

CHAPTER 3

SOPHISTICATED TECHNOLOGY: FRONTIER CAPITALISM AND THE BIRTH OF THE SALWEEN DAMS

Plans are explicit, and easily seen and understood: conspiracies are only slightly less so.

James Ferguson (2003: 276)

The Salween borderlands as resource frontiers are characterized by regulation and are so even today. In the previous chapter, I explained the process of commodification of the forests through which the Salween borderlands were converted into resource frontiers in the colonial and postcolonial periods. In the colonial period, this practice reflected the conflict over access to resources among the British and Japanese empires, local rulers, and local people. European and Japanese firms came to exploit the forest in the Salween borderlands and the vicinity, while at the same time expropriating the local people's property. In the postcolonial period, by the mid-20th century, there was a shift in state actors: the British and Japanese empires were replaced by the Burmese and Thai states in accordance with their increasing political roles.

In the 1980s, a new round of commodification of nature at the Salween borderlands began with the proposal for Salween dam projects by a coalition of supra-state organizations, state institutions, and transnational corporations. In this way, the new transnationals and states transformed the Salween River into hydro-electric potential for trade in the power market, and the border people, who lived along the Salween River, were dispossessed of their lands by the project. However, this new commodification process is more complicated than the process of the colonial period, because capitalists cannot take over the Salween borderlands directly and exploit the natural resources like the empire states did in the past. Instead, they have to do this in an indirect manner. In the new spatial arrangement of nation-states, capital is no longer affiliated to any single nation in the region. In such an arrangement, global capital cannot claim legitimate ownership over the Salween borderlands to exploit the

River. Therefore, they have to create other discourses, and nature is turned into commodity: the Salween River is transformed into hydro-electric production, which generates development, via scientific discourse. Alternatively, the Burmese state use development discourse (Escobar 1995; Gupta 1998) or ‘civilizing the margins’ (Duncan 2004) to territorialized the Salween borderlands, and the Thai state and capitalists use development as ‘anti-politics machine’ (Ferguson 2003) to accelerate territorialization and enhance the capitalist expansion into the borderlands. The capitalists and states, then, systematically collaborate to meet their ends; the requirement of resources for opening new marketplaces and control. Eventually, capital snuggles up to state power, while at the same time the states are backed up by capital to exploit the state’s rich natural resources (Nevins and Peluso 2008). In this sense, the production of the meaning of nature is a discursive practice (Foucault 1977), and such a meaning emerges not only because of language or speech but also because of actual practice. Hence, the hydropower dam is a meaningful guide on how to use a river to generate economic growth and national progress, expressing the production of Salween resource frontier by means of regulation. This view, I would argue, is quite different from Tsing’s deregulated Kalimantan frontier.

This chapter aims to describe the practice of frontier capitalization in turning Salween’s resources into commodities for purchase on regional markets in a contemporary neo-liberal period. I elaborate upon the commodification of the Salween River at the Thai-Burmese border, beginning with civilizing the Salween borderlands, and rationalizing the Salween River, which is turned into hydro-electricity for trade on the regional energy markets. This is followed by seeing like transnational corporations in taking control of natural resources.

3.1 Civilizing the Salween Borderlands

[D]ams and irrigation systems – all offer many fine examples of dominated space.

Henri Lefebvre (1991: 164)

After the cold wars in Southeast Asia, in the 1990s, the Salween borderlands have opened further for trade and investment in the process of regional capitalization. The Salween borderlands are marginal spaces of both the Thai and Burmese states, but these areas were modernized by Thai and Burmese governments. As Duncan points out, modernization refers to the notion of unilinear social change: a single line of evolution that moves from the most primitive to the most advanced. It is the necessary and inevitable prelude to higher levels of social development, and to the notion that a higher level of development is better than the primitive and traditional (Duncan 2004: 3). Development refers to raising people's standard of living and level of civilization. It is the civilizing project which underlies the modernization theory and myth of the untouched primitive. These ideologies are embedded in the state policies from which the drive for modernization stems. This concept is known as "civilizing the margins," and it induced dramatic modernization in the Salween borderlands, where the commodification of nature is increasingly occurring. "Civilizing the margins" has been continuously practiced from the beginning of colonial era to the present day. However, it changes over time in terms of actors involved and forms of appropriation. One of the main groups of actors in this process today is transnational companies, which are becoming increasingly powerful. This section discusses the process of commodification of the Salween River at the border, as a means of civilizing the margins embedded in the wider political context of neo-liberalism at the Thai-Burmese border.

3.1.1 Targeting the Salween Borderlands

In 1988, the Thai Prime Minister, General Chatichai Choonhawan, initiated an economic inspiration to transform Indochina from a "battlefield into a marketplace." This turning point brought capitalist development to the Thai-Burmese border regions (Battersby 1999: 479), and Burma also adopted a market economy in socialist way.¹ Although the military regime seems oblivious to international opinion and any criticism of its actions, it is struggling to make adjustments to its political rule. The Burmese regime is trying to achieve this through its so-called "road-map" towards

¹ After independence, Burmese government started a program of economic development premised on socialism, and the first economic development plan was initiated in 1948 (Bryant 1997: 168-69).

national reconciliation and through its opaque attempts to develop and privatize the economy (Skidmore and Wilson 2007: xviii). As a result, the political situation in Burma has shifted the center of gravity of the country's economy from the agricultural heartland of the ethnic Burmese areas to a natural resource-based economy based in the ethnic-minority inhabited highlands and border regions (Hirsch 1995: 255).

The Burmese government has designated 24 regions for special development projects and is now implementing it in order to achieve equitable development of all parts of the nation. At the same time, it is putting the border area development projects and rural development tasks into action (Anonymous 2007b).² In May 1989, the Burmese military regime formed the Committee for Development of the Border Areas and National Races (DBANR) as part of this strategy. Its stated goal is development of the country's border regions and advancement of the ethnic minority groups. However, military strategy was set apart from the Master Plan for DBANR's stated goal of developing all sectors: economic, agriculture, social, infrastructure, and communication; preserve culture, literature and customs; preserve and maintain security, peace, and law and order (Lambrecht 2000: 30). Burmese government policies are focused principally on exerting military control over the border regions, extracting the material wealth therein, and imposing an overarching national identity (Lambrecht 2004: 151).

The military regime governing Burma is currently using development discourse to justify its control over the border regions.³ The regime claims superiority over its people by intentionally developing a portrayal of people's inferior status. By portraying ethnic minorities as living in darkness, the government has attempted to legitimize its dominance over the marginalized groups residing in the periphery of the country by couching its intervention as well-intentioned aid (Lambrecht 2000: 29-30).

² In the process, it has given priority to the development of border areas that lagged behind in development due to lack of security. It managed to make a significant progress in various sectors such as economic infrastructures, transport, agriculture, livestock farming, education and health (Anonymous 2007b).

³ Border Areas and National Races Development Program regions include Rakhine Region, Naga Region, Kachin Special Region, Kokang Region, Kachin Northern Shan State Region, Palaung Region, Wa Region, Maw Pa Region, Kyaing Tong (East) Region, Pa-O Region, Karenni (Kayah) Region, Padaung Region, Karen (Kayin) Region, Mon Region, and Tenasserim (Tanitharyi) Region (Lambrecht 2004: 152).

In February 1994, the military regime's official publication, *The New Light of Myanmar*, had some pretty nice things to say about the military rule: "Border regions of today are not like before. Education, public health, communication and agriculture have progressed and developed. The city of Rangoon has now become more easily accessible to border regions. Post and telegraph services are already functioning. Electric lights have brightened the border regions. National races who had lived in darkness in the past are now enjoying the fruits of progress" (Lambrecht 2000: 28). In response to regional economic integration, the Burmese government is planning cross-country cooperation activities: linked and shared infrastructure including hydropower plants, power lines, gas pipelines, roads, channels for navigations, bridges, and so on (Mee-Net 2011). In November 2003, General Chavalit Yongchaiyudh, the former Thai defense minister, disclosed bilateral cooperation between Thailand and Burma on four mega-projects: the Tasang Dam on the Salween River to be constructed by Thailand's MDX company; a coal mine in the town opposite Prachuap Khiri Khan; a port project in Tavoy and a Mae Sot-Yangon road project (Fawthrop 2003). These projects were identified as development for the country as a whole.

The issue of "development" has been a key to the Burmese military regime's propaganda strategy. The regime has used the promise of "development" to help convince various ethnic armies to sign ceasefire agreements since 1989. The Burmese government's strategy of development, particularly in the border regions, is in principle a state-building exercise oriented toward realization of three goals: extension and solidification of the regime's control over the populace, extraction of natural resources, and construction of a national identity *through efforts to depoliticize ethnicity* (Lambrecht 2000: 29-30).

However, a depoliticized program is never successful because people will come back to ask political questions. They will ask questions about technical programs of such development (Li 2007). As uneven development (Smith 1984; Watts 1997) underlies the government's agendas, the border people have been displaced by development schemes. This is precisely one of the unintended consequences of "development" of the proposed series of dams on the Salween River. Many have alleged that building large dams are likely to cause human rights abuses in

China and in many Southeast Asia countries (McCully 2003). Therefore, Burma is not an exceptional case. The residents of designated project sites on the Salween have been subjected to further systematic human rights violations in the form of a massive forced relocation program implemented by the military regime (Akimoto 2004; Butler 2004). Despite that these dams will affect the lives of the border people and their livelihoods, the border people were not informed about the projects by the Thai and Burmese governments. Most of the people who I interviewed did not know about the Salween dam projects. Later, they received information from NGOs instead. In addition, The Karens in Burma do not trust the government to carry out the Border Area Development (BAD) program in their areas (Karen Rivers Watch 2004a: 9-10). They tend to see BAD as a tool for Burmese military occupation of their territory. In this sense, infrastructure development is a major facet of Burmese development in the border regions and nationally. Thus, a political agenda in the border region was represented as a disinterested effort to realize the goal of development, in that it can appeal for international assistance and justify the violent consequences of its development policies as the necessary cost of progress (Lambrecht 2000: 29-30).

The dam construction projects – both inside Burma and on the Thai-Burmese border in which transnational corporations, especially Chinese-backed companies, state-owned Thai enterprises, and Burmese companies, are involved – are developed with the help of Burmese armed incursion into the border regions. Therefore, the dam projects in the war zones have caused severe violence and political conflicts, as well as human rights violations and environmental degradation (This topic is discussed further in Chapter 4).

In 1996, the Burmese government signed a memorandum of understanding (MoU) with the Thai government to export electricity (1,500 megawatts) to Thailand by the year 2010. They agreed to establish a joint venture to proceed with five hydro-electric projects in 2004. Thereafter, on May 30th 2005, governments of the both countries Thailand's Ministry of Energy and Burma's Ministry of Electric Power proceeded on the subsequent MoU to develop five hydropower dams in the Salween River Basin and Tanaosri River Basin – the Tasang Dam (7,110 megawatts);⁴ the

⁴ They are simultaneously proceeding with plans to build the giant Tasang Dam in southern Shan State. New surveys for dam construction are currently being carried out in the area, under heavy armed

Ywathit Dam (4,000 megawatts) on the upper part of the Salween River inside Burma (Shan State); the Upper Salween, or Weigyi Dam (4,540 megawatts); the Lower Salween, or Dargwin Dam (792 megawatts); and the Hatgyi Dam (1,200 megawatts), about 47 kilometers from the confluence of Moei River and the Salween River on the Thai border inside the Burma's Karen State and Tanintharyi (Tenasserim) (Agence France Presse 2007; Apinya 2007; TERRA 2006; Tunya 2007).

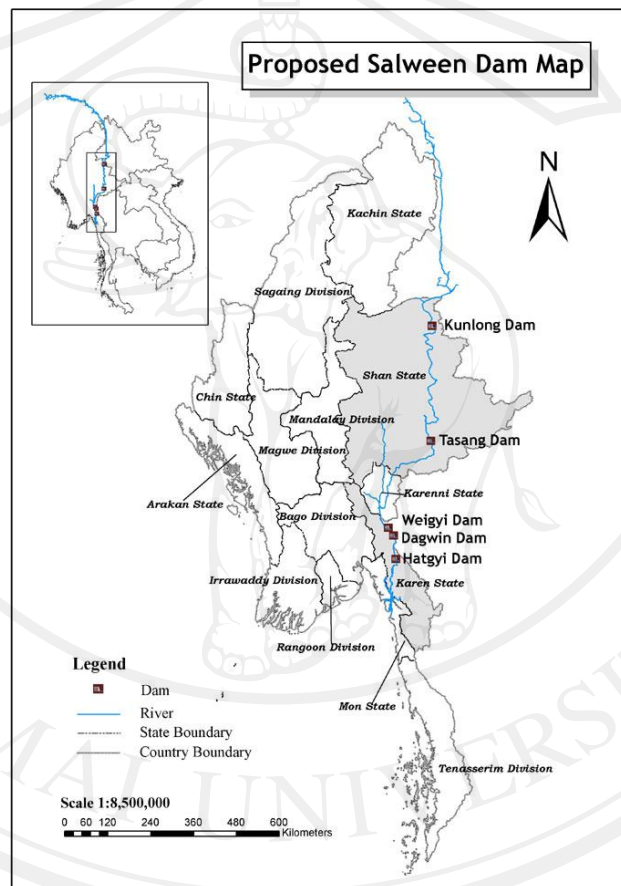


Figure 3.1 The proposed Dams on the Salween River

Source: http://www.livingriversiam.org/images/sw/sw_upper_map.jpg

military escort. There has been no transparency around this process whatsoever. Only days after Burma's election, on November 11st, 2010, The EGAT and China's Three Gorges Group Corporation signed an MoU with Burma's military rulers to develop the Tasang dam, increasing the investment to US\$10 billion. Salween Watch Coalition has raised a question as to why China did not delay its plans to build dams in Burma. Rather, Chinese government officials stated that if "a single problem" was found on the proposed 13 dams on the Nu (Salween) River in China, they would not move into the construction phase (Salween Watch Coalition 2011b).

