HYDRAULICS OF WATER PROJECTS:

The Flows of Powers and Waters in Northeastern Thailand

Research Paper

Mekong Program on Water, Environment and Resilience (M-POWER)

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In Thailand, water resource development has long been a popular apparatus of government agencies in implementing political agendas into its ‘problematic’ regions. The region of Isan, or the northeast of Thailand, has been an area where there were constant experiences of political destabilization, economic stagnation, natural disasters, racial inferiority complexes and social prejudice, as well as perceived poverty in term of industrial production (Long 1966; Rigg 1985; Parnwell 1986, 1988; McCargo and Krisadawan 2004). Along with those social and political instabilities, ecological and economic deprivation caused by the lack of water have often singled out as being the main factor (Sneddon 2002) rendering the northeast an instability-prone region. In response to this problem, there has been a straightforward assumption that if water can be supplied to dry areas, farmers could grow more crops, the economy would improve, as will the quality of life, and everyone would be happier (Hewison 1994). As a result, numerous attempts by government have been initiated to insert their technical know-how and strategic management to counter water shortage in this poverty-stricken region and to transform it into a politically secure area.

This paper examines water development schemes in northeastern Thailand. Under political, economic as well as social challenges - dubbed ‘panha phaktawan-ok chiangnuea’, ‘The Northeast Problem’ - the paper argues that the modern Thai state has been deploying water resource management as a political tool. Governmental water resource development projects, assisted by modern hydrological technologies and knowledge, have been promised and implemented to depoliticize the regional problems, believed to be fundamentally caused by water shortage, while at the same time strengthening the region social and economic development as part of the government’s struggle against political threats from outside.

The first part of the paper draws on several cases of state’s water schemes, devised both in symbolic and pragmatic domains, to explain how water resources can be used by state bureaucracies for their political advocacy and legitimization. The ideas of hydrological
development as an ‘anti-politics machine’ (Ferguson 1994) will be examined within the context of Isan regional water development. Along with the regional investigation, the paper introduces a Mekong riparian ‘community’, Ban Nawaeng and its extended cluster Ban Nawaeng Mai, the villages of northeast Thailand where my field research took place. The paper aims to illustrate how the ideological and political schemes of hydrology have been put into operation in the context of Isan regional development and the said villages in particular. In so doing, the paper juxtaposes the regional making process of Isan as a hydrological-oriented development space with the local scene of village’s water resource transformation. As the paper will later investigate, the politically schematic agendas that came under the discursive practices of water resources ‘development’ have largely gone unnoticed by the public. In such case, Isan water development would end up working to expand and reinforce the power of state -- be its military, local bureaucrats, and incumbent politicians -- to control over other politically high-stake issues rather than effectively solving the real water problems. Here, the failure of state’s water schemes to cope with seasonal droughts and social disparity in the Northeast may not totally be a failure of the state to exercise their power. Rather, the success lies in the very nature that the water schemes allow them to exert their political authority and ideology into a risk-prone region without causing too much resistance from the locals. In sum, the first part of the paper looks into the sociopolitical role of Isan’s water.

The second part examines two water resource development projects ‘provided’ for the villagers of Ban Nawaeng. It focuses on their effects within the community and on the multitude of government agencies surrounding the projects. Both projects were designed to supply water for agricultural development in the vicinity of the communities. The first project is an earth dam built on local creek. The second project is an electricity-run pump irrigation pulling water from the Mekong into agricultural fields. In exploring these irrigation development endeavors, my aim is not to examine them in terms of their ultimate success or failure – the very question posed by James Scott (1998) as why certain schemes devised to improve human condition have failed. Rather, my intention, following questions posed by James Ferguson (1994) and Tania Li (2005: 384; 2007), is to look at what and how these projects were shaped across multi-layered agencies. As the paper examines concurrent effects surrounding the projects at the local level, it shows that there
is no such thing as a ‘purely’ technical domain. Rather, the projects are inevitably caught up in local political and social processes.

Power is, somewhat, like water in motion. It is never fixed and, in any account, materializes in one particular form. As per ‘scientific fact’ of hydrology, water is always transformed into different shapes and forms due to its surrounding effects. In ‘social reality’, likewise, power also performs the similar kind of fluid nature within our society. Employing such nature of ‘water in motion’, in the third part the paper looks at how power can be observed as a dynamic process that shall always be altered through different times, agencies and contexts. Due to its liquidity, I argues, power can flow, infiltrate, and can even be intercepted by social agencies holding distinctive elements and influences. I opt to use the term ‘hydraulics’ here to signify the operation and movement of power through, or pertaining to, the maneuvering process of water project operation.

The third part of the paper offers some empirical insight into the dynamics of powers in relation to community struggle and process of state’s water development. In so doing, I trace historical and ethnographic accounts of the development of water project called faī huai Tat, a series of weirs under construction along the local Tat creek. Along with historical and ethnographic accounts, I pay particular attention to a ‘close reading of project documents’ (Li 2007: 123) produced in accordance to the project’s initiation, planning and implementation. This approach, as Li suggests, is aimed at discovering ‘what these programs sought to change, and what was excluded from their technical domain’. In other words, the close reading of project documents allows us to ‘expose multiple gaps: gaps between one document and the next, gaps between the world conveyed and the texts and the world to be transformed, as well as gaps between what the programs proposed and what they delivered’ (2007: 123). In addition, as recently pointed out by Walker (2009a: 8), it is productive to study a project’s formation such as a project proposal as a localized field in which ‘power and resources can flow between the various elements assembled’. As he argues, writing projects (khian khrongkan) is an approach in which local people ‘render themselves legible in the eyes of the state officials who are desperate to find non-problematic sites for the disbursement of their budget allocation’ (2009a: 8). This part is, then, about such flows and the way in which the community renders itself legible to catch
the state’s attention. In so doing, I argue that power and resources can be initiated and, to
certain extent, trickle into the hands of villagers involved.

The water project I shall investigate in the last part consists of the old existing weir
built by the villagers and the newly proposed ones which, recently, have been approved to
build on the same creek which drains into the Mekong mainstream. While the first weir was
set up by the Nawaeng community, it has undergone improvements during the previous
years using community development funds provided by local government. The newly
proposed project, however, was initiated by the villagers of Nawaeng Mai, the extended
community of Ban Nawaeng. Responsibility for this project, however, was later transferred
to provincial irrigation authority. Under such shift from local initiation to the state agency’s
implementation, the project’s size, location, and other technical structure have been
redesigned by water project ‘experts’ hired by the state agency. State agencies, however, are
not the only actor that can effectively devise the ‘technical domain’ of the water
development schemes through their ‘government through community’— a pattern of
development intervention which I will elaborate further later on. As the studied case will
show, there has always been local influences and manipulation in designing and crafting the
nature and outcome of water projects. Employing a recent work by Walker (2009a) on the
ways in which rural villagers bind themselves to the state through the initiation of, and
participation in, development projects, this paper shows the manifestation of how power
was transmitted among various agencies through the liquidity of social and political
connection.

All in all, my primary goal in this paper is to show that, on one side, the technicality
of modern hydrological projects is not the only factor in determining the initiation,
implementation, and the effectiveness of each water development project. There has been
much more social and political factors that hinder the efficiency and result of projects’
technicality. This, then, reminds us not to overemphasis on the ‘scientific hydrology’ too
much that we cannot see the effects of social contexts where the projects are going to be
implemented. The policy makers should be aware of their own political position, the bias of
employing technical solutions, as well as the limited legitimacy of scientific knowledge in
the improvement of water projects. On the other side, I would like point out to the ongoing
fantasy cherished by some ‘community’ advocacies especially those who work on the issues of rural development. The recent political advocacy on community’s resource and development issues, I argue, often portray community as idealistic, traditional, simplified, and fragile to the state’s power and the changing world outside (See Chattip 1991; Khanobporn 2006; Seri 1986). I show here that the community is by no mean static or an absolute solid harmony. Rather, it is a fluid society that always transform throughout the morphology of the state and globalization. The last part of the paper shows how the community reconstructs itself to deal with the state and their desire to participate in modernity and development.
PART 1

WHEN WATER FROM THE SKY IS LESS,
WATER FROM THE STATE IS MORE

‘Who do you love most?’
Koon was astonished at the question. ‘My father and mother,’ he replied. ‘And Boonlai and Yee-soon. They are my little sisters.’

‘Who do you hate?’
This question was even more astonishing. Koon had never thought of such a thing. He had no idea what to reply, and looked out the window, where all he could see was the sky, the pure, indigo blue sky, with the red-gold sun burning in its midst.

Turning to luang pho [revered monk], he said, ‘I hate the sky, sir.’

‘What?’

‘The sky. It never gives us any rain. It only gives dryness.’