There are two potential projects to sell electricity to Thailand: one, the Hatgyi Dam, which is expected to connect to the EGAT system at Tha Song Yang District, Tak Province, and two, the Tasang Dam, which is expected to connect to the EGAT system at Mae Ai District, Chiang Mai Province (Electricity Generating Authority of Thailand 2010: 23).

Furthermore, there are new actors that have played crucial roles in dam construction, creating a new type of relationship. The Burmese government and transnational investors are co-investing to build the dams, which will affect the lives of border people and their livelihoods at large. Development discourse is used by states and energy investors as an entry point to turn the River into hydro-electricity for trade. The Burmese military takes discourses of development and nation-state building, in terms of integrated harmony, reconciliation, and progress, to territorialize and expand its power into the Salween borderlands in the eastern part of Burma in Karen State, Karenni State, Shan State, Kachin State, and Mon State, all previously controlled by ethnic minority forces.

On the Thai side, the government has run community development projects, such as infrastructure development, constructing a health center and a school, and proposing the regional power development projects at the Salween borderlands. However, it does not simply justify these projects as good or bad. As Duncan points out, “development projects are not the benign empowerment schemes that they claim to be, nor are they the all-powerful machines of ethnocide and cultural destruction that many activists claim” (Duncan 2004: 18). The minorities’ choice between incorporation into the government projects or resistance of the government schemes depends on the particular context. In this case, the border people in Thailand have chosen to incorporate into community development projects, but they resist the Salween dam projects. This implies that the Thai state cannot totally govern the border people because they would rather confront the government if such development projects are seen as disrupting their livelihoods and security.

3.1.2 Imposing “*Khwam Charoen*”⁵

The Salween borderlands are zones at the state margin where the central government has tried to control people and territory. It is important to ask: how do the border people perceive the Thai state and its activities and why are they unable to reject the state at the borderlands? The Thai state, for the border people, is important to the improvement of their well being, even if it takes control of their territory. The border people want to improve their poor living conditions, such as limited land for housing, poor roads, no agricultural lands, prohibited access to forest lands; they need the state and local government help improve these conditions. This part examines how the border people articulate the development projects on their own place and as self-proclaimed subjects.

Bon Bea Luang village is located in the foot hills, on a tiny, flat piece of land along the Salween River because they are not allowed to settle inland area. The houses are set in a row, close to each other, along a narrow road. The front floor of the houses protruded to the edge of the road and the back floors of houses perched on high wooden poles without unstable bases. It was the edge of land and deep creek that terrified those who pass their houses.



Figure 3.2 Limited Space: “Many houses collapsed”

⁵ In modern Thai usage, the word can be made into a noun by adding the prefix “*khwam*” [–ness], and the word *Charoen* can be found in the 14th century and probably earlier. In the old sense, it means cultivating, growing, increasing, building up or expanding until complete in a positive sense, which applied mostly to nonmaterial matters. However, its meaning is changed in 19th century to imply secular or worldly development, material progress, and technological advance. Therefore, the emphasis of *charoen* is on material conditions, such as paved roads, electricity, machines, and modern buildings (Thongchai 2000: 531).

It was dangerous to be there, particularly in the rainy season. The villagers faced land erosion and flooding. In 2009, Nongnut, a Shan resident of Bon Bea Luang, said that in rainy season, a mass of water from the mountain ran down, causing erosion and sweeping away the houses located near to the stream. More than ten houses were ruined. Until now the families who lost their houses, both Karens and Tais, did not have any land to build new houses. “They have to move and stay with their other family – their relatives. No official came to provide them with land. They didn’t know where to build houses,” said Nongnut. “My mom also moved to stay with my relative’s house where was more comfortable and quiet than my house. TAO’s staff also came to help them, giving money each family amount 30,000 baht. But my mom received 21,500 baht without providing any piece of land.” This case shows that they have no choice but to settle in their houses, because the village’s area is limited. They also want to expand their community, but they do not have more space. The areas surrounding the village are protected forest and as such they have been prohibited to occupy it. Unfortunately, they have faced flooding and soil erosion year after year, and they need the government’s help. In this regard, local governments have played a significant role in helping the villagers to cope with the difficulties.

It is difficult to judge whether the border people are not being governed by the state. Even though they have expressed their confidence to arrange their own kinds of development projects, they have not totally rejected government’s help. In June 2010, *Pi* Somjit and *Ai* Kai spoke to the Center for River Training students and me. Their thinking is as follows:

Pi Somjit said, “We have never waited for help only from the government. We will do anything we can do by ourselves. NGOs sometimes came to help us in improving living conditions. The school, roads, water supply system, toilets, electricity, and health care center were sponsored by the Thai government. The church was supported by an NGO, and there is Sunday school taught by three teachers from the village. We’re planning to build more toilets and a ground floor in the church. We’ll do this ourselves.”

School, for them, is also important. It provides education not only to children in the village, but also for children from the Burmese side. *Ai Kai* said, “Many children on Burmese side also come to study at school in the village. They are the same like our children here.”

In response to the question about health care concerns, *Pi Somjit* said, “Villagers have good health in general, but malaria is abundant. So, most people have had malaria. This is the main problem. The other disease is diarrhea.” Next, a student asked how pregnant women deliver babies. An elder Karen explained, “The women prepare to give birth at home with the traditional midwife’s help. But if it is difficult to do a delivery if the midwife cannot help, because they take the woman to the hospital in Mae Sariang.”

Transportation also became a common concern of the border people, particularly in Saw Myin Dong and Muang Mean. *Ai Srithong*, a resident of Saw Myin Dong, told me that the quality of the road in Muang Mean is low. His words: “The concrete road in the village was built ten years ago. The road from shelters, developed six years ago, is worse than this one. Riding a motorcycle to Bon Bea Luang village takes four hours, by car three hours, but it takes only one hour by boat. Unfortunately, there is not public transportation here.”

This is how *Ai Prasong* explained the condition of road in the village and their mode of travel to Sowán, my research assistant, in February 2010: “There is a road from the village to Mae Sariang directly, but it is not good because it is along the stream and it is an entirely dirt road. However, the road at Bon Bea Luang is a paved road. So, we take a boat from our village to Bon Bea Luang village, which takes just 15 minutes, and then take a pickup taxi to Mae Sariang, which takes only two hours. You know, it is difficult to drive a motorcycle directly to Mae Sariang, even if we can. This road was found by grandparent generation for a long time ago. They used it before I was born over 30 years ago. So it takes over two hours to get to Mae Sariang.”

Road construction is linked to local politics of development. Its implementation was discussed between *Ai Srithong* and Sowán as follows:

Sowan asked, “Did the people attempt to find the budget for improving the road and expanding it to be more comfortable? Was there any project submitted to the government?”

“Yes,” *Ai Srithong* replied, “we submitted the project to TAO. Only a small caterpillar machine came. Indeed, I asked them expand the road at the sharp curve point, but they could not do it because there was no machine... They didn’t bring a good one. It depends on whether or not the TAO leader has a policy. So, the road is still not good. It was good when they repaired it, but it collapsed during a day of heavy rain in the rainy season. The people who travel have to bring digging tools along with them. They sometimes have to push and pull motorcycles stuck in the mud road. So, traveling by boat is better. However, the boat is available during the daytime until 5.00 p.m.” Additionally, *Ai Srithong* pointed out that the road in his village must be improved. “At the moment, I heard they would pave the road. So it will be more convenient for us. Actually, it is not far, just about 36 kilometers, but the road from Bon Bea Luang to Mae Sariang is long over 40 kilometers. Traveling directly takes only one and a half hours. In the rainy season last year, my friend, who is a driver from another village nearby, told me that he saw construction soldiers come to survey and mark the poles in his village. I think it is good project for us. The villagers will like to travel on this road rather than in an indirect way. But we don’t know how many years it will take to construct. To go along the indirect way at night is dangerous. You know, it is the border,” said *Ai Srithong*.

The villagers reflected upon the fact that the Thai state stretched its power over every part of their lives through several community development projects, even if they did not always wait for the government’s help. Why are they unable to keep the state power away? *Lung Kaew*, a resident of Muang Mean village, pointed out that their lives, materially, depended on more *khwaam charoen* (material progress) from outside. Those who have modern material things are rich people. “There is a lot of *khwaam charoen* that has come into the village,” *Lung Kaew* said. *Lung Kaew*’s view was that progress leads to social change. He did not refuse it in terms of material improvement, but he wondered whether the villagers are aware of it. In his opinion, “it is good when *khwaam charoen* came into the village. But the problem is that it came into the village too fast. Rural villages (*ban nok ban na*) sometimes have

not yet developed in agriculture and living conditions. It caused the people, including many children who had not finished school, in this village to have to hurry to find jobs outside the village. This is because they wanted to be like the people who have many material things. So, development should slow down.”

Lung Kaew further stated that, “The villagers must have access to electricity in order to have *khwam charoen*. It is good if there is electricity because the country will progress (*ban muang ja dai charoen*).” However, electricity can cause or exacerbate conflict in the village. The conflict of access to electricity was exemplified by the story of *Lung Jai*, a Muslim resident of Bon Bea Luang village. He explained that the conflict occurred along with ethnic discrimination. As Muslims, they were upset when someone mentioned that the Muslims were the last group who came to stay in the village. The village was established by Karens, but Muslims argued that their ancestors also came along with Karens to stay around this area. Compared to the Karens, the Muslims in the Thai-Burmese border zones along the Salween River are a minority group, and as such they feel that they are always unfairly treated by the majority and local officers. *Lung Jai* said, “Most of the problems happen as a result of to discrimination.” However, they do not accept such unfair treatment, and they have called for equality and nondiscrimination from the ethnic majority and the authorities.

In 2004, TAO ran a solar cell electricity project to provide electricity to the villagers. The assistant head of the village, a Karen, managed the project. The project was subcontracted by an electricity construction company. They set up two solar cell panelboards: one near the police checkpoint and another nearby public health center. Muslims also worked for the project, digging pillar holes and setting up the pillars. They expected that the 50 Muslim households in the village would also receive electricity connections, but they did not receive them. Only Karens and Tais got electricity connections. Therefore, they were upset and they sent a petition letter to the company. The subcontractor informed them that the company followed the order given by the project manager, and that it was too late to change anything. The problem could not be resolved. “I told him, ‘you can continue, but you have to understand that the community members should have been treated equally and should

have received the same thing, but your electricity provision is discriminating against us,” said *Lung Jai*.

The Muslim villagers next sent a report to the head of the district office, along with a village map showing the location of their houses that did not get electricity connections. There was no response. A week later, two electricians came to set up two lights for each house. At the time, they tried to negotiate with the TAO’s permanent secretary for a solution. Fortunately, all the villagers could come to a solution peacefully, and all Muslim households received solar cell electricity. However, the problem might be more serious when one asks the question: where does this electricity come from or how is this energy generated? *Lung Kaew*’s view was, that, dams and *khwam charoen* are related. Large dams generate electricity, and then electricity makes the *khwam charoen* be possible. Because of this, conflict will not only occur at village level, but also at higher levels.

Up to this point, the border people in Thailand have narrated their story of their communities’ lives and their situation. Villagers of Bon Bea Luang told me about their lives, their poverty and the village’s limited land. A huge stretch of land has been seized by forestry officials and they have prohibited the villagers from occupying land there. The villagers have to live in poor and risky conditions, and they are also denied better opportunities, such as access to state services. The border people viewed the Thai state as a development-centric state that provides them with development based on the notion of material progress. They thought that the state should be involved with their lives and better their quality of life. Hence, the border people focused on material progress, which caused them to put their faith in the state. However, they still question the consequences of the development projects, in which the idea of *khwam charoen* is embedded. They worry that the development projects might disrupt their livelihoods and quality of life. They are especially concerned with the Salween dams, and with the notion of dams as the means to achieve the country’s progress.

In short, ‘civilizing the margins’ at the Salween borderlands represents a discourse that refers to the fact that the utilization of the Salween River has changed, from supporting normal livelihoods to the production of energy. This discourse generates exclusion in the sense that the Thai and Burmese states have used it as an

instrument to exclude border people from the Salween's resources. The Salween borderlands have been targeted by transnational capitalists and the Thai and Burmese states as resource frontiers; to generate capitalist expansion and maximize profits derived from the natural resources there. The Thai and Burmese states have identified the Salween borderlands as zones on the margin, a place where border people live in poor conditions, and are 'uncivilized'. Because of this, they should see that states will guide them to a civilized world through development activities. By the 1990s, the Burmese and Thai governments, with market-oriented economies, pushed for the development of the Salween borderland, aiming to have the Salween River transformed into a hydro-electricity production area. This development discourse has since been used to exclude border people from access to the local resources, especially the Salween River itself and its surrounding forest land, and has legitimized the states' authority over local people's lives and their relationship with the River, in the light of the response to regional economic integration. These events point to one explanation, which is that rationalization of the Salween River has occurred at both the national and regional scales.