‘Boy Koon, I want you to remember this forever: From this day forward, you must never, ever say that you hate the sky, or blame the sky for anything. Because the sky has never punished anybody.’

‘Remember, young Koon,’ luang pho said, [...] ‘That the sky never hurt anybody. Only people can really hurt people.’


MEKONG AS GEOPOLITICAL BOUNDARY AND THE EMERGENCE OF ISAN

The regional area of Thailand commonly known today as ‘Isan’ did not identify itself. Rather, as some scholars argue, the region is part of the country’s ‘geo-body’ establishment (Thongchai 1994) and a definitive result of nationalism inflicted by Bangkok-based absolute monarchy’s bureaucratic regime. The borderlines drawn by Franco-Siamese Treaties, 1

1 I choose to limit the historical account of the development of the Isan region only to its formal establishment under modern nation-state rather than tracing its early subjugation under Siamese court e.g. in the King Taksin era. Such historical narratives are already widely written and I found little relevance to the argument of the paper.
dividing the ethnically Lao inhabited region along the Mekong river into parts of Siam and Laos in 1893 and 1904, crucially marked the configuration of the region and the official position of it as a northeastern precinct administratively oriented toward Bangkok. Without Bangkok as a center point of geopolitical reference, indeed, the region would by no mean being called the ‘northeast’. Alternatively, the consolidation of Isan into Siamese monarchic government can also be seen as the responsive result of pressure within mainland Southeast Asian countries under colonialist maneuvers over region’s rich forests and untamed rivers. The Mekong, no matter how great it linked and brought various people within the region together, was manifested as a demarcation line where the official Isan territory is necessarily derived from. Isan region and the ‘northeast’ people is thus a political product that gained its origin prominently by turning Mekong river from its multiple cultural basin into a political boundary of nation-states’ distinction.

Under the King Chulalongkorn’s centralized administrative reform, an area of the Khorat plateau located on the right bank of the Mekong experienced great transformation in provincial administrative structure, especially in 1894 when an official reform took place in the region. Subsequent to being strategically integrated into Siam’s modernization, the Isan region’s development has since then been directed by new ‘central’ bureaucratic power and its outward policies. The introduction of the new system comprising provinces (changwat), subsumed under administrative regions (monthon) over former townships (huamueang), was used schematically as direct control of extensive region beyond greater Bangkok. In his pioneering work on Isan regionalism, Keyes argues that, under the then newly introduced centralization of bureaucracy and administration, the northeasterners ‘experienced for the first time the subordination of local political interests to central Thai objective’ (Keyes 1967: 17). The effective strategies of Siamese state deployed to eliminate the then existing physical and social remoteness of the region, and the ability of the central power to weaken powers of local rural elites, are often pointed out in many of academic literatures as the triumph of Bangkok bureaucrats over the rural masses (Keyes 1967; Seri and Hewison 2001; Ratana 2003; McCargo and Krasadawan 2004; Somchai 2007). While Isan as a regional whole was constructed, local authorities, paradoxically, declined as the region had been fragmented into provinces individually directed by a focal bureaucratic regime. Since then, self identification of the region was ‘taken away’ from the hands of the
locals. As argued by many scholars, Isan has since entered a so-called ‘internal colonialism’ under the Thai state (London 1979, 1980; Brown 1994; Missingham 1996; Suthep 2005).

After the consolidation into Siamese state, Isan was linked with the central vicinity, and thus other regions, through the construction of transportation networks. Better commuting routes led to greater possibility of the government in reaching out their power by sending officials to the countryside. Chulalongkorn’s administration, at the outset of 20th century, was very much concerned with developing transportation infrastructures to extensive reaches of the country -- a priority laid down not only for an internal reason of centralization but also as a symbolic, outward projection of Siam’s modernization and its involvement with ‘civilized’ Europeans. At first, a railway system was initiated to commute between Bangkok and Khorat. Its completion in 1900 rendered a crucial turn in the Isan history as the region was effectively linked with external markets leading to immense emigration and the expansion of commercial agriculture into then subsistence region (Koizumi 1990; Seri and Hewison 2001; Suthep 2005). By 1929, the extension of the railway line to Ubon, linking the lower Isan region with Bangkok was completed. A few years later, the train route was extended to Khon Kaen.

Besides the railways, most of narratives about how Isan experienced modernization often considered road expansion as the indication and landmark of the arrival of commercial agriculture and village-level industrialization (Suthep 2005). In fact, the first construction of road in Isan was aimed not for its economic development as most of the narratives usually claim. Rather it was a pressing need of national security that state authority would be capable of taking effective surveillance of the newly demarcated border along the Mekong river. The first road line was laid along the stretch of the Mekong river from Nakhon Phanom to Mukdahan at the beginning of the 20th century (Seri and Hewison 2001). Though there was a need to associate the region more with central municipality as to encourage economic and people movement, however, the even more important concern at that time was rather how Siam was to keep its territory from intrusion as well as domestic uprising such at *phu mi bun* revolt, the case in which will be discussed soon.
The actual road that links the people of northeast to the center was later constructed in 1957 by way of connecting Mekong border town of Nong Khai to Bangkok. Financed by the United States in the early stages of the Indochina conflict, it carries the name of ‘Friendship’ highway (thanon mittraphap) and was constructed wide enough for US Air Force planes to use as runways. The ‘friendship’ here signifies the Thai-American relation which was vital in countering the perceived communist aggression in Indochina. Before the construction of roads and railways, boat trips along the Mun, Chi, and Mekong rivers were primary for the locals to travel mostly within reaches of the river basins and its tributaries (Keyes 1967; Suthep 2005). The dominating idea of turning the Isan into a rapidly modernized region was thus expressed through the replacement of old local routes with new centrally planned infrastructure aimed at giving convenience for the authority to access to the formerly remote areas. With better transportation networks laid down from Bangkok through roads and railways, the development projects could be straightforwardly delivered, while national security along the river borders can be kept well under the state’s patrols.

It is worthwhile to reiterate that rather than focusing on agricultural-based economic development and social integration, the idea of developing Isan at first was oriented toward political objective of tightening the region with bureaucratic accessibility and state surveillance. Particularly on the scheme of water resource improvement, during the first years of the 20th century, Siam was very much far from seeing immediate returns of benefit from irrigated agriculture, thus explaining the government’s reluctance of investment for any big water development project (Brummelhuis 2007). The case of Van der Heide’s proposal in developing Great Scheme in the lower Chaophraya river basin in the central plain where rice commercialization was a potential benefit was even put off by the bureaucrats worrying about national budget deficits. There was less priority on Isan water development at that time, which might require greater budget and technical staff in order to improve the arid area of the region into a profitable agricultural commercialized land.

THE SWAMP OF WAENG AND THE SETTLEMENT OF COMMUNITY

Situated on the banks of the Mekong river and extending southward for its pervasive agricultural area, Ban Nawaeng lies at the edge of Thailand and its Isan region today. The village is presently administered under Khemarat district and is about 112 km away from the central municipality of its province, Ubon Ratchathani. The community
consists of two administrative villages: the initial settlement, Ban Nawaeng village 2, and the extension of the former, Ban Nawaeng Mai of village 12\(^2\). The registered population of village 2 is about 224 households or 927 people. The extended village, village 12, is smaller with about 143 families or 622 people. While the administrative divide has been imposed since 2003, some local activities, especially those related to religious beliefs, and the utilization of some development projects are still communally shared. In addition, villagers of both villages still share their natural resources while their agricultural lands are scattered and overlap. Here, I will use the term ‘community’ and ‘village’ interchangeably referring to both the former and the extension villages as one social entity following the way the locals call themselves as the people of Nawaeng (khon nawaeng). However, the specific use of village 2 versus village 12 will be referred to when the division of village administration needs to be highlighted to provide insight into the analysis of ‘community’, especially in the later part of this paper.

Legend of the community has it that people of Nawaeng today came from the area south of present location where the Mekong confluences with the Mun river. The main oral history claims that the first group of people had migrated upstream along the Mekong river until they reached the present area of the village. Yet there is no concerted agreement of why and how at that time the migration took place. The area of the confluence where they emigrated from is called Khong Chiam, the name believed to stand for ‘elephant herds’. When the ancestors decided to set up their community at the present location, they named it ‘Khong Chiam Nuea’ or northern Khong Chiam. The military document (Special Border Patrol Unit 21 1997) produced as part of border survey during 1990s exactly indicates that the village’s settlement occurred in 1862, but the source of information is not cited. Today the southern Khong Chiam is administered as a district of Ubon and still claims the traditional name as Khong Chiam District. The north Khong Chiam, however, become Nawaeng subdistrict around 1922. This was when the formal kamnan or head of subdistrict was firstly assigned. The existing main riverside temple in the village is called wat khong chiam pu ran wat-- meaning the Temple of Ancient Khong Chiam confirms the old use of the former name lest the descendants forget where their ancestor came from.