3.2 Rationalizing the Salween River

The practice of rationalizing the Salween River use and management is a part of the commodification of the Salween River at the Thai-Burmese border, in which the Salween is organized in terms of buying and selling (Polanyi 1980; Smith 1984). Indeed, the Salween River is a basis of life, but it is transformed into hydro-electric production for purchase in the energy market at the national and regional levels. As Polanyi observes, land and water are not ordinary commodities, but the basis of life (Polanyi 1980). In the process of "functional territorialization" (Vandergeest 1996) of the Salween River (its use and management), national and regional energy security, scientific knowledge of energy, and rationalization of the Salween River as source of energy production are the only factors that guide the state and capital, not the fact that it is a basis of livelihood for its inhabitants. The rationalization of the Salween River, in fact, provides benefits to the Burmese and Thai states and TNCs but exclude others, particularly the border people, who are powerless. In terms of producing nature (socio-nature), this section explores this process of rationalization.

3.2.1 Energy Security for the Region: GMS Power Grid

Large-scale hydropower construction on the Salween River has become, increasingly, an “essential element” of the development of the ASEAN Power Grid, which would stretch across Southeast Asia (Wong 2003: 6). Under the goal of energy security, ASEAN Vision 2020, which was founded in 1999, has been making arrangements for interconnections in energy and utilities for electricity, natural gas and water through the ASEAN Power Grid, the Trans-ASEAN Gas Pipeline, and the Water Pipeline. In so doing, the plan for the Southeast Asian Power Grid and regional centralization of energy infrastructure has been elaborated under the auspices of the ASEAN (Skeer, et al. 2004: 10). It is seen as a means of powering the region by using resources to produce energy, leading to economic development of the region (Electricity Generating Authority of Thailand 2004: 38). Similarly, the ADB⁶ promoted regional cooperation and integration through power pool arrangements and cross-border energy flows. The Greater Mekong Sub-region (GMS) Power Grid plan is one of the outcomes of the ASEAN Power Grid, with which influential new actors involved. In conjunction with these plans, Thailand created its national energy plan. In the following section, I will try to articulate the spatial practices of domination, which is to say how capital/states, in this case the GMS Power Grid, have taken control of the Salween borderlands.

In terms of geographical-regional space, the GMS can be understood as a “geo-body” entity (Thongchai 1994) that encompasses Yunnan Province, China, Burma, Thailand, Laos, Cambodia, and Vietnam. Between them they share a common set of natural and social conditions, a shared vision of a prosperous, integrated, and harmonious societies and association with global funding agencies (Diokno and Chinh 2006: 2-3). On the one hand, the GMS has been presented as a shared prosperity, and towards this common goal each country makes friends with neighboring countries in the region. On the other hand, in the ensuing competition among the riparian countries to gain access to and control over natural resources, the

⁶ The ADB was established in 1966. It is a multilateral development bank owned by 67 members, 48 from the region and 19 from other parts of the world.

natural resources, as “property,” are transformed into a tradable commodity in the market system. The Salween River is thus in a transnational enclosure, and each country faces a decision about resource use and management, by whom, and for whose benefit (Yos 2011). A brief diversion here would be quite illustrative: How did the GMS Power Grid emerge?

The regional energy security plan was created by an assembly of various organizations at different levels. They included multilateral financial institutions (the ADB and World Bank); state actors state utilities such as the EGAT, and ministries responsible for energy; bilateral donors (the Japanese Bank for International Cooperation [JBIC], Agence Française de Développement [AFD], and the Swedish International Development Agency [SIDA]); the Mekong River Commission (MRC); consultancies (Norwegian consultancy [Norconsult], Brazilian consultancy [Soluziona/Mercados]); E8, previously called E7; private sector companies, investors, and commercial banks; export credit agencies; and the Association of Southeast Asian Nations (ASEAN) (International Rivers Network 2006: 1).

Despite capitalist attempts to intervene in the management of common resources, the states accede to the assembly of supra-state organizations in promoting the GMS Power Grid for regional power security. At the same time, states can also retain sovereignty. By 1995, GMS countries officially started cooperating under the GMS program to promote regional power trade. In January 2000, the Policy Statement on Regional Power Trade in the GMS was endorsed by all the Mekong governments. Following the signing of the Intergovernmental Agreement on Power Interconnection and Trade in September 2003, the Regional Power Trade Coordination Committee (RPTCC) was established. It oversees the establishment of regulatory, institutional and commercial framework for power trade in the GMS (Asian Development Bank 2012). For Thailand, a high-ranking member of the Office of the National Economic and Social Development Board (NESDB) holds the position of GMS National Coordinator, who handles the formulation of international economic strategies and economic cooperation framework within the sub-regional area and neighboring countries.⁷

⁷ The Special Meeting of the Regional Power Trade Coordination Committee (RPTCC Meeting) was held by Ministry of Energy and the ADB December 14th-15th, 2010 in Bangkok. Additionally, in order

The ADB aims to promote state-led cooperative economic development between the six Mekong countries and facilitate increased interaction and economic activities aimed at economic growth, trade liberalization and infrastructure development between the six Mekong countries. The goals of regional power trade and regional energy security provide the GMS program legitimacy to claim control over natural resources within a single state. This has caused the Salween River Basin to become part of the GMS program aimed at driving economic change. The Salween River is under threat, as it has become base for energy resource supply for the Southeast Asia region (Asian Development Bank 2007; Sokhen and Sunada 2008; Wong 2003).

Energy security is an important agenda and the ADB was given the task of handling this policy concern for the region. By 1992, the ADB had initiated the GMS Power Grid plan. For the ADB, the power sector is a combination of cross-border electricity trade and the interconnection of transmission networks. Therefore, modern energy services are focused. As the ADB put it, “undertaking a comprehensive study to define a regional strategy for the energy sector aims to expand cooperation among GMS economies to ensure efficient and affordable access to modern energy services for all... There is a need to integrate environmental sustainability issues in the design of energy strategy so as to reduce overall cost of energy for the region” (Asian Development Bank 2006).

The overall plan is to build a series of dams and transmission lines in Laos, Burma and Yunnan Province that will be connected to the rest of the region (International Rivers Network 2006: 2). In 2002, there were 12 dams supported by the GMS Power Grid plan: eight in Laos (Nam Mo, Nam Theun 2, Nam Theun 1, Nam Ngum 2, Xe Pian-Xe Namnoy, Xe Kaman 1, Nam Kong 1, Xe Kaman 3); one in Burma (Tasang); two in Yunnan (Jinghong and Nuozhadu); and one in Cambodia (Sambor CPEC). These dams will be connected via transmission lines as part of the goal to share and trade power within the region. The ADB hired a hydropower consultancy to create the GMS Power Grid plans, and the consultancy drew the GMS Power Grid (See Figure 3.3) to justify that the need to construct a series of dams. As

to push PRTCC towards regional cooperation, a Subregional Energy Forum (SEF) was created. The office of the chairperson for the SEF will rotate among countries alphabetically.

Thongchai suggests, we should recognize the power of map (Thongchai 1994: 173). Colored lines represented different high-voltage transmission lines on the map. Even though the GMS Power Grid map was made by the specialists, it turned to control the planners' way of thinking how to develop power development plans. Through the map and the ADB's encouragement of each GMS country, the series of dams was born.

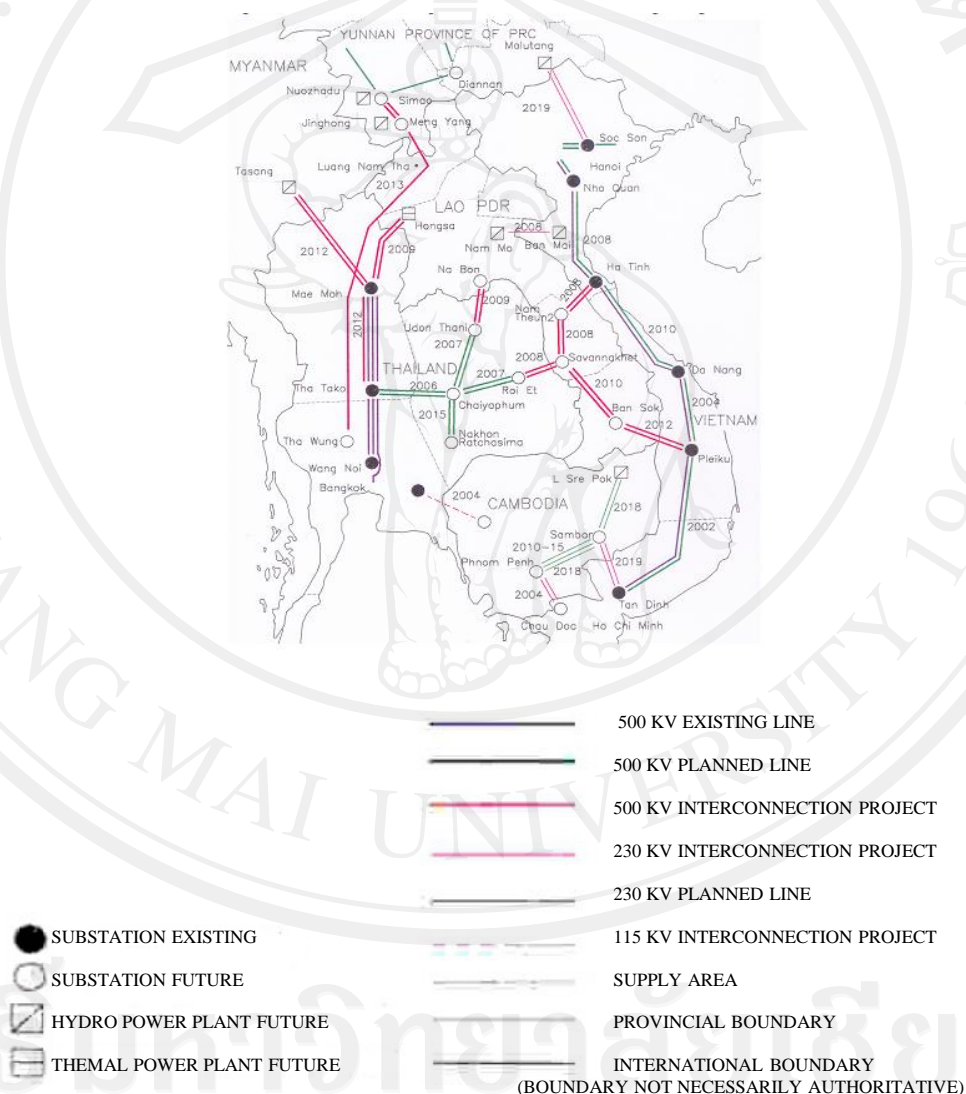


Figure 3.3 The ADB's GMS Power Grid

Source: http://www.internationalrivers.org/en/southeast-asia/lancang-mekong-river/mekong-power-grid/adbs-mekong-power-grid-plan-developed-hydropow?size=_original

The ADB also worked with national policies to build consensus on power integration, meeting with concerned ministries in each country. The meetings were designed to keep the program running by assigning an official bureaucrat to run the project and to sign project deals with companies. In addition, the ADB worked with private companies to convince them to invest in the project (International Rivers 2009). In fact, the ADB-proposed GMS Power Interconnection Project was developed by the hydropower consultancy Norconsult in 2002, and it provided a regional technical assistance grant.⁸ At the Salween borderlands, the ADB has promoted a multi-billion dollar regional electricity scheme powered, in part, by the Tasang Dam. The ADB reported that two 500-kilovolt-transmission lines from Tasang hydropower plant will be linked to 500-kilovolt-system at Mae Moh Cold-Fired Power Plant by 2012 (Asian Development Bank 2010; International Rivers Network 2009; Wong 2003).

The Salween River Basin is one of the area-based productions of energy and its situation is the same as in the Mekong River Basin's (Asian Development Bank 2007). Impacts from the dams on the border people's livelihoods and environment are an inevitable consequence of the sub-regional power grid in Southeast Asia. Alarming, many of these projects appear to be designed to supply power to non-local consumers. The GMS Power Grid is intended to supply power to urban areas, especially in Thailand and Vietnam; however, there is little in these plans to suggest that it will actually promote more sustainable forms of economic development throughout the region⁹ (EarthRights International 2005).

⁸ Based on the projects recommended by Norconsult, the ADB's Greater Mekong Sub-region Department has developed a lending portfolio of US\$4.58 billion worth of loans and grants for financing 32 grid and grid-related projects in the GMS countries to 2020.

⁹ The Prime Minister of Vietnam, Nguyen Tan Dung, in his opening speech at a meeting of ASEAN energy ministers in 2010, said that Asia faces rising energy need to fuel economic growth. Therefore, he argued, every state in the region should promote cooperation on planning and energy policy to ensure security of energy supply and demand, extraction and conversion, transport and distribution of oil and gas. Additionally he said that nuclear energy should become a source of alternative low-carbon and sustainable energy in consideration of the ASEAN (Minh 2010).

3.2.2 Thai National Energy Security: Scientific Calculation of Electric Load Forecast

Coming back to the discussion at the national level, stories of the Salween River and its inhabitants are merely known to public society. On many instances, regional development projects have been simply imposed on the local people without taking into account the values of their lives. The Salween River, as a perceived space for the border people, means many things: fishing, agriculture, transportation, relaxation and so on. The Salween River first is a space that creates livelihoods of border people. However, the Salween River can benefit not only local people, but also the region as a source of power generation. It is conceived as resource supply for economic development by dam investors and the Burmese and Thai states. They consider dams to be a renewable and sustainable form of energy technology. Thus, the Salween dams can and should be built in accordance with environmentalism. As a result of this thinking, the fate of the people at the Salween borderlands depends on the forecast demand for electricity in Thailand. It is being debated whether Thailand needs the increase in power plants or not.