\(^2\) The use of village number, as here village 2 versus village 12, is an indication of bureaucratic administration of population according to household registration.
There were certain criteria that the community settlers used as to decide the suitable location to set up their new village at that time. By and large among the people of Isan, the main elements considering as suitable for village location are water resources, lowland, upland, and forest (Seri and Hewison 2001). In the case of Ban Nawaeng, though there is no resolute agreement of why their ancestors migrated to the present area, most people claimed the need of fertile lands and water sources for rice production. While the former confluent area where community used to live could provide them plenty of fish and other aquatic resources from the Mun and Mekong river for their subsistence, the extensive rocky ground in that area, however, limited their opportunity in turning unoccupied lands into rice paddies. Therefore, when the migration was decided, they were looking for fertile lands adjacent to the river that would allow them both to fish and to grow rice. With this agenda in mind, the ancestors traveled up north along the great river, by boat and by foot, until they found a suitable land where they named it 'Nong Waeng'. The word 'nong' means a swamp or an area of soft, wet, low-lying land, often characterized by grassy vegetation and certain types of trees. The term 'Waeng' is the Lao name for reed-family plant, central Thai called kok, in which they are widely used for thatching. As elderly residents now point out, the derived name of 'Nong Waeng' well signifies the priority in the mind of the first settlers in choosing the area for their settlement. Here, it was the marshy area where the soil could essentially carry water and hence inland water source existed (nong), and there were plenty of natural materials such as trees and other vegetation for making basic houses (waeng).

While water sources for rice farming and natural materials for house construction were fundamental, the new settlement area also provided the settlers with other crucial natural features that were needed to be taken into account. The forest is considered important in community building of any Isan village, as it contributes food and other fundamentals to community members in the long run. Also, on the spiritual side, the forest is essential as a place where the settlers would erect the house of paternal ancestral spirit (tup phi pu ta) during the early stage of settlement. During this initial period of community development, besides the setting up of residential area on the banks of the river, some of the forest would be cleared and turned to be rice paddy fields, while densely forested area would be designated as a sacred place inhibited by the respected pu ta spirit. Once the shrine of pu ta had been well established and the inaugural ceremony had been held, the village
members considered themselves as a distinct, self-identified community basically being empowered by the securing spiritual power and surrounding resource abundance.

THE NORTHEAST’S HOLY MAN AND HOLY WATER

From the later half of the 19th century onwards, the expansion and centralization of Bangkok power onto its northeastern region was, however, not without political difficulties. The integration of Isan into the Siamese state, led to the improvement of region’s living condition through the development of many basic infrastructures and market-oriented agricultural production, yet the central government was nevertheless encountered with local conflicts. There were several factors that contributed to the depressing and suffering atmosphere that finally led to the local movement against states authorities. Politically, the external influence of the French that led to the 1893 border agreement prohibited Siamese military presence in the area 25 kilometers left of the Mekong. While the ambiguity of borderland was seen as a ‘recipe’ for ongoing conflict and instability along the frontier on the upper Mekong (Walker 2008), there were also some dispersed movements organized among local riparian people using the politically vague zone in the lower part of the same river as a space in hope of stimulating political uprising against state authority (Suwit 2006). In addition, the replacement of powers that were formerly held by local, ruling elites by the Siamese bureaucratic court led to some discontents among many local chiefs throughout the region. From an economic aspect, the new implementation of the four baht-tax system (phasi suai) into the area had induced great burden on the locals’ shoulders. The hardship of acquiring money to pay for the tax collection was worsened by catastrophic droughts that last for few years, failure of agricultural production as well as widespread banditry. In that deprivation, rural Isan populace was ready to embrace anything that would give them hope and better lives.

At the turn of 20th century saw as many as sixty fragmented groups of movement carrying quite similar message as acknowledged for a region-wide millenarianism. Known as Holy Man revolt or kabot phu mi bun, the local resistant movements are often highlighted by historians of Isan as regional grassroots disobediences to the newly introduced politico-economic regime. Such restlessness, it is argued, gave rise to collective movement, based on prefabricating Buddhists’ belief in millenarianism and the Holy Man who would come to rescue them from existing deprivation (Toem 1970; Keyes 1977; Phonphen and
Atcharaphon 1984; Somchai 2007). Rumors were spread out across the already demarcated political border especially among Mekong riverine communities through mobile troupes performing traditional musical shows (*molam*), the coverage of oral poetic recitals (*phaya*) and sequential hand-written scripts (*chotmai lukso*), which rendered the idea of an imminent extraordinary catastrophe, holocaust, and the establishment of new social order under a righteous and merited ruler (Chattip and Suthy 1977; Keyes 1977; Suwit 2006).

In Khemarat district, where my research site is located, the movement was developed into a fierce confrontation between Ubon administrative commissioner and rebellion group consisting of many hundred people (Toem 1970). Led by a characteristic man from the Lao side, in March 1901, the Holy Man movement successfully seized the town, killed some local bureaucrats, while the main governor was captured. The Siamese commissioner in Ubon was informed about the incident and hence decided that immediate action was unavoidable and thus an armed clash occurred. The fighting was finally over when the Holy Man troops were seized in which hundreds of people were taken prisoner. Such revolt in Ubon tremendously led to extensive adjustment concerning the state’s policies toward the northeastern provinces. The first officially trained police was established and sent to posts in numerous towns. Central Thai education system was imposed and replaced old style learning system at community temples. Yet, one of the most important changes is the dramatically increased attention from state in surveillance and regular assignment of official visits into the region. Consequently, at least 17 surveillance missions by high-ranking officers from Bangkok were made during 1906-1929 (Toem 1970). The inauguration visit in 1906 was done by Prince Damrong Rachanuphab who was then Minister of Interior.

One of the interesting aspects necessary to point out here is that though the millenarian movement which emerged throughout the region at the turn of 19th century was widely recognized by the locals as *phu mi bun* or the holy man, the Siamese state’s authorities, however, never acknowledged using such name in the reference to the movements or their leaders. Instead the term *phiba phibun*, literally means insane ghost or fanatic cult, was strategically employed to signify the movements as well as their leaders. This schematic discourse came into practice right after the main Holy Man revolt in Ubon.
was defeated. Prince Damrong (1935), for example, omitted the use of term *phu mi bun* when he referred to the incident in his essay concerning his visit to *monthon* Isan. In addition, in the government announcement dated August 8, 1902 by Prince Naresh Vorarit, then the Minister of Metropolitan Affairs, on incidents of peasant revolts in the Northeast and the North, it was clearly stated that the believers, most of whom were illiterate Laotian, had been ‘misinformed by evil leaders and nonsensical things’ (Chattip and Suthy 1977:54). By imposing the pejorative term and discourse onto the movement and their belief, the state was able to claim for ignorance and uneducated feature of the Isan people. This, in turn, lent opportunity for state to establish schooling system based on centrally-designed curriculum.

The Mekong river, once in the history of Siam, was a place of political contestation over national border as well as an ambivalent space that gave rise to the local movement against the colonial and Siamese state hegemony like *phu mi bun* revolts. Other smaller water sources in the region, like the Mekong, had also been symbolically placed as an ideological source of power in nation building. On 11 November 1912, King Vajiravudh, the successor of Chulalongkorn, was crowned as the country’s new king in a lavish ceremony (*rachaphisek*). In that *rachaphisek*, Prince Damrong ordered every *monthon* under Siamese administration to send holy water from various propitious sources that contain auspicious names (*mongkhon nam*) within their territories as tribute to the new King in his coronation. The holy water, as being called *murathaphisek*, would be presented to pour over the head of the King. From Ubon county, where the main Holy Man revolt took place, blessing water from six sources were gathered for the ceremony in Bangkok. They were collected from well-known places local people considered important (Toem 1970): *Tha Ho Chai* (Pier of Victory Tower) in *Mun* (Heritage) River, *Kut Si Mangkhla* (Swamp of Fame and Auspices), *Kut Chantha Rue Chai* (Swamp of Great Moon), *Kham Nam Saep* (Spring of Appetite), *Huai Samran* (Joyful Creek), and *Sa Boran* (Pond of Antiquity).

The conference of holy water from all the auspicious places in the kingdom during the *rachaphisek* was not only aimed to bring auspices and holiness to the new King. Symbolically, it can be viewed as an expression of the power of kingship over the remote and very local prominent areas where the sources of sacred water were located and gathered.
for the central ceremony. The schematic notion of using holy water sources that known to
the locals and the integration of that sacredness into the monarchic ceremony essentially
led to the symbolic confirmation of power of the Siamese court over the rest of the modern
nation-state. In this sense, water has not only shaped social and political institutions, it has
also legitimized them (Mosse 2003: 4) as the mingling of water from all over the country
has broken down distinctions formerly based on local reaches, the distinctions that had
been important in defining boundaries of the traditional polities.

**TURNING ’NONG’ INTO ‘NA’. MAKING ‘PA’ INTO ‘HAI’**

After the community area had been developed into residential as well as rice-based
agricultural plots, the villager called their community ‘Nong Waeng’ to signify the
important of the *nong*, or the swamp, of Waeng. As mentioned earlier, one of the main
reasons the present residential and agricultural area where the settlers initially chose to set
up their village was that because there was a *nong* or swamp, that the first group of people
saw it as a crucial natural source of fertility and for further development of the village. The
*nong* had been preserved as a significant water source as well as a symbolic reference to their
community’s first settlement landmark. Not until that the community was assigned a new
name when it was officially registered with district office in the early twentieth century that
the term ‘*nong*’ in its title was abandoned. This was in 1909 when the village of Nong Waeng
was registered as part of Khemarat district of Ubon Ratchthani province.

The village registration has rendered the community with another given ‘official’
title ‘Nawaeng’, slightly different from the former ‘Nong Waeng’. As some elderly people in
the village now reasoned, the former term ‘*nong*’, carries with it the negative connotation of
backwater and stagnancy. This then need to be replaced by a better term ‘*na*’ representing
agriculturally prosperous village suiting the aim of national development at that time. The
*nong* Waeng, however, had physically persisted despite the change of village’s name toward
the more agro-modernized term. The communal swamp was preserved well until the
introduction of state’s irrigation project that laid down irrigation canal over the former
swampy area. Once the irrigation canal was completed, the *nong* was finally replaced by the
modern, irrigated, *na*. 
Dhida (1995) explains the regional factor that caused Mekong people to seek new settlement in the late nineteenth to twentieth century as the purpose of searching for lands to grow rice. To turn forest into rice paddies (*tham pa hai pen na*) was a crucial step after their long travel of seeking an appropriate place to establish a new village. In Nawaeng, when asked how their agricultural lands were initially developed, the old saying often being cited among many elders was ‘*pian nong hai pen na, pang pa hai pen hai*’ or turning swamp into wet rice paddies and, later, changing forest into farmlands.

Elderly villagers of Ban Nawaeng believe that after the settlers found this suitable land to make a new village, and after simple houses were set up facing the Mekong river, villagers then soon started to transform the inland area next to their village as to turn into their extensive rice fields. The ideal place for turning into wet rice paddies was where the swamp was formerly located, while the upper and more distant areas were, at first, left unoccupied. Such agricultural area next to village where community members started to use for rice production at their earlier period is now called *na lum*, meaning lowland rice fields, in which it was primarily based on rain-fed production (see map below; the former swamp area is shaded in orange). There were many good reasons in selecting the swampy area next to the community as a place to start their rice production. Unlike the area next to the Mekong river, the swamp was far more inland and hence safe from river floods. The villagers’ residential area which is located between the great river and villagers’ rice fields would act as a buffer zone in reducing the impact of river’s overflow. In that case, villagers would build houses on stilts in order to cope with seasonal floods and drainage.

In addition to flood reduction, the swamp area also serves as a suitable place for rain-fed rice paddies. Due to the character of the water-holding nature of the soil, villagers can be sure that, when the rain comes, the area would be able to hold enough water to cover the surface of the paddy grounds as to maintain moisture for rice to grow consistently. In the case that rainfall is beyond agricultural need, villagers can always make drainage canals to draw off excess water from the fields into the Mekong without difficulty. Once the swampy area has been turned into wet rice paddies, yet rice farmers can also benefit from the former environment of the swamp as their rice fields had been filled with fish and other aquatic animals in which villagers can catch as for their food during rice cultivation period.
During the later decades, the population in village increased with immigration from other areas, including from the other side of the Mekong after the 1975 change of government in Laos. With such growing number of population and the introduction of commercial agriculture into the community in the late 1960s, the extensive forested area beyond the na lum, as a result, was then cleared and utilized for agriculture. The na don, upland rice fields, were then started along with the newly introduced idea of state’s irrigation development in 1970s. For the past few decades na don has not only accommodated rainy season rice production, but also it has been a place where several market-oriented plants were introduced and tested. There are variety of plants that people grow which includes corn, eucalyptus, cassava, cotton, kenaf, teak, tamarind, and even longan.

At the present, in term of existing irrigation systems within the proximity of the community, most of the rice fields adjacent to the village residential area (na lum) are effectively irrigated all year round with the well-maintained pumping system and irrigation canals. Agricultural lands of na don, however, are not systematically irrigated but depend on array of existing water sources available until now. This ranges from rain, manmade ponds, creeks, and government irrigation tanks. In the next part, I will extensively deal with the two main irrigation schemes in the Ban Na Weang: The National Energy Administrator’s Mekong water pumping system and its irrigation canals located at the area of na lum and the Royal Irrigation Department’s irrigation tank project in the na don.

While Nawaeng faces the Mekong river on the north, it is now surrounded by three other villages on the east, west, and south. The area is now covered mainly by rice paddies and other agricultural lands as well as a communal forest area. From government documents, the village area is about 7,815 rai. A communal zone -covering about 5,200 rai, designated for areas such as forest, forest temples, school, cemetery, and irrigation projects - takes up most of the area. The occupied land for agriculture is about 2,195 rai and the residential area consists of only 420 rai. While local official data provided by Tambon Administrative Office (TAO) of Nawaeng subdistrict, a local government set up in the late 1996 for the aim of decentralization, indicates that, at the end of 2008, the community
consists of more than 1,572 registered inhabitants (NWTAO 2008), the actual inhabiting population is, however, far much lesser than what the official number. Most of the out-migration is due to the economic and educational factors. From my approximate survey, it is found that the two thirds of the population are living outside the village, mainly in the Muang district of Ubon and in Bangkok.

COUNTERING COMMUNISM WITH POPULATION-MOBILIZED WAR

Thailand’s change in political regime in 1932 from absolute monarchy to bureaucratic polity led to a nation-wide administrative reform for a bureaucratic centralized system through provincial administration. Despite the change, Isan rural was left mostly unattended as local government officials were limited in number and the budget provision was still in vague. Only after the Second World War and the rise of communist threat in Indochina did the region become an important strategic area not only to Thailand but also for other anti-communist countries from the west, especially the United States. It was widely expressed among Thai and the US bureaucrats that poverty and deprivation of rural Isan communities was the fundamental cause of their support for the communist movement in Thailand received from the early 1960s. Rapid rural development, if successfully implemented, would promptly increase living standards and therefore reduce support for communist subversion (Brown 1994).

With technical and financial support from the International Bank for Reconstruction and Development (IBRD) and the United States which were represented in Thailand since the late 1950s, the country’s first National Economic and Social Development Plan (1961-1966) was set up. The then Prime minister Field Marshal Sarit Thanarat, one of the few leaders in Southeast Asia who managed to build a strong, anti-communist regime (Time 1964), established firm relations with the United States Operation Mission (USOM) that led to the provision of financial and technical assistance to fight against communist insurgency, especially in Isan (Prasong 1996). His famous slogan ‘nam lai, fai sawang, thang di’ (running water, widespread electricity, and good-quality roads) was widely promoted as part of wider hopes for the nation’s modernization. The perceived threat of communist insurgencies in Indochina and the spread of ideology into northeastern part of Thailand were crucial driving factors for the government to make itself present in Isan.
The Office of Accelerated Rural Development (ARD) was established by the government of Field Marshal Thanom, Sarit’s successor, in January 1966 with the status of a department in charge of rapid development of Isan region for ‘rural security’ against communism (Prasong 1996). Yet, the plan of using development projects to strengthen the Northeast and to protect it from the so-called ‘Domino Effect’ was, in fact, initiated several years earlier by the then-Prime Minister Sarit before his death in 1963. At first, the agency was set to be called ‘Department of Rural Development for the Resistance of Communism’ (krom phatthana chonnabot phuea totan khommiunit). Fearing that name would attract too much attention and hence physical attacks from communists (Prasong 1996: 88), only the shortened phatthana chonnabot (‘Department of Rural Development) was publicly used. Of course, the main agenda remained countering communism. After the ARD was set up, its plan was to construct basic infrastructure especially roads into ‘sensitive’ areas (khet lolaem) in six border provinces of Isan. Under the idea of ‘population-mobilized war’ (songkhram yaengching prachachon), ARD was designed not to directly counterstrike the communists like the army’s physical warfare. Rather, its aim was to be able to reach into areas where communist insurges were reported, and to ‘open and sneak into people’s hearts’ (ngaem khao pai nai chitchai) so that the marginal people would be less likely to believe or trust communist propaganda.