The discourse on national energy security justifies the Salween dam projects. This exactly is the aim of investors. In fact, the border people do not know and are not involved with science of statistic calculation and technology involved in national energy security. Rather, they are concerned with their lives and the potential destruction of their livelihood security. Thus, the main organizations and people who are playing critical role in these discussions are outsiders, particularly the EGAT, NGOs, and some local leaders from elsewhere. The debate is based in technical calculations of the amount of electricity and power, which has nothing to do with the lives of the border people. The situation at the Salween borderlands is totally different from the situation of the local people of Prachuap Khiri Khan Province, who are also struggling against the construction of a hydropower plant. They have used the EGAT's statistical data and information to counter the reservoir capacity calculated by the EGAT. The experience of the local people in Prachuap Khiri Khan indicates that ways to accumulate knowledge and skills are needed so that the border people or NGO activists can improve their campaign potential.

The EGAT's energy policy is to supply and reserve electricity. The EGAT can produce between 22,000 megawatts and 48,000 megawatts with all of its power plants combined. This is in response to the increase in electricity demand in the year 2011. In this situation, the EGAT had to seek more private producer concessions and electricity imports from neighboring countries. To calculate how much electricity and power they have to receive, they are calculating statistics to forecast the energy demand for the next 10 to 20 years based on the consistency of the historical record showing a linear trend. This is the best way to play safe in reserving power, as the EGAT has done in the past. The EGAT proclaimed that the suitable reserve margin is probably larger than 20 percent of the peak demand forecast volume which is calculated by the EGAT's Power Development Plan (PDP) (Electricity Generating Authority of Thailand 2010: 11).¹⁰

The PDP 2007 was approved by the National Energy Policy Council (NEPC) and the Cabinet in June 2007; the PDP 2007 Revision 1 was endorsed by the NEPC and the Cabinet in December 2007. Nevertheless, ten months later the EGAT, along with Ministry of Energy, reviewed it because the power system was reflecting a high reserve margin, and because of the changing situation of the global economic recession (Electricity Generating Authority of Thailand 2009c: 1). This new version is known as PDP 2007: Revision 2. Many NGOs and local people from many areas participated in the debate on reserve power calculated by the EGAT. The EGAT argued that Thailand needs its reserve margin electricity to reach 40 percent of Thailand's peak power load.¹¹ But the NGOs and local people argued that only 15 percent of the peak power load is actually needed for Thailand. An even more

¹⁰ The PDP is a 20-Year master plan that specifies the power plant that will be built, who will be in charge, and how. The Energy Policy and Planning Office (EPPO), which is under the Ministry of Energy, is responsible for the country's energy policy and the role of the National Energy Policy Council (NEPC) is to set up a sub-committee for working on the load forecast and the PDP. Thereafter, the PDP 2010 was endorsed by the Cabinet on March 12th, 2010.

¹¹ NGOs have questioned the energy projection of the government and whether any new power plant is needed. In fact, a new power plant is not really needed (Chuenchom Sangarasri Greacen 2010b: 33). The issue of the accuracy of the load forecast was questioned by public. In his article *Open discussion on energy needed*, Chris Greacen argues that the government electric load forecasts have a notorious track record of overestimating actual demand and making urgent calls for building new power plants in the country. Indeed, the record of the government and NGOs' load forecasts were compared with actual peak demand side by side (Greacen 2007).

important issue is *kha ngo*¹² (silly payment), which every Thai has to pay in addition to losing natural resources.

Over the past 13 years, all nine of the ‘base-case’ demand forecasts issued by the Thai government have over-estimated current power demand, sometimes by as much as 48 percent, or up to 6,000 megawatts. Exaggerated forecasts result in false claims regarding the benefits of regional power trade (International Rivers Network 2006: 2-3). *Pi Sawang* mentioned that even though the proportion standard of reserve energy is 15 percent of the peak power load, the reserve margin of electricity was over 40 percent and almost 30 percent of peak power load in 2008 and 2009, respectively. The high reserve margin of electricity caused the EGAT to cancel the tariff MoUs of five power development projects in Lao PDR. These were hydropower plants (Nam Theun 1, Nam Theun 3, Nam Ngiep, and Nam Ou) and the Hongsa coal-fired power plant. The EGAT also delayed five to six of its own projects to keep the amount of reserve margin electricity lower. The EGAT reported that these tariff MoUs were terminated, but that the projects are viable and a review the proposed tariffs would be required later (Electricity Generating Authority of Thailand 2010: 3, 5). Nevertheless, the EGAT has not yet signed the tariff MoU on the Hatgyi Dam project, but it has paid much attention to it in order to push it ahead. In *Pi Sawang*’s opinion, it is not reasonable to do that.

Civil society groups, such as Alternative Energy Project for Sustainability, MEE-Net, and Palang Thai, argue that the acceptable minimum annual reserve margin should be at 15 percent of the peak load. Otherwise, they argue, Thailand’s cycle of over-investment and excess consumer burden is aggravated. They point out that the energy-hungry state will leave its people hungrier. Many NGOs criticize the project because it was done under the auspices of a Thai government agency. Thailand consistently over-estimates its energy demands and is currently experiencing an energy “glut” (Shan Sapawa Environmental Organization 2009: 117).

¹² This ordinary term is used by civil sectors; activists, local people, and a few academics to show a dearth of good judgment on the part of the EGAT in deciding to build many power plants and signing several tariff MoUs. In academia, it is called “available payment,” and includes the costs of design, hiring, procurement, construction, testing operation, and maintenance, including interest and fixed costs paid for obtaining a power plant that is ready to generating electricity.

Despite the pressure from civil society groups and NGOs, the NEPC endorsed the PDP 2007: Revision 2 and submitted it to the Cabinet. However, on January 28th, 2009, the Cabinet assigned the NEPC to consider the necessity for a public hearing on the plan, so a workshop was arranged on February 11th, 2009 (Electricity Generating Authority of Thailand 2009c: 2). The issue regarding the appropriate rate for an installed capacity is still being debated. The EGAT insisted that the requirement of high reserve margin is necessary for national energy security, arguing that: “If it is set too low, it could cause electricity outages. An electrical system in Thailand is a system that must rely on itself. It does not connect to neighboring countries like electrical systems in Europe and the United States do. Therefore, specifying the appropriate reserve margin is necessary. Presently, the EGAT specifies the reserve margin rate at 20-25 percent in accordance with National Social and Economic Development Plan No. 7-8 and in order to secure that we will have electricity for using throughout the year” (Electricity Generating Authority of Thailand 2009b).

Santi, a Thai activist working for Alternative Energy Project for Sustainability (AEPS) said that: “In 2009, the unnecessary power plants are calculated at 3,860 megawatts which is equal to 28 times the capacity of the Pak Mun Dam.” Likewise, the information given on Mee-Net’s website points out that the average increase in annual actual peak demand over 15 years (1992-2006) was 868 megawatts; furthermore, the average increase in annual peak demand forecast over 15 years (2007-2021) is 1,942 megawatts. This means that the average increase in annual peak demand 15-year forecast is two times the actual 15-year average peak demand. Because of this overestimate of electricity demand for twenty years (2010-2030), Thailand has to pay more than 2.7 billion baht.

Can Tho Province, Vietnam hosted a workshop entitled “Mekong Environment and Livelihood: The Changing Situation and Trans-boundary Implications” February 3rd/4th, 2010. Chuenchom Sangarasri Greacen, who works for Palang Thai organization (based in Bangkok), said in her presentation that: “The demand forecast has systemic bias towards over-projections. Too many expensive power projects get built” (Chuenchom 2010a). The EGAT is planning to invest in nine new coal-fired power plants and five nuclear power plants; additionally, it is

planning to construct many dams and coal-fired power plants in neighboring countries, particularly Burma, Laos and Cambodia, to export power to Thailand.

On the disagreement over the capacity of an installed power plant between NGOs and the EGAT, Santi had this to say: “The total capacity requirement is equal to peak demand plus 15 percent reserve margin. In the past, the minimum annual reserve margin was set up at 25 percent of the peak power load. But after we struggled against the power plants in Prachuap Khiri Khan, it was decreased to 15 percent, so that the EGAT will not pay too much for the costs of investment.” However, the system’s reserve margin in the early years was greater than 20 percent (Electricity Generating Authority of Thailand 2010: 4).

The EGAT claimed that PDP 2007: Revision 2 was critiqued and commented on in a public hearing, was endorsed again by the NEPC on March 9th, 2009, and finally was endorsed by the Cabinet on March 24th, 2009 (Electricity Generating Authority of Thailand 2009c: 3). The Thailand Power Development Plan 2010-2030 (PDP 2010) was formulated based on this process. PDP 2010 regression analysis is based on National Economic and Social Development Board’s (NESDB) long term GDP projection in the scenario to perform the load forecast. Mr. Sutat Patmasiriwat, one of the governors of EGAT, presented that EGAT’s annual projection was revised after January’s power consumption jumped to 12,281 million units, a 21 percent year-on-year increase, despite that the EGAT had planned to reduce power consumption in the country by 1,500 megawatts by the year 2014 (the end of the save energy campaign) (Anonymous 2010).

In 2010, Thailand’s reserve power capacity was 28,000 megawatts, above 20 percent of peak demand. The EGAT defended this, arguing that, “Although the latest PDP 2010 is formulated, the minimum reserve margin at 15 percent of the peak power load is still under consideration and is not accepted as the appropriate level for Thailand because the uncertainties of building new power plants and energy demand are not taken into account. There is potential for electricity outage if the reserve capacity is insufficient. This will cause damage to consumers that falling value of electrical failures and electricity outage damage about 60 baht per unit, while the electricity price per unit is only 2.50 baht, according to the research of the Energy

Research Institute, Chulalongkorn University” (Electricity Generating Authority of Thailand 2009b).

On its web site, the EGAT explains the level of minimum reserve margin that: “The power system of Thailand is a single state system, not like European countries and America, which have systems that are connected between countries or states. Therefore, the minimum reserve margin was set up at 20-25 percent to meet the aim of the National Socio-Economic Development Plans No. 7 and 8 in order to guarantee that there is electricity all year round. Even though the 15 percent minimum reserve margin was set up in PDP 2010, that level is still considered to be unsuitable for Thailand because it does not consider the uncertainty of new power plant construction and the demand for energy” (Electricity Generating Authority of Thailand 2009b).

There is a disagreement between NGOs and the EGAT on how to calculate the minimum reserve margin (installed capacity). NGOs calculate the installed capacity from *the predicted generating capacity of a power production system*, but in PDP 2010, the EGAT calculates from *the dependable generating capacity*. Santi said, “The dependable generating capacity is, of course, specified from an unclear source, by claiming that some power plants are not ready to generate electricity, because they must close to do repairs or other reasons.” This statement was recently made to show the people that the existing power plants are not unnecessary, because NGOs have argued that there are already more plants than necessary. In contrast, calculating installed capacity from the predicted capacity reflects the real generating capacity. However, the EGAT insisted on its methodology to calculate the minimum reverse margin, saying that that: “The margin is dependable capacity minus peak demand. It is not calculated from the average of annual electricity demand, because we have to ensure that electricity is available all the time, including during the peak load demand. It is also not calculated from the projected generating capacity; but from dependable capacity. Dependable capacity is the actual generation capacity of a single power plant can produce because each power plant cannot continuously generate electricity on full capacity. *So the dependable capacity will be lower than projected generating capacity*” (Electricity Generating Authority of Thailand 2009b).

The statistical data of reserve capacity calculated by NGOs and the EGAT are different because they calculate from different types of basic data. The former

calculates reserve capacity based on the projected generating capacity of power production system, but the latter calculates reserve capacity based on the dependable capacity, and its volume is always lower than the projected generating capacity. The EGAT insisted that this source of information (dependable capacity) will reflect the actual generation capacity that they could produce. Nevertheless, NGOs (Palang Thai, Mee Net, and AEPS) argue that, the way EGAT calculates the reserve margin of electricity creates a myth of energy insufficiency. Therefore, they can build more projects, such as the Ban Krut and Bor Nok coal-fired power plant projects. In contrast, the EGAT does not accept that the reserve margin should be at 15 percent of peak power load, claiming that if it limits the level of installed capacity to 15 percent, Thailand will face national power insecurity, which will have bad implications for the national economy.

Dr. Kurujit Nakornthap, the former Deputy Permanent Secretary to Ministry of Energy, in his reply¹³ to Christ Greacen's article writes: "Perhaps in one's dislike of fossil fuels and nuclear energy, one should also try to understand that for risk management and pricing stability of electricity tariff, Thailand needs to diversify its sources and types of fuel." The EGAT opined that energy security management so as to balance and share the risk is needed, and stated that 70 percent of Thailand's power need is met through natural gas.¹⁴

The risk of emergency incidents that the EGAT is concerned with is gas shortages, because natural gas is still the major fuel for power generation in Thailand (Electricity Generating Authority of Thailand 2010: 11). Gas shortages usually occur at Thailand's western pipeline system. During the year 2009, the EGAT had to cope with major gas supply shortages twice. The first incident occurred August 13th-18th when the EGAT received lower gas supplies for its generation system due to the scheduled maintenance of the A-18 gas field in the Thai-Malaysia Joint Development Area (JDA). The situation was exacerbated by a leakage of the condensate pipelines

¹³ The letter "Electricity planning more open than ever" was put in the same place of Chris Greacen's article (Greacen 2007).