THE BUDDHIST PAGODA MODEL PLAN

The ARD in its first period was administered by Prasong Sukhum, a young Bangkok royalist who was assistant director of the Bureau of the Budget. After its inception, the ARD coordinated with other government agencies especially with Supreme Command Headquarters, the Border Patrol Police, the Ministry of Interior and USOM through the Central Committee for Accelerated Rural Development. This was chaired by General Praphas Charusathien, then the minister of Interior and the Chief Army Commander. Prasong, who was the first secretary-general of ARD and held the position for more than eleven years, later published a book entitled ‘su phai phaendin’ (Fighting Against the Nation’s Threat) recounting the success of ARD and its missions against the spread of communism in the region.
In Su phai phaendin, Prasong (1996) disclosed one of the strategy of the ARD called phaen buddhachedi or ‘Buddhist Pagoda Model Plan’. The actions of ARD, symbolically linked to Buddhists’ dharma, the righteous deeds, as opposed to the ‘immoral’ communists (CSOC 1972). Under the phaen buddhachedi, the rural development strategy was employed to counteract the incursion of communist through three vital stages (see figure 1).

The first, the foundation of the pagoda, is to make sure that government agencies can approach ‘sensitive’ communities at all times during the year. This ‘outreach’ strategy was materialized as expansive road constructions along six provinces bordering with Laos.
The second step, the body of pagoda, was to provide assistances to communities in need. There are several projects under this ‘assistance’ scheme such as the development of water supplies, community’s living condition improvement, healthcare provision and income generation. These had been done through the establishment of proactive Mobile Development Units roaming around villages especially in sensitive areas. However, as will be further discussed below, the projects emphasized development of water resources more than other concerns proposed initially under the plan. This was due to the ideal and technical matters within the ARD, and the Thai and US government through USOM at that time. The last part of the plan, the pagoda’s top, was to establish mutual ‘engagement’ among government officials and the locals. This was considered by many scholars as a failure due to the immediate, short-lived nature of the plan itself (Apichai 1998).

Let us focus here on the body of the pagoda plan, the ‘assistance’ or *chuailuea prachachon*. As mentioned above, within this step of providing villagers of necessary assistance, the ARD mainly concentrated their work on the building of water resource infrastructure. Looking back to the project, it is easy to understand why the ARD’s mission, which was supported by USOM, dealt mainly with a ‘technical solutions’ to the communist insurgency. Besides financial assistance from the US government, ARD had also received some of machinery such as tractors, compactors, backhoe loaders, forest clearing machines, hydraulic excavators, and off-highway trucks as to primarily use to transform Isan landscape for the purpose of communist clearance. The ARD staff considered machines as a very important tool for their accomplishment, as the ARD director Prasong often mention that his staff had ‘protected the machines as even before than their lives’ (Prasong 1996: 149).

Once the machines successfully created accessible roads to remote villages, the first step of ARD’s *phaen buddhachedi* is then completed. As a consequence, it was the same set of machines that would be of use to proceed to the second step. While there were several tasks that needed to be done in order to accomplish the whole body of the pagoda, the ARD only paid attention to the machinery works. Water resource development through the engineering machine works served as the best practice to carry on. As Prasong (1996: 149) points out:
ARD’s machinery (*khruangchakkon*) became a magic apparatus (*khruangmue wiset*) to best contend with the communists. This is because it could unbelievably create channels to approach villagers. [...] When their works for road construction are finished, they [the machines] could then be used to build water supplies to the villagers as well. [They can] excavate [existing water ponds] to deepen their bases as well as to raise their earthen edges so that water can be kept in larger volumes. [...] When rainy season comes, water would be fully filled up and could be saved for entire dry season. The lives of villagers would definitely be changed and astonishingly delightful (*sotsai khuen yang pralat*).

With their machinery already in place, ARD decided to concentrate on engineering water resource facilities for communities. By the outset of the second step of *phaen buddhachedi*, ARD considered itself playing the role of *mae phra thorani bip muai phom* (Prasong 1996: 185), Goddess of the Earth, who, according to Buddhist mythology, drew water from her hair knot to ward off demons from the Buddha. The staff of ARD at that time was very confident that one of the quickest and most effective ways in winning local people’s hearts is by providing them with sufficient water resources. So, with the equipment they had, ARD made their move by start to excavate and dredge existing ponds and canals. Later on the water resource improvement projects developed into some new construction works such as check dams, 30 x 40 meter standard ponds, groundwater wells and groundwater hand-pumps. Once the construction was finished, ARD would put a sign next to the works indicating that it was a provision from ARD. According to ARD’s first Director-General, Prasong, the important reason behind signifying every construction work of ARD was that: ‘The ARD is part of the Thai government. If villagers are satisfied with ARD works, they would also be impressed with the government. If the communists came and propaganda against the government, villagers would be less likely to trust them’ (1996: 192).

It is debatable whether the works of ARD has contributed to the long-term development of Isan communities or whether their rapid rural development significantly led to the final failure of communist insurgency. Their construction of physical infrastructures especially road and water supply facilities, however, were dramatically
decreased after the US lost the Indochina War (Prasong 1996). There are some critiques pointing out to the lack of participation, short-term intensification, and physical infrastructure-oriented approach in rural development by the ARD (Apichai 1998; Seri and Hewison 2001). In addition, there is a study pointing out that ARD projects did not actually lead to any significant reduction of deprivation during the period from 1950s up to early 1980s (Brown 1994). As we see here, there was obviously a political factor that had driven the interest of the Thai state in developing water supplies into the areas of Isan. The above elaboration shows that state’s water development schemes were attached to varied symbolic aspects of righteous, apolitical authorities such as Buddhism’s pagoda, the Goddess of the Earth, modern machinery, and the idea of rural development. The mixture of such symbolism, discourses, and practices was machinated through development projects supported by USOM’s machinery that yielded roads and water projects. In that case, water ideology and consequential projects were planned and used as a political mechanism to eliminate political instability fostered by the communist insurgency. In short, water schemes were deployed as, to use Ferguson (1994)’s term, an ‘anti-politics machine’.

A VILLAGE OF NATURAL DISPARITY AND NATIONAL SECURITY

During 1970s, Ban Nawaeng had undergone a severe political situation especially before the closing stage of civil war in Laos in 1975. Talking with the villagers today, more than a dozen people identify themselves as part of the cross-border communist movement in the local area. In addition, the village had also hosted many traders who, in the old time, used to cross the great river to deliver food, medicines, and necessary commodities to the communist troops in Laos. To counter such social mobility and political movement, the state agency had strictly prohibited cross-border activities along the river. As a consequence, for example, local fishermen along the Mekong river were only allowed to go out catching fish during the day time and needed to return to the village and report to border petrol police before dusk each day.

The perceived threat of communist insurgency to the Thai nation-state finally brought operational military forces into the village of Nawaeng in 1974. Prior to the arrival of the military which set up a temporary base close to the community, a road, dubbed ‘strategic line’ (sen yutthasat), was constructed along the Mekong border for surveillance. At that time, at least five military surveillance posts and two refuge holes were erected within...
Nawaeng village. With the rise of military action along the river border and the peak of communist insurgency in Indochina, in 1975, the present king and queen along with other members of the royal family visited Ban Nawaeng to support local military operations. The ground of the village’s main temple was turned into an army site to accommodate the high-ranking military officers attending the greeting ceremony for royal family. With the royal visit, Ban Nawaeng was confirmed as significant to national security.

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Population</th>
<th>Population in Insurgency-prone Districts</th>
<th>% of population in Insurgency-prone Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>14,823,000</td>
<td>4,619,006</td>
<td>52.5</td>
</tr>
<tr>
<td>North</td>
<td>9,519,000</td>
<td>1,580,588</td>
<td>18.0</td>
</tr>
<tr>
<td>South</td>
<td>5,441,000</td>
<td>1,766,435</td>
<td>20.1</td>
</tr>
<tr>
<td>Central</td>
<td>10,664,000</td>
<td>829,084</td>
<td>9.4</td>
</tr>
<tr>
<td>Bangkok</td>
<td>3,328,000</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td>43,775,000</td>
<td>8,795,113</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1: Population Residing in Insurgency-prone Areas in 1975  (Source: NESDB 1977)

<table>
<thead>
<tr>
<th>Region</th>
<th>Agriculture Areas (million rai)</th>
<th>Irrigation Areas (million rai)</th>
<th>% of Irrigated Areas in the Region</th>
<th>Dry Season Irrigated Areas (million rai)</th>
<th>% of Total Irrigated Areas only in Rainy Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>47.8</td>
<td>2.4</td>
<td>5.0</td>
<td>0.9</td>
<td>62.5</td>
</tr>
<tr>
<td>South</td>
<td>11.5</td>
<td>1.7</td>
<td>14.9</td>
<td>0.8</td>
<td>52.9</td>
</tr>
<tr>
<td>North</td>
<td>24.0</td>
<td>3.6</td>
<td>15.0</td>
<td>1.2</td>
<td>66.7</td>
</tr>
<tr>
<td>Central</td>
<td>26.1</td>
<td>12.4</td>
<td>47.5</td>
<td>2.1</td>
<td>83.1</td>
</tr>
</tbody>
</table>

Table 2: Irrigated Areas According to Regions in 1975  (Source: NESDB 1977)
The Forth National Economic and Social Development Plan which began in 1977 elevated the issue of border security to a national priority. The main concern was that the region of Isan had incorporated most of cross-border political movement during that time. It has been estimated that in 1975, according to the National Economic and Social Development Board (NESDB), there was at least 4.6 million northeasterners living in the districts that were found to be at risk of being targeted by communist movement; the number represented was that greater than 50 percent of Isan population resided in what NESDB called ‘insurgency-prone regions’ (NESDB 1977). With such concern, the NESDB believed that the very process of ‘development’ would be a solution to the facing issue of security in Isan.

The government’s idea of linking the lack of development with communist insurgency came from NESDB statistics which inferred that because the Northeast had so far received less development budget than other regions of the country, it was then left in the condition of lack and insecurity (see Table 1). The national budget of that time shows that, despite the investment that took place under ARD, Isan people were provided with only 238.40 baht while central Thai received 457.90 baht per capita for agricultural and irrigation development during the third development plan. As a consequence, only 5 percent of agricultural areas in Isan region was irrigated, which was far less than the central plains that was maintained by a vast irrigation system with more than 47.6 percent of total agricultural area. The NESDB further highlighted that the region that tended to carry more security problems such as Isan was found having the lowest income with only 3,035.60 baht of GDP/capita. In contrast, the central region where security problems occurred the least, had the highest GDP/capita of 9,409.7 baht in 1975 (National Economic and Social Development Board (NESDB) 1977). With all these statistics at hand, the government finally came to the conclusion that the more investment in water infrastructures and agriculture improvement would bring the risk-prone region out of a vicious cycle.

In response to national concern on communism, in 1981, Ban Nawaeng was established as a ‘Village for Voluntary Development and Self-Defense’ (muban asa phatthana lae pongkan ton-eng, abbreviated as muban o pho po). The project was imitated by Internal Security Operations Command when it was then called Anti-Communist Command Centre.
as a project aiming at strengthening rural communities’ relationship with the military and
the state during the height of communist insurgency into the country. After being
established as a self-defense village, Ban Nawaeng set up a committee to coordinate with
state agencies concerning political situation within the community especially observing
inhabitants and neighbors. The committee was also to oversee budget being distributed
from the government to development community’s basic infrastructures. In 1983, just two
years after Ban Nawaeng was set up as a self-defense village, the community was
redesignated as a ‘Self-Defense Border Village’ (muban pongkan ton-eng chaidae, in short
muban po cho do), a similar kind of project but under a different name.

**Kindness That Flows Like a Graceful River**

*Dry or wet land—which one is desired?
Prosperity or poverty—which do people admire?
These depend on the lushness of forests and watersheds
Flowing down from jungles, they nourish people living in urban concretes
So here together, we sing a song for the woods
The city can be civilized because there are forests, headwaters, and riverhood
There are soaring birds; there are nursing mothers
We make a living, so do animals; therefore don’t exploit each others
When trees are beautiful, so are people; our kindness flows like a graceful river
Reviving and cherishing us all, humans, trees and animals--now and forever*

-- ‘Connected Lives’ (Chiwit Samphan),
A Song by Carabao Music Band

Amidst the military’s political campaign in setting up self-defense communities to
fight against communist insurgency along the Isan border, the Chief Command Center in
Bangkok has launched another ‘ecological’ project aiming to fight against what they see as
Isan’s natural catastrophe. On the evening of December 27, 1987, thousands of people
gathered for a charity concert entitled ‘Kindness Flows to the Green Northeast (sai than su
isan khiao)’ hosted by the Royal Thai Army at its sport stadium in Bangkok. Led by the
Carabao music band, the Rolling Stones of Thailand, and other famous Thai singers, the
concert was organized to raise fund for a huge development project widely known
throughout the country as ‘Greening the Isan’ scheme. The main theme song for the concert, chiwit samphan, at a glimpse, was composed and sung to raise awareness among urban people concerning environmentalism. Listening more carefully, however, such there is an emphasis of the very idea that Bangkok cannot be well developed and sustained if other regions, particularly the Northeast, falls into persistent drought and hence poverty. The song thus calls for ‘kindness that flows like a graceful river’ (namchai lai pen sai than) from all Thai people over the country through the donation of money to the Army and its ‘Greening the Isan’ project. Due to its success that night, the concert was later on organized in California also to raise some financial support from Thais living in the United States.

On March 25 of the same year, Army Commander Chavalit Yongchaiyudh was ‘advised’ by the King to initiate a comprehensive project aimed at helping the Isan people who faced acute water shortage. Being equipped with all necessary machinery, labor, and technical know-how, the Army was considered the most suitable agent to tackle such ‘immediate need of solving expansive drought problems’ (Thanufai 2002). From that outset, the project was quickly incepted within the next few days and on March 28, a caravan of military trucks and troops headed to central Isan, the most arid zone, carrying with them fully filled water containers, soil drilling machines, water pumping engines, landmass excavators, and plenty of military labor. Within the next few weeks, the northeast villagers cheerfully carried their water buckets and any other available containers waiting in line for the coming of the military caravans. The impressive scenes were repeatedly broadcast through television, showing massive military caravans heading to rescue poor Isan people from drought. Along with huge machinery, water tanks, and caravans of military labors, the army hauling trucks proudly flagged banners that say ‘namphrathai chak nai luang’, the water from the heart (or kindness) of the King.

Following the namphrathai chak nai luang, another similar concept was employed to involve other Thais into the project. The very concept that Thai people never laeng namchai, literally means drying out of kindness, was used to gather financial support to the people of Isan. They were, in the eyes of other Thais, portrayed as being from poverty stricken region, undernourished through their deficit of natural resources, and hence lacking of hope. The success of the charity concert held to raise financial support was an evidence of Thai
people’s consideration of not being laeng namchai towards the underprivileged people who share the same ‘Thainess’ in the northeastern part of the country. The song chiwit samphan, Connected Lives, too, when sung at the concert by famous fellow singers and used as a soundtrack for the project’s television advertisement, did a successful job to reconfirm the connectedness of the whole ‘Thai’ nation, the intertwining relationship between urbanites and the rural, the civilization of Bangkok and its supporting environment from the outer provinces, the bipolarity between nourishing wet and unwanted dry as well as admired prosperity and miserable poverty, and so on. The water shortage of Isan during that few years was thoroughly diffused with several kinds of discourses of ‘eco-body’ of the nation, while the politics surrounding it was successfully made unobserved.

From the initiation of the project as a namphrathai chak nai luang, the project was well received not only among Isan peasants but also the Thai as a whole. Within the first year, the project was reported to have cost about 300 million baht (Missingham 1996). As to alleviate severe water shortage, water from available water sources was transported to villages in need by trucks, hand-pumping stations for groundwater were set up, existing ditches and waterways had been excavated, electricity-run pumping stations were widely installed and artificial rains were carried out. The most controversial method of a fast-track attempt in establishing water resources in the region was the when the military used explosives to create water ponds in villages, which, later on, was vastly criticized of being useless and, even worse, may have degraded natural underground water already used by communities (Apichai 1998). After the first year, the military evaluated the project and found that the project was too costly to carry on for every single arid year. Just only the transportation of water into water-deficient areas, it was claimed, cost the military of 4 liters of fuel for one liter of clean water (Apichai 1998). With all that costly ‘water from the heart’, then, the project was, later on, rearranged to deal with long-term problem-solving. Finally, a five-year plan hoping to getting rid of chronic environmental problems caused by deforestation and water deficiency was launched. It was widely publicized that the whole scheme was designed, both intensively and extensively, to make the Isan green (isan khiao) permanently.
The military has had a long history of involvement in development programs in Isan. It is argued that such involvement in the region by the army stemmed from Bangkok’s desire to ensure state control and order in peripheral regions perceived as possible threats to national security (Missingham 1996: 195). The *Isan khiao* project proved itself as a success in terms of the increase in the role of the military in the northeast (Xiaohui 1990; Missingham 1996; Apichai 1998), while its long-term social and ecological objectives were somewhat obscured. As Missingham (1996: 196) points out, with the virtual ending of political menace after the Communist Party of Thailand broke down in 1983 and external threats from Indochina seemed less and less likely, the army was seeking a new legitimate role for itself and justification for its large share of the national budget. It was not so long after the initiation of *Isan khiao* scheme in 1987 and the establishment of fund-managing organization, *Isan khiao* Foundation, administered by military staff, that Chavalit gained enough popularity among northeastern mass and was ready to resign from the military commander-in-chief to run in the country’s politics under his own brand-new ‘New Aspiration Party’ in 1990.