¹⁴ Energy in Thailand was generated by various fuel types: natural gas (70%), coal/lignite (21%), hydropower (5%), import and others (3%), and oil (1%). Gas supplies for EGAT's power generation came from various gas fields including the Gulf of Thailand, Nam Phong, Phu Hom, Sirikit, the A-18 field of the Thai-Malaysian joint development area (JDA) in the Gulf of Thailand, Arthit, and Myanmar's Yadana and Yetakun gas fields (Electricity Generating Authority of Thailand 2009a: 12).

at the Bongkot gas field in the Gulf of Thailand, as well as by some technical problems at the Yadana gas field in Burma. These situations caused emergency shutdowns of both gas fields. The second major gas supply crisis occurred October 7th-20th, 2009 due to unplanned maintenance of the Bongkot gas field, coupled with the emergency shutdowns of the Funan gas field and the JDA A-18 gas field. Both major incidents and short disruptions of gas transmission have caused gas supply shortages for the EGAT's generation system. Despite those emergency crises, the EGAT has efficiently managed the power system operation to provide adequate and reliable electricity supply to meet the system's requirements uninterruptedly¹⁵ (Electricity Generating Authority of Thailand 2009a: 12). In so doing, Thailand cannot rely so much on natural gas and need to build the other types of power, which are listed in the EGAT's PDP 2010. Considering only coal/gas/hydro/nuclear mega-projects,¹⁶ Dr. Kurujit Nakornthap said that: "Any real energy expert should know that a new power plant needs at least five years' advance time from conception to completion." The Deputy Permanent Secretary of the Ministry of Energy, Mr. Norkun Sittipong, pointed out that the PDP for 2010-2030 will enable the country to reduce its dependence on natural gas for electricity generation to 40 percent from the current 70 percent over the next 20 years¹⁷ (Watcharapong 2010).

At the national level, the power development policy and national energy security are the issues that civil society, especially NGOs, have addressed. Those controversial issues are far from the participation of the local people who are concerned with their lives and their environment in the Salween borderlands. There are two issues that civil society and the border people have dealt with: national power security and state security. The former is the politics of the national power policy or

¹⁵ However, the 2009 Annual Report of EGAT did not mentioned in detail how to solve this problem and consequences. Actually, the EGAT decided to release water in the Srinakarin and Wachiralongkorn dams in Kanchanaburi province to generate power. This action flooded a number of villages. But information on this was not available from the authorities (Usa 2009). A committee was set up to investigate the sudden release of water. The EGAT paid compensation to the affected people (Anonymous 2009b).

¹⁶ Chris Greacen shows that projects under the Small Power Producer (SPP) and Very Small Power Producer (VSPP) programs, which are based on the approach of decentralized generation, are effective and can be launched immediately. It is quicker to build than large power plants, giving less opportunity for forecasts to diverge from reality (Greacen 2007).

¹⁷ However, local people in Thailand's Southern provinces argue that the natural gas can be stocked and they suggested that the government do that. They said that the PTT should also pay for the investment cost.

energy security and the latter is the politics of state security. Civil society and the border people are facing different kinds of politics. In other words, there is a gap in the political situation between civil society and the border people.

Supra-state organizations and transnational energy investors claimed regional energy security to be rational: to give life to power development projects through the GMS Power Grid under the GMS programs. The ADB has a prominent role in promoting power sharing and regional power trade. GMS countries also follow this theme: every state should think about its national power security and make plans for national power development. Internally, each state rearranges its organizations and mechanisms to handle and cooperate with neighboring countries and supra-state organizations. However, the way the states, along with the supra-state organizations, envision the power sharing and regional power trade is contested. Civil society groups have challenged the supra-state organizations at the regional level, particularly the ADB, to govern and challenge the states to improve their national power development plans and projections. At the local level, however, the national power security and power development policy are far from matters of the border people.

To sum up, rationalization of the Salween River refers to the process of the territorialization of state control, in which the Thai and Burmese states, in association with the Asian Development Bank (ADB) and transnational dam investors, have attempted to subvert the border people's resource management and take control of the Salween River through the discourse of national and regional energy security. These states-plus-capitalists have territorialized the Salween River by proscribing or prescribing specific activities along the River, or what is called "functional territorialization" (Vandergeest 1996: 160). To legitimize power over the Salween area, they have identified the function of the Salween River as a source of energy, one used to serve the nations' and the region's prosperity. Since the Salween River has been rationalized, so the Thai and Burmese states have had power to control its use and management, even claiming that they have not come to monopolize the River, but instead substitute for the people in terms of taking care of it. Actually; however, dam development represents the practice of exclusion in the way that the Thai and Burmese states have created a functional form of territorialization, one that prohibits access for the border people.

3.3 Seeing Like Transnational Companies

According to the figures compiled by Burma's Foreign Trade Department, Thailand currently ranks as Burma's third-largest foreign investor, with investments totaling US\$1.3 billion in 2007. Britain ranks first with US\$1.5 billion worth of investments, followed by Singapore with US\$1.4 billion. Thailand also ranks among Burma's leading trade partners (Cho 2008). In Burma, 19 hydropower projects are under construction and 18 cross-border hydropower projects are currently being planned through investments by companies and/or state-owned enterprises from China,¹⁸ Thailand and India (Mee-Net 2011). The Mekong governments have supported investment and trade in the region in the light of regional policy and cross-country cooperation in infrastructure development, including hydropower, power lines, gas pipelines and supporting road networks for the import and export of oil, gas, and other sources of energy. China is becoming an increasingly influential player in the region through its transnational investments in Burma.¹⁹ In addition, China has its own plan, not only in Mekong Region, but around the world.²⁰

¹⁸ There is an increasing anxiety over depleting energy sources in the region, so much so that every single country is trying to seek new sources of energy. The power failures in 16 of China's 31 provinces during the summer 2004 highlighted the problem. Hydro-electricity at the upper Salween was viewed by the Beijing government as a solution – an absolute necessity for a rapidly expanding economy (Butler 2004). They believed that hydropower is clean energy, which is cheaper than building power plants using sources of coal and oil energy. In so doing, China has planned to “develop” 13 dam projects on the Nu River (Nu Jiang): Songta, Maji, Bingzhongluo, Lumadeng, Fugong, Bijiang, Yabiluo, Lushui, Liuku, Shitouzhai, Saige, Yansangshu, and Guangpo (Agence France Presse 2007; The Epoch Times 2004). These dams would have a combined capacity of 21,320 megawatts, and they were expected to be completed in 20 years (Kultida and Praiwan 2003).

Chinese Premier Wen Jiabao suspended the Nu River projects in early 2004 because of pressure from environmental groups. This area covers the Three Parallel Rivers World Heritage Site which has a rich biodiversity and home to numerous indigenous groups. However, media reports indicate that a scaled-down version, including four dams, may be built, and preliminary construction and exploration activities have already begun around these dam sites. In addition, 82 environmental, human rights, and ethnic groups in Thailand and Burma have called on China to consult countries downstream of the Salween River before going ahead with its plan to build 13 large hydropower dams (Kultida and Praiwan 2003). The dams are likely to result in severe human rights abuses and environmental degradation (EarthRights International 2005).

¹⁹ Between 2010 and 2020, the Burmese government plans to construct 62 transmission lines throughout Burma. At present, 129 transmission lines are in operation (Mee-Net 2011). See also the details of Chinese investments in dam construction inside Burma in Appendix C, Table 1.

²⁰ Since 2000, the government of China has advanced policies that encourage domestic companies and banks to conduct business overseas. There are 97 dams built around the world by Chinese institutions (International Rivers 2008: 5, 14-17).

It is quite clear that the GMS Power Grid is part of the regional development plan for a supposedly better future is primarily regulated by the ADB. Increasingly, current development programs in the region tend to be involved with the private-sector investments where government-backed up financing is available, while the role of the ADB and international funding agencies has significantly decreased (Middleton 2008; Middleton, et al. 2009: 44). In the case of proposed Salween dam projects, such as the Tasang Dam with China Gezhouba Water and Power Group Co. (CGGC) and MDX, the Upper Thanlwin Dam with Water Resource Group, and the Hatgyi Dam with Sinohydro Corp. and the EGATi, transnational Chinese and Thai investors are influential financiers (International Rivers 2008).

On the one hand, the ADB, as an original financier, still has a significant role in the GMS region that poses a challenge to state sovereignty. On the other hand, the new financiers are state-owned enterprises and state-related private companies, such as the EGATi, Sinohydro Corp. and IGE Co., which are becoming more powerful in regulating the trajectory of regional development and investment at the Salween borderlands. However, the Salween dam projects are opposed by the people at the Thai-Burmese border. Therefore, the transnational dam investors have to seek alternative ways to make them not reject or oppose the dam constructions. Several kinds of development are introduced into the Salween borderlands so as to convince the border people agree to the Salween dam constructions. In this sense, alternative development conducted by capitalists became a depoliticized program. As Ferguson points out, the development apparatus is an “anti-politics machine,” depoliticizing everything it touches, everywhere whisking political realities out of sight, all the while performing, almost unnoticed, its own pre-eminently political operation of expanding bureaucratic state power (Ferguson 2003: xv). This section explores the influential roles of the ADB and TNCs at the Thai-Burmese border and analyzes the limitations and difficulties that civil society groups have when dealing with new financiers of dams.

3.3.1 The ADB: Investor or Developer?

The ADB is one of the important funding sources for development plans in Asia, particularly for infrastructure projects in each country. However, not all

countries can equally receive the ADB's loans. The ability to receive loans depends on the situation within each individual country. Burma, for instance, has been boycotted internationally, as it has been accused as being an undemocratic country. Thus, the ADB decided not to provide loans directly to Burma's infrastructure projects, with the exception of technical assistance and knowledge-sharing grants. Although the ADB is not the main donor to Burma, it still has some involvements in the proposed dam projects. In the meantime, other Asian countries, such as Thailand, China, India, and Korea, continue to provide loans to Burma. Burma also received grants from the ADB for development schemes, including for power and energy development projects (hydropower plants, gas pipelines, and coal-fired power plants) through the investments of private firms and state-owned enterprises. However, it is an illusion that those in the military regime and capitalists will go along or work together in honoring the condition of making Burma a democratic country.

The ADB has played two roles simultaneously, one as a bank and the other as a development institution. The ADB's main instruments for helping its developing member countries are policy dialogues, loans, equity investments, guarantees, grants, and technical assistance. As of December 31st, 2010, the cumulative totals of this spending, excluding co-financing, were US\$167.1 billion in loans for 2,328 projects in 42 countries; US\$4.4 billion in 163 grants; and US\$3.15 billion in technical assistance (TA grants), including regional TA grants²¹ (Asian Development Bank 2011b). Burma had received US\$530.86 million for 32 loans. The greatest share of these loans (59.54%) went to the agriculture and natural resources sector, followed by health and social protection (11.89%); transport and communications (8.01%); and water supply and other municipal infrastructure and services (6.77%); and energy (5.05%). The remaining loans went to support projects in industry and trade, and the financial sector. The last loans for technical assistance projects for Burma were approved in 1986 and 1987 (Asian Development Bank 2011a).

²¹ Since joining the ADB, Thailand has received US\$5.97 billion for 88 loans. The greatest share of the loans (31.44%) has gone to the energy sector; followed by transport and communications (21.64%); finance (17.50%); and water supply, sanitation, and waste management (9.97%). The remaining loans have gone to support projects in health, education, agriculture and natural resources, and industry and trade. In recent years, technical assistance and knowledge sharing played a major role in Thailand's engagement with ADB. In total, US\$64.42 million has been provided for 165 TA projects covering a wide range of sectors (Asian Development Bank 2011b).

Pi Peaw, an activist monitoring the ADB, mentioned that the ADB does not lend money to Burma not because the Burmese government is not democracy, but because it did not return money to the ADB for 20-30 years. The ADB does not accept the Burmese government, so the ADB does not give loans to Burma. This does not mean that the ADB does not want to invest in Burma. In fact, the ADB's administration is interested in Burma because the country is endowed with rich natural resources (land, forest, mineral, gas and oil, and freshwater and marine resources) and has high potential to develop its economy.

The ADB has not offered direct assistance to Burma for more than 20 years now, but it has supported private companies from several countries, including China, Thailand, India and Korea, in investing in Burma for over a decade. In recent years, the ADB (as well as the World Bank) took the opportunity to grant loans to Burma again after Cyclone Nargis. Ostensibly, the loans were meant for recovery. They tried to be involved in relief measures via ASEAN²² (Nang Muay 2009).

Pi Peaw explained that the ADB wants to invest in Burma. The rationale for investing in Burma is better now, with the release of Aung San Suu Kyi and the national election that took place in 2010. The ADB has tried to invest in Burma, creating the regional assistant project known as the "drug eradication program." However, the project was not approved. "Right now, the ADB is not directly investing in Burma. But the ADB continues to monitor Burma's economic development. An operational strategy will be formulated when the appropriate time comes," said *Pi* Peaw.