At the end of 1991 when the *Isan khiao* project was terminated, it seems that the project had some success in improving conditions in parts of the Northeast. The project, however, fell far short of its ambitious goal of greening the Isan (Missingham 1996). It was quite obvious that the project yielded out recognizable popularity towards the military among the northeaster people which, in turn, led to the success of newly established political party run by the former Commander-in-Chief who managed the *Isan khiao* project. In fact, this political agenda was only an immediate return for the military. In the long term, however, the army has also been able to establish, once again, their anti-communist activities into the region. It was also able to exploit the national budget to support its own bureaucracy, which after the late 1980s, unlike during the communist insurgencies after during the Cold War, rarely had obvious national threats to fight against. Despite the fact that there was no clear perceived threat to national security at that time, we could still see that in many cases, the *Isan khiao* project was somehow been linked with the Office of Counter-Communist Activities. In other words, the project was deployed not only to solve the immediate and long term ecological problems facing the region. Rather, it also used to keep the army in the money and politics under the banner of ‘fighting against poverty’
(Thanufai 2002), the very discourse that the military employed to expand their active roles and presence in the region. This is pointed out in Chavalit’s biographical book (Thanufai 2002) saying:

The Isan khiao project was not only aimed to solve immediate problem of scarcity but it was designed to tackle the problems of the region in a long term manner. It was actually to get rid of all the image of the region as the poorest region. And because Isan is a frontline of national security, it is then strategically important area where those who want to take control of the region often use the problem of poverty as a fundamental condition in stimulating systematic and consistent psychological warfare.

At the end of the day, it can be said that the five-year action of Isan khiao project as to green the region was not merely through the introduction of economic crops and plantation, as well as implementing stricter measure to protect ‘national parks’ in the region. But also to ‘green’ the region with the military’s green. The greater roles and numbers of military officers spread all over the region as to fight against real and discursive threats of the region. Natural water shortage, economic deficiency and national security was juxtaposed and diffused within the scheme which, at first, may look less political but rather an ecological oriented project. The greening of Isan was then an effective means of politicizing and militarizing the region through the use of ecologically-oriented project.
PART 2

FLOW, STAGNATION, AND SEDIMENTS
OF WATER PROJECTS

Following the first part where I argue that water projects could be used as an ‘anti-politics machine’ to suppress potential political unrest in northeaster Thailand. Consequently, through the state’s mega-plans, ‘technical’ water projects were implemented on local communities designated as being politically insecure and economically weak. Building upon such narrative, this second part zooms into the pragmatic operation of state’s water development projects to see how they intersect with other political and social processes. The focus is here on small-scale projects from the receiving end as I will explore their contradictory, messiness, and non-technical effects. The argument is that, under seemingly technical design and operation, irrigation projects did not operate as anticipated. In contrast to the flows of money, people, materials and knowledge, there has often been stagnation in project administration, people participation and the utilization of project facilities. This stagnation, as the cases that follow will reveal, was affected by local processes in determining the outcome of the project. Based on an ethnography of water projects, this part will unveil the flows, stagnation as well as the physical and social sediment being left on the community landscape.

AGRICULTURAL EXTENSION & INTENSIVE IRRIGATION

Amidst the flat and dry terrain of the upland fields of Ban Nawaeng, there emerges a reservoir one can easily notice as a swampy area with a small forested islet in the center. Covering a terrain greater in size than the village’s residential area, the reservoir was built in 1980 by the Farmer Service Mobile Center Project. The reservoir project was part of government provision scheme aimed at creating artificial water resources in the lower Isan area. With its capacity of 57,600 cubic meters - still classified as a small-scale project by the Irrigation Department - the reservoir was primarily built to store water for agriculture activities in the area surrounding Ban Nawaeng. Looking through non-technical eyes, the
The reservoir body was created by building an earthen dam blocking Tat creek, thus allowing excess water to flow downstream through concrete spillway on its fringe, passing an old weir, and finally drain into the Mekong (Figure 2). Also halfway along the length of the dam, there is a steel drainage pipe, equipped with a hand-operated steel gate valve, to let water flow to the other side of the dam.

The story of the construction of Tat reservoir goes back to the initiation of the Farmer Service Mobile Center Project under the auspices of RID in the late 1970s. The Mobile Center was established as a state mechanism aiming to address problems of water deficiency especially in the areas where farmers could not get access to medium- or large-sized irrigation projects (see Mingsan 2001). This can be seen as the result of a changing approach in irrigation management policy at the national level at that time. There were, in fact, growing concerns among hydro-bureaucrats about the economic efficiency and the real agricultural benefits of large-scale irrigation projects during the hydro-technical boom from the 1950s. The practice of extensive distribution of water, targeting large agricultural coverage, shifted to an intensive approach. The small and less bureaucratic operation like the Mobile Center would then be considered as an effective working unit in providing remote areas with immediate assistance in developing water resources. In addition to that, the National Program of Agricultural Extension, set up earlier in 1977 under the
Department of Agricultural Extension, was also actively working within the four pilot provinces of Isan, Ubon included, to promote new ‘modern’ agricultural practices to the Northeast farmers (NEA 1980). Decentralized agricultural offices in regional, provincial, district as well as community levels were set up, financed by the International Bank for Reconstruction and Development and the national budget. Agricultural extension officers (kaset tambon) were widely recruited and technically trained to work at the village level while funding was distributed to communities promote double cropping (Wathana 1986: 61).

Having heard about the state’s campaign providing service to villagers in need, one of the community leaders of Ban Na Samart, a neighboring village of Nawaeng, went to the Irrigation Office in Ubon province to request assistance. A former Nawaeng villager and Na Samart community leader, Samart was among one of the very influential people within the tambon. People recalled that Samart was the one who decided to pull some families out of Ban Nawaeng to set up the new village of Na Samart, meaning Samart’s paddy fields. Among the villagers, not only in Nawaeng but also in other nearby villages, Samart was widely known to be a local member of the Democrat Party in which he ran for national election twice, failing both times. Even though Samart had no political position to back him up, he was well-connected with high-ranking officials in Ubon province. It was said that many of the development projects in the tambon were the result of his close relationship with authorities in the provincial hall. The paved road in his village, for example, was constructed by the Department of Highways which, in fact, is not directly responsible for this sort of road building at all. Besides this, many other government projects such as the building of health care center and the Mekong river embankment counted as ‘achievements’ (phonngan) and were testament of his influence and association with provincial authorities. Samart was also said to have very good connections with the Irrigation Office in Ubon and regularly asked the office for development projects in the area. As one of the former kamnan recounted Samart’s stories for me, he recalled one of the irrigation officers asking him to tell Samart ‘to stop demanding more and more projects as we [the irrigation officers] are sick of it now’.
After a ‘request’ to the Mobile Center had been submitted, as expected, local staff of Irrigation Office came to survey the area near Ban Na Samart. The Irrigation Office later proposed that a suitable location for building a reservoir would be in Bung Khilek, another nearby village with another smaller creek flowing down into the Mekong. After the proposal of location of reservoir was known to the villagers, however, there was a strong opposition by one family in Bung Khilek, fearing that the reservoir would inundate all of their farmland. After some communication and negotiation among villagers, community leaders, the kamnan, and the irrigation staff, they finally decided to find another area to construct the reservoir. And that new location was in Nawaeng.