The range of the ADB's loans in the energy sector of the six GMS countries is US\$26.80-3,587.71 million. The highest is China, followed by Vietnam, Thailand,

²² In May 2008, Cyclone Nargis struck Burma and wiped out many households and families, as well as the livelihoods of the Burmese people. The biggest affected area was the Ayeyarwady Delta, including the city of Yangon. The Tripartite Core Group (TCG), which includes representatives from the Burmese government, ASEAN, and the United Nations, conducted an assessment in recovery relief called PONJA (Post Nargis Joint Assessment) without letting the community know. According to the ADB's website, US\$690 million fund supported PONJA for three years to cover eight sectors, including shelter, education, health, water sanitation, disaster risk reduction, environment protection and restoration of livelihoods. The World Bank has no disclosed data that mentions giving loans and grants to Burma after Nargis. There is a mention that World Bank gave US\$850,000 money to the Trust Fund managed by the ASEAN in PONJA process. ASEAN funded local NOGs and INGOs for implementing the projects according to the plan prepared by PONJA (Nang Muay 2009).

Laos, Cambodia, and Burma, respectively (See table 3.1).²³ An average of 18.66 percent of the six countries' total amount of loans come from the ADB.

Table 3.1 Cumulative ADB Lending for Energy Sector

Unit: US\$ million

Country	Total Loans*	Energy Sector	Percent
Thailand	5,969.48	1,876.61	31.44
China	24,536.61	3,587.71	14.62
Burma	530.86	26.80	5.05
Laos	1,211.46	323.32	26.69
Vietnam	9,284.97	2,033.99	21.91
Cambodia	1,167.80	120.77	0.34

Source: Asian Development Bank (2011)

* As of December 31st, 2010 and as of December 31st, 2009 in case of Burma

In the Mekong region, rich countries like China have also received huge loans from the ADB. However, it is difficult to hold the ADB responsible for particular projects under the GMS. *Pi Peaw* said,

For example, the Dachaoshan Dam in China. It is being constructed on the upper Mekong in Yunnan Province. The ADB is not funding the dam construction, but it is funding a transmission lines from the dam to Kunming. If some institutions or companies are funding only power stations or transmission lines, we have to look at environmental and social impacts of these as well. This is because without these facilities, they cannot operate the dam. So the ADB should be responsible for this dam. However, this does not mean either we can still pressure or we should give up. We can always try to make more space.

²³ As of 2010, China had received US\$24.54 billion for 183 loans. The biggest share of the loans (53.48%) went to the transportation and communications sector, followed by energy (14.62%), followed by water supply and other municipal infrastructure and services (12.63%). The remaining loans were spent to support projects in agriculture and natural resources, multi-sector, industry and trade, and finance (Asian Development Bank 2011b; Cf. Appendix C, Table 2).

Furthermore, a Shan friend of mine pointed out that due to the financial institutions' sanctions against Burma between 1988 and the end of 2011, the ADB cannot give direct support to Burma. However, the ADB has potential to support the Tasang Dam in an indirect way by giving a loan to other agencies to develop the transmission line, which is not directly related to Burma. The transmission lines, according to my friend, are the utmost driving forces for building the dam. Without a transmission line and a market to sell the output of electricity from Tasang Dam, it makes no sense to build the dam. Thus, my friend's assumption is that without financial support from the ADB for the transmission line, it makes no sense to go ahead with works on the Tasang Dam. My friend continued:

Because of the political transition in Burma, as well as the Burmese government's attempts to invite foreign investment inside Burma, from now on, the ADB will have more legitimacy to support infrastructure development projects inside Burma. Recently, Italian Thai Co. (ITC) has proposed to the ADB a loan to implement the Dawei Project inside Burma.²⁴ Once the Environmental Impact Assessment (EIA) is approved, I am sure that the ADB will give a loan to Italian-Thai Co. (ITC).

In short, the GMS Power Grid is a part of the regional development plans, created by the ADB as original financier. The ADB has influenced the facilitation of regional development among emerging financiers, especially TNCs or state-owned enterprises. The ADB has taken on the role of an investor and a development institution in Asia. It provides loans and technical assistance to member countries (including Thailand and Burma). It has not directly given loans to Burma for two decades due to international economic sanctions, but by taking the role of a

²⁴ The Burmese military regime and the Thai government signed a Memorandum of Understanding (MoU) in May 2008 for the 10-year Dawei Development Project, which includes the Dawei deep-sea port, an industrial zone, and a railroad and road connecting Dawei to Thailand. The Myanmar Port Authority and the builder, the Italian-Thai Co. (ITC), signed an MoU in June 2008 (Anonymous 2011c).

development institution, the ADB has still provided loans to Burma in indirect ways. The ADB is increasingly working closely with the Burmese government to develop the Salween borderlands that the border people who live in the areas, in turn, will be excluded from their local resources with the condition that the military regime in Burma should gradually democratize the country. Therefore, the border people are more and more being forcibly displaced people.

3.3.2 New Investors: the EGAT, Sinohydro Corp. and IGE Co.

The Salween River, as part of the Thai-Burmese border zone, is being militarized and capitalized by way of integrating it into border development scheme. The Salween dam projects in particular are brought within the ambit of Thailand's national Power Development Plan. In effect, the Salween borderlands are integrated into the EGAT's energy plan as sites of dam construction. In terms of transnational power energy investment, the EGAT has its own history of border zone managements in the four decades since it was founded. As Hirsch notes, the geopolitics of resource management in Mainland Southeast Asia are products of both eco-political and geo-political forms. In the Cold War era, the borderlands of Thailand served as buffer zones to protect the country from possession by communists. After the Cold War, Thailand was pushed towards forming new and constructive relationships with central governments in neighboring countries. In this era, Thailand's fundamental geopolitics of cross-border resource-related issues shaped its inter-state relationships (Hirsch 1995: 235-36). Therefore, the political and economic contexts of regional relations were changed to serve as gateways for trade and investment (Battersby 1999). However, Hirsch and Warren problematized the "environmental" action, arguing that its success at one level can lead to similar problems at another level. For example, the cancellation of Thailand's logging concessions, in response to environmental protest, was quickly followed by the granting of logging concession to Thai companies in Burma and Laos. Similarly, protests over dam construction in Thailand have encouraged the EGAT to seek new sites in neighboring countries where protest is less likely, rather than within Thailand's border (Hirsch and Warren 1998: 304-05).

Furthermore, Hirsch argues that the Thai government has changed its diplomacy towards its neighboring countries in the post cold war era "from battlefield

to market place,” given resource scarcity and environmental obstacles. Because Thailand has to find supplementary resources and energy (in many forms, including logging, energy, fisheries, mineral and gems) from its neighboring countries, there is an increasing internalized role of Thailand’s environmental movement. The result of this is that environmental concerns are at the forefront at the local, national and international levels in each of the neighboring countries in Thailand (Hirsch 1995: 251-55). As a result, a direct linkage between the Thailand government and the SLORC of Burma was established, thereby imposing more hardships on border people and leading to environmental degradation. The environment and people are further threatened by proposed new projects such as the Salween dams. This search for new energy sources is implicit in a statement made by Mr. Pornchai Rujiapha, the secretary-general of the Energy Ministry, who was also the chairman of the EGAT: “Natural gas supply in the country is decreasing and the cost is increasing...so other sources and kinds of energy are needed from both Laos and Burma” (The Irrawaddy 2007).

Turning our attention back to the EGAT, it has played a major role to feed Thailand's energy demand for five decades. Its privilege is embedded in its national duty to drive the country to the *khwam charoen*. On top of that, it is its own business. The nation’s progress and the EGAT’s profit are intertwined. Hence, the EGAT has invested in neighboring countries since 1968. For example, Thailand and Lao PDR’s first electricity exchange project was to construct Laos’ first dam, the Nam Nguem Dam.²⁵

To supply electricity to Vientiane, the EGAT constructed a 115-kilowatt-transmission line from Udon Province to Vientiane. The construction finished two months before the state opening ceremony, which took place on October 16th 1968. The country’s opening ceremony made the EGAT proud of its successful venture, and the king of Laos and King Bhumibol of Thailand were chairpersons of the ceremony.

²⁵ The contact agreement stated that Thailand would send energy to Lao PDR. The exported energy would not exceed 5,000 kilowatts and electricity would amount to at least 500,000 kilowatt hour per month for the dam construction and US\$1.25-million-cement loan. In return, the equivalent of Laos’ electricity would be sent to Thailand after the dam project is completed. In addition, two 22-kilowatt-underwater cable lines were constructed across the Mekong River (Nakornphanom-Thakhaek and Mukdaharn-Suwannaket), and electricity was exported via these routes in August 1973 (Electricity Generating Authority of Thailand 1997: 44).

The EGAT claimed the event as historic (Electricity Generating Authority of Thailand 1997: 44), that its work was done in the name of Thai nation,²⁶ in which the *khwaam charoen* and the Thai nation-ness are matched. Since then, the EGAT has represented its work as a national duty to make all Thai people happy.

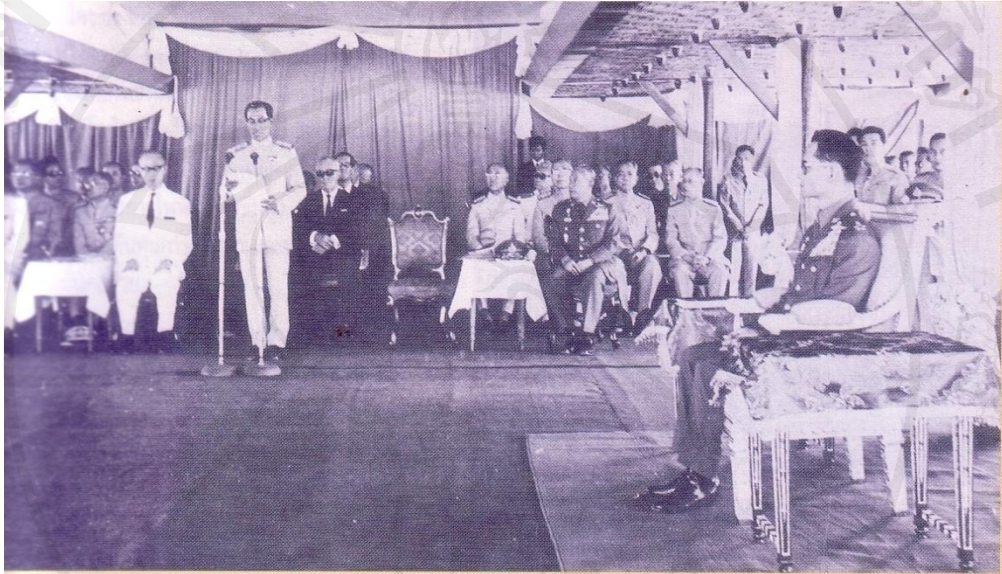


Figure 3.4 “State Ceremony” the Opening Ceremony of Transmission Line between Thailand and Lao PDR on December 16th, 1968

Source: Electricity Generating Authority of Thailand (1997: 45)

Investment in power in Thailand’s neighboring countries, such as Laos, showed that the EGAT did not care about differences in political systems. Capitalism goes beyond political ideology where political patriotism does not appear to be a key issue. Thailand receives and takes advantages, obtaining less expensive electric power, to support the electricity system security and to avoid high indebtedness from international loans for dam construction that will affect Thai natural resources²⁷ (Kattima 2001: ix).

The EGAT has transformed itself into more of a commercial entity than a nationalist entity. By 1984, the EGAT started to form subsidiaries in compliance with

²⁶ The monarchy and the EGAT support each other, as the image of nation and legitimate power. As we can see, all the dams are named after the members of the King’s family.

²⁷ In the relationship between Thailand and Lao PDR, Thailand has more bargaining power than Lao PDR in terms of regulating the electricity trade price, as expressed by Director of Electricite Du Laos. (See more detail in Kattima 2001: 100).

the government's privatization policy in order to improve its ability to do business and co-invest with the private sector in the electricity supply industry and to reduce investment burden for both the EGAT and the government (Electricity Generating Authority of Thailand 2011). Recently, the EGAT established the EGAT international (EGATi) on December 18th, 2009 with share holding of 99.99 percent. It is, as a 'company limited,' the EGAT's means of investing in power projects and related businesses in neighboring countries in order to produce electricity for supply to Thailand. Linked to its plans for the Salween River, the EGAT's ambition is to become a regional power trader and investor beyond the GMS to all of Southeast Asia²⁸ (Ryder 2004: 14).

Industrial dam builders have been planning a series of dams on the Salween River since the early 1980s (TERRA 2006). The Thai and Burmese governments have been engaged in negotiations to build large dams on the Salween. The Thai government also plans to construct more dams along the tributaries of the Salween River, to divert water from the River to the Bhumibol reservoir in northern Thailand. All of the feasibility studies and other forms of technical assistance for the dams and other water diversion projects on the Salween River have been conducted by the Electric Power Development Company, a Japanese government agency (Living River Siam, et al. 2008: 171).

Even though governments worldwide are restricting aid to Burma – in response to human rights violations by Burmese military government – Japan, China and Thailand still openly invest inside Burma, regardless of the violence, human rights violation and environment destruction perpetrated by the Burmese government. The proposed Salween dam projects are a joint undertaking of the Burmese, Thai and Chinese governments (Butler 2004; Sai Silp 2007). There are many other investors who are involved in the proposed Salween dam projects. Thai-based MDX group of companies, in conjunction with Italian-Thai Development Company and Marubeni

²⁸ Regional cooperation framework is used to explore and expand business opportunities for Thai energy corporations. The EGAT's subsidiaries, such as Ratchaburi Electricity Generating Holding Public Company (RATCH), Electricity Generating Public Company Limited (EGCO), the EGATi, are playing important roles in investing in power projects, not only in Thailand, but also neighboring countries, such as Lao PDR, Burma, and Cambodia. Therefore, Thailand's centralized energy corporations can grow and profit along with their speculation.

Corporation have initiated work on three dams on the Salween River in Burma: Nam Kok, Hatgyi and Tasang (Adams 2002: 57).

Furthermore, Thai political leaders intended to move ahead with the construction of dams on the Salween River and promised to return any remaining funds from a 4-million-baht (US\$127,000) soft loan to the Burmese government as a means to strengthen economic ties between the two countries, maintaining the agreements of the Bagan Declaration (ACMECS 2011; Cho 2008).²⁹ Therefore, Thailand's Ministry of Finance approved a low-interest loan to Burma by Thailand's state-owned Exim Bank for the telecoms sector in 2004.³⁰ As a result of the loan, Shinawatra Satellite Co. leased a satellite service for broadband Internet access and telephone service to Bagan Cybertech, a Burmese company owned by the son of former Burmese Prime Minister Gen Khin Nyunt (Saw Yan Naing and The Associated Press 2010).

According to a high-level Energy Ministry official, the Salween dam projects in Burma should continue because they are important for energy stability in Thailand (Sai Silp 2007). According to the PDP 2010, on July 4, 1997, the government of Thailand signed an MoU with the Burmese government. The essence of the MoU is to encourage up to 1500 megawatts of power development in Burma to be exported to Thailand. Although the Salween Hatgyi and Tasang dams are located in Burma, the generating units will be installed in Thailand. Most of the electricity generated will be sold to Thailand, and Burma will receive only a small amount. This makes easier

²⁹ The Bagan Declaration is a regional economic agreement signed by the Thai, Burmese, Lao and Cambodian governments in 2003 as Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS). The Declaration states that the Economic Cooperation Strategy (ECS) will act as a catalyst to promote regional cooperation programs, especially in the context of ASEAN Economic Community and to complement ongoing bilateral frameworks. The main objectives of the ECS are to increase competitiveness and generate greater growth along the borders; to facilitate relocation of agricultural and manufacturing industries to areas with comparative advantage; to create employment opportunities and reduce income disparity among the four countries; and to enhance peace, stability, and shared prosperity for all in a sustainable manner (ACMECS 2011). Accordingly, the former Foreign Minister of Thailand, Noppodon Pattama, opposed economic sanctions against the junta, preferring "negotiations rather than punishments", which would lead to more positive developments in the country, which has been run by the military since 1962 (Cho 2008).

³⁰ However, Prime Minister Thaksin Shinawatra was found guilty. Thailand's Supreme Court said that Thaksin had abused his power while in office to pressure the Foreign Ministry to approve a 4-billion baht loan to Burma so that his own Shinawatra Satellite Co. could profit from telecoms contracts. This led to the expulsion of Thaksin Shinawatra. The Supreme Court ruled that, in four out of five cases presented to it, Thaksin had used his authority as the country's leader from 2001 to 2006 to implement policies that personally benefited him, sometimes at the expense of the state (Saw Yan Naing and The Associated Press 2010).

for the EGAT to secure low-interest loans to fund the projects (May Kyaw 2009; Yuthana 2002). In keeping with this rationale, the EGAT seeks to invest in constructing dams on the Salween River in Burma, since hydropower is the cheapest method of generating power. Investing in hydro-electric projects in neighboring countries means avoiding protests by conservationists in Thailand. Outside the country, they have more freedom to press their cause, and power projects are not required to pass environmental impact assessments.

Thai companies benefit from partnering with Chinese companies, in part because of the Chinese government's close ties with Burma's military junta (Middleton 2008: 13). Until the 1990s, most dams in the lower Mekong countries were public investments based on loans from the World Bank and the ADB. Now the game has changed: most dams are commercial projects, and China is a power investor in downstream development. Chinese state-owned enterprises have stakes in several key projects³¹ (Hirsch 2011), including in the proposed Salween dam projects. The Hatgyi Dam project is a joint venture between the EGAT, Chinese state-owned Sinohydro Corp, and Burma's Hydropower Department under the Ministry of Electric Power (The Burmese state-owned Myanmar Electric Power Enterprise) (Anonymous 2009d). The EGAT and Burma's Hydroelectric Power Department (Electricity Authority of Burma) signed a Memorandum of Agreement (MoA) for the development, ownership and operation of the Hatgyi Dam project in December 2005. Additionally, China's state-owned enterprise Sinohydro Corp. signed a Memorandum of Understanding (MoU) with Burma for US\$1 billion on the Hatgyi Dam in 2006 (Bosshard 2010).

Sinohydro Corp. is the world's foremost dam builder. It controls 70 percent of the Chinese and 50 percent of the global hydropower market and seeks to become a leading global brand in the hydropower sector. The company is seeking investor support for this position and announced its interest in an Initial Public Offering (IPO) in November 2009. China's Ministry of Environmental Protection posted the

³¹ China has weighed in heavily: it is estimated that up to 40 percent of the proposed tributary and mainstream hydropower development in coming years in MRC member countries (in other words, outside China) will be done by Chinese companies. These projects include four of the eleven proposed Mekong mainstream dams, at Pak Beng, Pak Lay and Xanakhm in Laos and at Sambor in Cambodia (Hirsch 2011).

Environmental Audit Report for Sinohydro Corp. for comment in March 2010. The company plans to list 25-30 percent of its shares as A-Shares on the Shanghai stock exchange in 2010, and to raise ¥12.9 billion (US\$1.9 billion) in the process (Bosshard 2010; International Rivers 2010).

The EGAT signed a deal with Sinohydro Corp., to be a third partner in the Hatgyi Dam construction on June 26th, 2006 (Living River Siam, et al. 2008; Northern NGO CORD and Salween Watch Coalition 2007; Tunya 2007). The EGAT's share in the project is 45 percent; Sinohydro Corp.'s share is 40 percent, and the Burmese military government's share is 15 percent. The project's total budget is 44,100 million baht (Living River Siam, et al. 2008: 94, 210). IGE Co. reportedly signed a contract worth US\$30 million with China's state-owned Sinohydro Corp. for the dam construction in 2008 (Yan Pai 2011). *Bangkok Business*, a Thai newspaper, quoted a report from the *New Light of Myanmar*, a Burmese Newspaper (April 26th 2010), that the EGATi already signed an MoA with International Group of Entrepreneur Co. Ltd. (IGE) of Burma and Sinohydro Corp. to build the Hatgyi Dam on April 24th, 2010.³²

What do we know about IGE? The IGE group of companies was established in 1994. It is co-owned by Nay Aung and Pyi Aung, sons of Burma's Minister of Industry Aung Thaung, a known hardliner in the cabinet. Aung Thaung is considered to be close to the junta chief Snr-Gen Than Shwe and Vice Snr-Gen Maung Aye, the former regime's second-in-command. Pyi Aung is married to Nandar Aye Maugn Aye's daughter. The IGE group of companies is involved in gold mining, oil, gas, agricultural products, and timber trading industries, under the company names of Aung Yee Phyo Co. Ltd., IGE Co. Ltd., MRT and the Amara Group, as well as a banking corporation called United Amara. IGE was registered in Singapore in 2001. Its office is in Shenton Way, an exclusive area of the Lion City.³³ The IGE group is

³² According to the MoA signed in April 2010, Sinohydro Corp. has a 50 percent share in the Hatgyi Dam project. The EGATi has a 36 percent share in the project. The Department of Hydropower Project Planning (DHPP), Myanmar has a 10 percent share in the project. In addition, IGE Co. Ltd. has a 4 percent share in the project (Nang Shining 2011: 121-23).

³³ IGE is one of Burma's leading companies. It is a major supplier of materials used in the construction of electrical substations and transmission lines. It sells equipment and machinery to both private and public sector companies in the oil and gas industry. It also provides compressed natural gas (CNG) filling stations for government projects. The company exports rice and imports machinery and spare parts for electrical generating projects. It also imports steel, fertilizers and chemicals. In March 2007, IGE signed a contract with little-known Rimbunan Petrogas Ltd., a partner in a joint venture with the state-owned Myanmar Oil and Gas Enterprise to explore offshore oil and gas in Block A, off the

very close to the military regime; it is a crony business in Burma to which Aung Thaung gave valuable government projects and export-import licenses relating to automobiles, gems, palm oil, agriculture goods, oil, and gas products³⁴ (Anonymous 2008; Wai Moe 2007; Yan Pai 2011).

Recent moves to open up Burma's economy are not expected to bring much relief to the impoverished Southeast Asian nation because there are still numerous obstacles to economic growth, including monopolistic control of key sectors by cronies of top military officials (Aung Thet Wine 2011). The key to business success in the country is close ties to the ruling generals. But it is less well understood just how much this chronic cronyism affects the lives of ordinary Burmese. The practice of awarding major contracts to junta cronies continues, as the new rules continue to favor companies closely connected to Burma's military (Aung Thet Wine 2011; Wai Moe 2010a).

IGE and Aung Yee Phyoe trade chiefly with Asian countries, such as China, India and Singapore. Neither company is on the list of Burmese businesses targeted with sanctions by the US. However, Aung Thaung and his immediate family are on

Arakan coast. Rimbunan Petrogas Ltd. is registered in the British Virgin Islands (Anonymous 2008). The IGE Group of Companies has obtained an official permit from the Trade Policy Council (TPC) to transport pipelines to the project areas where natural gas will be transferred from offshore rigs in Burma's western Arakan State to China's Yunnan Province, according to business sources in Burma. According to the Thailand-based NGO Shwe Gas Movement, IGE will also be responsible for road construction and other related infrastructure projects along the pipeline route. In addition, MRT Construction Co., a subsidiary of IGE, has reportedly been granted a construction permit for a safari project in the country's capital, Naypyidaw. Another of IGE's subsidiaries, the Singapore-registered UNOG, in January 2010 signed a production-sharing contract with Malaysia's Petronas to explore for oil and gas in three blocks in the Gulf of Martaban, south of Rangoon (Yan Pai 2011).

³⁴ Tin Aung Myint Oo is the Secretary of the SPDC and the chair of the Trade Policy Council (TPC), overseeing investment and import-export contracts. He reportedly controls the movements of construction and other important businesses, and he has authorized work permits to several of his close business associates. He gave permission to Max Myanmar, a company owned by his close business associate Zaw Zaw, the chairman of the Myanmar Football Federation, for the construction of several other projects, including the Tavoy deep seaport in southern Burma, a football stadium, and a children's hospital in Rangoon. He originally granted the company permission for the construction of Kyauk Phyu deep seaport in western Arakan State, but later ordered that the contract be shared between Htoo Company and his son, former Capt. Tayza Saw Oo, and the Asia World Company. He also granted the company permission for the construction of several projects, including hydropower plants, jetties in the Rangoon port, airports, and roads and bridges. Tin Aung Myint Oo has prioritized large-scale projects for prominent businessmen close to him. He later became Burma's First Vice President (Yan Pai 2011).

the EU and US visa blacklist and are listed as a target of EU sanctions³⁵ (Ko Htwe 2011; Wai Moe 2007).

The agreements between TNCs and the Burmese junta's cronies on the Hatgyi Dam project made the local communities worry about the project's potential impacts (Bangkok Business 2010). These companies conducted a preliminary study and a feasibility study, drafted a final report, and constructed roads into the area beginning in late 2005 through 2006 (Anonymous 2007a). Under the existing plan, the dam is due to start supplying electricity to the EGAT by 2013 (TERRA 2006). However, the Hatgyi Dam will not be built if Thailand does not agree to it. On January 27th, 2010, Ai Chang said, "Who will come to build it? China wants to build dams at the upper part of Salween River. You know, Burma itself will not be able to build it if Thailand doesn't support the project and buy electricity generated from the dam."

Likewise, Naree, a Thai environmental campaigner, mentioned that if Thailand does not buy the 1,200-megawatts of electricity produced at the Hatgyi Dam, nobody will come to invest because it is close to the Thai border. "The Burmese government, as I know, has inadequate efficiency to purchase a huge amount of electricity for domestic use. Furthermore, it is not worthwhile to send electricity to China or India through transmission line. Both China and India are over 1,000 kilometers away from the dam. This project is designed to purchase and import electricity to Thailand. If Thailand does not sign a contract to buy electricity or is not involved with the project, it will be aborted for sure," said Naree.

However, the EGAT will invest US\$5.5-billion in building the Upper and Lower Salween dams (the Weigyi and Dargwin dams), as they are cheaper than building its own power plants in Thailand using other sources of energy such as coal and oil. Mr. Sitthiporn Rattanopas, the EGAT's governor, said that the EGAT would develop, finance and operate the project under a timeframe specified in a concession granted by Burmese authorities. After the concession has expired, the EGAT and Burma will hold an equal stake in the project. The EGAT could save about US\$203 million by overhauling the units rather than building new plants (Yuthana 2002).

The Hatgyi Dam was the first project to be considered to be built on the Salween River, because its location site is in Burma and the inundated areas would be

³⁵ The last few weeks in April 2012, Western sanctions on Burma have been changing rapidly.

completely inside Burma. The adverse environmental and social impacts have not been a priority for the Thai government, much less the Burmese government (Tunya 2007). In terms of investment, Thai strategic planners view China as an influential power in the region in both a competitive and cooperative sense. In a competitive sense, the question is, how does Thailand compete with China? In a cooperative sense, China is bigger power than Thailand and it cannot compete against China. As such, Thailand should cooperate with China and share benefits from businesses and investment in Burma. The EGAT tends to choose to work with China in a cooperative way.

Up to now, the Salween dam projects, under the GMS Power Grid, are financed by the ADB and the new financiers. New financiers involved with the Salween dam projects, for example, state-owned enterprises (Sinohydro Corp. and the EGATi) and the Burmese junta's crony IGE Co., are investing in the construction of the Hatgyi Dam. They have admitted to conspiring to keep the proposed Salween dam projects running. They are closely and increasingly working with the Burmese government to transform the Salween River into a commodity, thus excluding the border people from their forestlands and river resources. In effect, the people at the Thai-Burmese border, are "subject to two regulatory authorities" (Ong 1999b: 224): TNCs and the state authorities.

3.3.3 Khwam Charoen and the EGAT

The border people perceive the Thai state as a developing state, as necessary to improvement of their poor material condition. This perception grants enormous power to the state, which has both negative and positive sides. They are aware of the state practices of power through development projects. They have accepted and engaged with the development projects identified as profitable, but they have rejected and even protested against projects that tend to induce negative impacts.

The EGAT has claimed, in public, that they promote Corporate Social Responsibility (CSR)³⁶ to support good works on society, community, and the

³⁶ The corporate social accountability (CSR) campaign tries to advocate that companies act responsibly for the projects in which they invest. It is based on capitalist mentality. Internationally, the UN is also concerned with CSR at the government and corporate levels. It is seen as a way to push transnational investment issues softly and carefully. CSR became a tentative agenda that transnational social

environment. “The EGAT has strictly observed all applicable laws and regulations in all processes of its operations and activities, both before and during the project development and throughout the operating life of its power facilities. Particular emphasis has been placed on the implementation of all environmental and social impact prevention and mitigation measures as well as environmental monitoring programs”³⁷ (Electricity Generating Authority of Thailand 2009a: 76-77). In terms of professional and social engagement, they are actively focused on CSR³⁸ (Sorayuth 2009).

However, CSR is a voluntary, self-regulated evaluation of businesses performance on social and environmental issues beyond the requirement of the law. It appears to be a good theory, but it has not been successfully applied in practice. The EGAT international has accepted very limited CSR during the preparation process of the Hatgyi Dam project (Nang Shining 2011: 92). International Rivers, an international NGO, is critical of the fact that very few hydropower companies have developed and published CSR policies. The EGAT’s subsidiary companies, Electricity Generating Public Co., Ltd. and Ratchaburi Electricity Generating Holding PLC., have adopted a very narrow interpretation of CSR. As such, they provide only limited support for affected communities (Middleton 2008: 15).

The EGAT has donated money to environmental conservation projects and tried to show that they take care of the environment, but they still exploit natural

movement is focusing on. They, of course, believe that CSR goes beyond sovereignty issues. Therefore, they have tried to develop a guide for communities dealing with corporations. For example, a case of Khon Kaen, a Thai sugar company has been involved with cases of land confiscation in Cambodia. The lawyers (Thai, Cambodian, and international) first handed the complaint to the Thai National Human Rights Commission, which will consider the case involving abuse outside Thai borders. They expect that the case will define jurisdiction and could be formative. In addition, a British company, Tate & Lisle, is a purchasing company in Europe that has a strong CSR platform and will be targeted to act in accordance with “fair trade” regulations.

³⁷ Other major environmental efforts in 2009 also included the continuous implementation of the standardized management systems. It included the ISO 14001 environmental management system; the safety, occupational health, and work environment system; and initiatives aiming at fighting global warming towards Clean Development Mechanism (CDM) projects and the Demand Side Management Program (Electricity Generating Authority of Thailand 2009a: 76-77).

³⁸ The EGAT has claimed that they believe in people and listen to the public and NGOs. Mr. Sombat Santijaree, the EGAT governor, said, “Our 1992 Environmental Law and the constitutions, both the 1997 and the 2007 versions, allow the Thai public great opportunities to express their concerns over environmental issues that we must not ignore. We have to show to the public and the government that we do care about the environment, are capable to manage our duty with a transparent attitude... The EGAT has done so many things for our Thai society such as our ‘return elephants to the wild’ program... I believe this will benefit the Thai public most” (Sorayuth 2009).

resources. Ai Chamnan argued that donation is actually a private action that is not related to the Salween dam projects. However, the EGAT has been bent on these two activities. As Mr. Pornchai Rujiprapha, the secretary-general of the Ministry of Energy and the governor of the EGAT stated, “The EGAT has designated 120 million baht (US\$3.6 million) to assist in public health, education and employment for local villagers in the Salween Dam area” (Sai Silp 2007). In reality, this is part of the EGAT’s mass propaganda (*karn tam mounchon*), and the EGAT itself has an ethical problem. As Nang Shining put it, “the findings have revealed that EGAT international has exercised a philanthropic approach to community investment as its CSR activity, which villagers felt was undertaken to sway those opposed to the dam project” (Nang Shining 2011: 92).

Here, I would like to elaborate on what the EGAT has done at the local level as part of its CSR strategy. The EGAT has tried in many ways to gain access to the community in order to persuade them to support the Salween dam projects. On the ground, they have tried to do this in a variety of ways. Where the villagers are poor, the EGAT used *khwaam charoen* and the King’s sufficiency economy theory as ideological tools to approach the communities along the Salween River. The EGAT persuaded local people to join their program of sufficiency agriculture, including, for example, organic fertilizer, biological fermented liquid, and dishwashing liquid. Ai Chamnan said, “*Karn fai fah* is not involved with making the *khwaam charoen*, but it intervenes to support the TAO with money for running activities, particularly agricultural activities: *liang pla duk* (catfish farm), and *nammak chewapap* (biological fermented liquid). This allows it to show its name in helping communities.”

In 2008, the EGAT provided some books and other materials for the school in Saw Myin Dong village. As a consequence, there were disagreements among the villagers over supporting the EGAT because they are skeptical of the EGAT’s long-term tactics.

Ai Chamnan said, “There were public health mobile services in Saw Myin Dong village two or three years ago. The first time a doctor team came here we accepted it. Villagers came to use the service. The second time, they came again. We wonder where they come from. A doctor said that the EGAT hired them from Mae Sariang Hospital to start the mobile service. All budgets came from the EGAT. So,

villagers rejected it. They didn't come to use their services because villagers understood the EGAT's trick."

The EGAT also established a good relationship with government officials. They might have connections at the top level of the military in order to use soldiers as a tool to coerce villagers to give in to EGAT's plans. Many residents in the community, including *Ai Sanong*, alleged that the EGAT also provided funding to other official departments who are working closely with the community, including the education department and the military. *Lung Sanit*, a Karen elder of Saw Myin Dong, also confirmed that the soldiers who were based in the village tried to coerce them to accept the Salween dam projects in 2008. *Lung Sanit* remembers well what the soldiers often said to villagers: the government will bring development to you, we should not resist.

In July 2009, I met *Ai Sanan*, a local Thai Karen activist, and we discussed the EGAT's public relations strategies in local areas. In response to my question about the Hatgyi Dam, *Ai Sanan* had this to say: "The Hatgyi Dam project will be revised so that the EGAT (*kor for phor*) can't run the project any further. But they haven't stopped even though they can't start it now. They try to gather mass supporters (*dueng mounchon*) to support them in the Thai-Burmese border zones during this time. Last year, you know, they gave the people on the Burma side the mosquito nets. And then later, they knew that those things belong to *kor for phor*. Hundreds of them were sent back, because people rejected *kor for phor*."

Ai Chamnan then told me this story:

Making the *khwam charoen* through organizations for villagers happened in the past. Villagers knew that the EGAT helped to develop the village, so if the EGAT wanted to construct dam we would have to agree with the EGAT. That is the EGAT's aim. They are very clever. The administrative people are oblivious to the EGAT's plan and so they supported *khwam charoen*... Most villagers and government officials thought that the dam is good because it produces electricity for us. Villagers also said that 'the dam brings *khwam charoen* to our villages. Why are you

against *khwam charoen*?' I argued 'what does *khwam charoen* mean? It means money, right? People in Mae Sariang, for instance, in the past, they received money from logging in the Salween forests. Where did the money go? They no longer have money. The meaning of *khwam charoen* is sustainable development. When we explained it to them, they understood better. The dam project will be approved if we don't oppose it. However, it is difficult to oppose because it is not transparent process. If we do not struggle, they will build it.

Therefore, the EGAT has tactically persuaded the border people to agree to dam construction on the Salween by exercising a philanthropic strategy within local communities at the Thai-Burmese border and swaying them away from opposition to dam construction. Due to the resistance, the EGAT has promoted, in public, Corporate Social Responsibility (CSR), to support good works on society, community, and the environment. At the local level, the EGAT has tried many ways to gain access to the community in order to persuade the border people to support the Salween dam projects. The EGAT also used *khwam charoen* and the King's 'sufficiency economy' theory to approach the communities by persuading the border people to join their development program. However, they understood the EGAT's trick and tended not to support the program, and they continued resisting the large dam projects because of concern over losing the ability to access local resources.

In summary, "seeing like a state" refers to state practices that bring development into areas in order to control local people, in the sense that they become submissive to the development discourse, after which the state excludes them from their local resources. Similar to "seeing like a state," "seeing like transnational companies" refers to the TNCs' practices along the Salween borderlands, where they have brought development projects in the form of welfare services so as to make the border people submissive and; thereafter, easily excluded from the forestlands and rivers. In this sense, the development program has been politically and tactically used by the TNCs as an 'anti-politics machine'. As I have shown, the EGAT; for example,

has introduced several local and small development projects or social welfare services as the forerunner to this strategy; however, these projects and services are not the central aim of the project; the EGAT has concealed its real aims behind the scenes. The real aims of EGAT are to proceed with the Salween dam projects and to bring a halt to people's struggles against them. If the EGAT proceeds with the Salween dam constructions, the benefits of these large dam development projects; however, will not flow to the border people – the electricity produced by these dams will not be sent to local communities, but to other areas. In addition, the projects will have many negative impacts on the environment and people's livelihoods; therefore, the 'development' process along the Salween borderlands, as introduced and brought into the area by the EGAT, in the foreground seems to be a development program that will benefit local people, but behind the scenes will be used to exclude them.

3.4 Summary

The process of frontier capitalization in the current neo-liberal period, characterized as the commodification of the Salween River, is more complicated than the previous commodification of the forests that took place during the colonial period, in that the Thai, Burmese and Chinese states, state-owned enterprises, and Burmese companies controlled by the military, are all involved actors. The Salween River has been targeted by these new actors as a resource frontier – to generate capitalist expansion along the border in the form of frontier capitalization, and especially to introduce commodification of the River itself. This process has been carried out through collaboration between the corporate and state sectors, because their purposes match. States want to control the conflict zones or borderlands, while capitalists want to invest and exploit in the natural resources there. The Burmese government has strategically combined these together in order to plan the Salween dam projects. The commodification of the Salween River has been the result of the processes of state and market exclusion, in which development discourse has been used to exclude the border people from access to local resources. To produce exclusion, three processes have been combined: civilizing the Salween, rationalization of the Salween and ensuring the border people are submissive.

The first process under this social construction of ‘nature’, and the basic condition necessary to create an exclusion process that prevents some people from having access to resources, is the Thai and Burmese states using a ‘civilizing the margins’ discourse to claim that the Salween borderlands are marginal regions and that the border people there are uncivilized. Therefore, the landscape of the Salween borderlands is re-read as an uncivilized margin, and is inhabited by poor backwards people, those who need to be developed in order to bring them better living conditions and guide them to *siwilai*. To civilize the margin and respond to the needs of regional economic integration, states have used the development discourse to enclose the borderlands.

Second, the Thai and Burmese states have rationalized the Salween River in terms of the functional territorialization of state control; to subvert the border people’s management and control over local resources, and by proscribing or prescribing specific activities as sources of energy production – to serve the nation’s and the region’s prosperity. As a result, they have excluded the border people from access to these resources and instead legitimized state and capitalist claims and authority over them. In this sense, the Salween borderlands are now being regulated by states in association with transnational capitalists, through the practice of rationalization.

Third, as the border people have opposed the Salween dam projects, so the Thai and Burmese states and the transnational companies, particularly the EGAT, have attempted to reduce and/or remove their resistance at the border. The Thai state and EGAT have also introduced alternative development as an “anti-politics machine,” to make the border people submissive and to sway them from opposition to dam construction activities on the Salween. They have also used *khwaam charoen* and the Thai King’s ‘sufficiency economy’ theory to approach the border communities and persuade them to join their development programs. In public, Corporate Social Responsibility (CSR) is promoted by the EGAT, to develop a good image, and the EGAT has also exercised a philanthropic strategy within the local communities. These discursive practices have given birth to Salween dam projects that have created a very real level of exclusion, turning the Salween River into a hydro-electricity producer and prohibiting the border people from accessing the Salween’s resources.

In the next chapter, I will examine the relationship between capital, state and violence in commodity production. Commodification of the Salween River does not only work through sophisticated technology, but also the process of state violence, and state violence is foundational to capitalist expansion in the Greater Mekong Subregion. Hence, commodification of the Salween River is produced via sophisticated and violent technologies and the border people who became people with ‘naked lives’ due to expropriation of their local resources. In this violent situation, the border people who live ‘naked lives’ are almost unable to strive for survival.