BUILDING HUAI TAT RESERVOIR

In the 1981, the kamnan along with the leader of Ban Na Samart and irrigation officers set up a meeting to inform villagers of Nawaeng about the plan to build reservoir on the upland area where the Tat creek flows through. Having heard how the reservoir would benefit their village, there was enthusiasm among the villagers of Ban Nawaeng. They considered themselves very fortunate in receiving the project from the state. However, concern was raised in that first meeting, again, by one of the villagers who was worried that his agricultural land covering approximately about 30 rai would be covered by the water. Such an amount of land, he claimed, would earn him about 100 bags of rice each year. Worse, the concerned villager, Prachit, and his family possessed no other land for farming in the community area. Hence, constructing the reservoir would totally wipe out all of his agricultural land. Due to the insurmountable administrative problems, financial burden, and since the issue is beyond the ‘technical’ hydrological control, the RID had no policy to compensate for agricultural land being converted for an irrigation project (Mingsan 2001). This, I would argue, derived from the very idea that the RID see their water development project as ‘an act of contribution’ (prathan) for the good of villagers as a whole. By positioning itself as a water contributor and by considering a water-receiving village as a homogenous entity, the RID chose to ignore the local politics and conflicts arising from their ‘granted’ projects. Without any compensation for the loss of farmland, the family who owned the land under proposal was reluctant to sacrifice their only resource for the sake of community development.
There were several village meetings as well as attempts by community leaders to negotiate with Prachit. Recalling his experience of that time, Prachit, now an old man at the age of 68, repeatedly mentioned to me several times of his feeling of uneasiness being under such circumstance. On the one hand he was worried about being blamed by his community fellows for refusing to sacrifice what he had for the sake of the village’s development. But, on the other hand, he seemed to have no choice but to insist on keeping the only land he had for his family. As the negotiation among the local folks had not yielded pragmatic outcome, finally, the kamnan decided to ask the Head of the District to ‘come down’ to the village and discuss a solution. The solution was reached when one of the respected villagers who worked full-time as a school teacher proposed to give away his unused plot of land to Prachit’s family. The land was adjacent to the rim of the reservoir after its completion. In addition to that, the community gathered a fund of 20,000 baht, which was given to his family as compensation for their lost crops and for the labor in preparing new farmland that year. There was also another case where about one rai of rice fields was flooded by the reservoir’s water. However, the owner of that land was not too troubled as the submerged land had only produced 10 bags of rice per year. Instead, having the land next to the reservoir would yield more benefit to the owner as he could produce a second crop of rice with easy access to irrigated water. After all the arrangements had been made, the construction of huai Tat reservoir then began.

The construction of the project was initially set up to inform and consult with the villagers especially concerning the location. Despite this, most community members had received little further ‘technical’ information on the project such as the structure and estimated capacity of the reservoir, its distribution system, construction period, and the management of the reservoir upon completion. There was only some personal communications mainly among RID staff, the village headman, and villagers who were directly involved with expected inundation areas. The ‘technical’ matter (rueang thang chang), as villagers said, was mainly managed by an irrigation officer whom local people called ‘the technical master’ (huana chang) and his three technical staff. Although there was little participation in the period of the project design and construction, some villagers were hired by the project to work as construction workers. During the period of construction, many villagers who went to observe the site often had no serious disagreement with the
project’s technical aspects. There was, of course, some discussion among the villagers about small details concerning the level of the dam’s height and the spillway. However, this was very far from being a local, everyday form of ‘resistance’ (Scott 1985). Instead, some villagers who regularly went to observe the construction work, watching the excavators coming from the city industriously digging out muddy soil to create a water basin, expressed their feeling of being grateful and fortunate to have a reservoir built in their community vicinity. The villagers’ understanding was that the project was ‘given’ by the government officials to locals so they should be thankful for that. On one side of the dam, after the overall project was completed, a permanent board was erected confirming the idea that the dam and reservoir were built by the government and granted to the people (ratthaban sang mop hai ratsadon) of Ban Nawaeng. And further down on the same board, the message read ‘it is for the communal use, care, and maintenance’ (phuea chai prayot lae dulae bamrungraksa ruam kan). The RID staff left behind the post-construction managerial affairs to local people for several years, but without any guidelines.

After three months of construction works between April and June, the dam was finally completed and ready to collect water from the creek. After the rainy season had passed, the basin was finally filled and, as an unexpected consequence, the privately owned lands of four families were inundated – not one or two as anticipated in the project’s planning earlier. Though they had taken their concerns to the kamnan, nothing had happened after the officials left the project site. Despite the relatively low level of dam’s spillway, bought about by concern on inundation of farmlands, the lack of long-term observation on water discharge and flow fluctuation made the calculation, if there was any, of reservoir’s inundated area an unreliable one. In addition to that, some of the forest area, designated as reserve forest under Royal Forest Department (RFD), was also covered with floodwater. When I asked the villagers why they or the construction team did not cut down the trees for other usage in the community or for their own benefit, they maintained that, since the forest area was khongluang (royal/government property) belonging to the RFD, this was not allowed. There were a few occasions during the construction period when RFD staff came to the site to make sure nobody cut down the trees and turned them into other useful resources. ‘They just let the water flood all the forest behind the dam and die out’, one of the elders told me during our conversation. Afraid of being caught by the authority,
people in Nawaeng just let the area of forest that was inundated gradually die away. Today, most of the previously forested areas around the rim of reservoir are degraded forest which allows villagers to exploit the land for their petty farming activities and the collection of forest products.

Upon the completion of the project, most of villagers were enthusiastic to experience the benefit of such a modern hydrological project. With the sight of the emerging reservoir amidst the dry upland fields, the villagers were keen that the project would improve their agricultural production, which previously relied heavily on seasonal rain, and that their lives would soon be better off. But their hopes were cleared when the dry season of the succeeding year arrived. What worried the villagers was that the dam and the reservoir which was supposed to collect and provide irrigated water for agricultural fields was devised without any irrigation lines to distribute water to their distant fields. Only Prachit and a few other families whose lands were adjacent to the reservoir were quiet, busily occupying themselves with their second crop using water, more or less exclusively, from the so-called ‘community’ reservoir. Of course, the villagers had learned, as early as during the initial process of the construction, that the whole structure of the project design mainly consisted of the dam, its spillway, and the water collected by the dam, hence formed a large area of reservoir. Nevertheless, they did not doubt the ‘technicality’ of state project at that time. Only recently, when the villagers started to initiate their own development projects, the questions and doubts on state’s previous projects were more expressive within the community. However, this is by no mean to suggest that the villagers would go against further cooperation with the state, or they would use the failure of the state’s previous projects as an excuse to discredit government agencies’ capability in development. I will come back to this particular issue when I discuss the recent water project being initiated by the local villagers in the last part of this paper.

**IRRIGATION WITHOUT WATER DISTRIBUTION**

Even now, the benefit of the reservoir is still very limited. Only those villagers who have agricultural lands next to the reservoir can access to the water by using diesel-run pump engine to bring water to their agricultural plots, which are close enough to reach with family-owned pipes. The ineffectiveness of the reservoir, as claimed by villagers, was two-fold. The first problem had to do with the lowland field area below the dam site where *huai*
Tat, acting as a reservoir’s drainage canal, passing by. The main concern here was that the water kept in the reservoir is very limited despite its anticipated 56,000 cubic meter capacity of holding water. This was due to the limited capacity in collecting water discharging into the wide catchments area upstream. The location where the dam was built was a flat area making the basin wide but shallow. One of revered monks in the village once mentioned to me that ‘those who built the dam were not smart enough and lacked ‘vision’, which was why they constructed the dam so low that it couldn’t even hold enough water’. Poor site selection, however, was not the only problem concerned here. From a study of utilization of irrigation facilities in northeastern Thailand conducted during the late 1970s and 1980s, it was also found that in many other irrigation projects, there were areas where main canals existed but secondary and tertiary canals were lacking along with the necessary ditches and drainage canals (Wathana 1986: 62). In Nawaeng, without any water distribution system, most of the villagers growing second crops in upland field rarely directly benefited from the reservoir (Figure 3).

Figure 3: The rain-fed upland cassava fields during the dry season with the reservoir in the background
The second concern, which was even far more important in the eyes of the villagers, was that the project has no effective irrigation system that could transfer water from reservoirs to feed extensive agricultural areas around the reservoir. Their understanding of any irrigation project was based on the very basic concept that it is a system where water is provided to fields under cultivation. During planning and construction of the project, there was no information provided to the villagers whether local channels for distribution were supposed to come from labor contributions by the community. Since the reservoir only collects limited amounts of water and there is no distribution line out of the basin, the stored water later on become stagnant and contaminated. For this reason, some villagers whose farmlands lay adjacent to the reservoir are reluctant to use water from the basin through electric pumps due to its poor quality. For the people of Nawaeng, the notion of ‘irrigation’ puts emphasis on the outcome which is cultivated fields being well irrigated. The state’s irrigation project which merely aimed at collecting water in the reservoir was then making no sense to their understanding of how the hydrological project should work. Their concern to them, therefore, has been on how to have a good system in transferring water from one place to others without creating cost and inconvenience.

While the irrigation dam and reservoir project yielded very little benefit to most of the community members, a few farmers had their farmlands close to the reservoir and were able to take advantage of the community’s water. Villagers estimated that the amount of water collected within the reservoir would not be sufficient to intensively irrigate agricultural plots of many households. And since the cost of setting up a community system of pumping and irrigating canals from the reservoir may not be recovered from the limited amount of reservoir water, investing in an irrigation reservoir may not be economically worthwhile. Aware of the limited water supply of the reservoir, villagers at least twice requested the Irrigation Office in Ubon to come and ‘fix’ the problems. In fact, prior to the first request in 1997, there had been discussion among local villagers of proposing that the Irrigation Office raise the height of the dam, which would increase the water volume. However, there was opposition to such plan since this would result in flooding of more privately-owned land. So the better solution would be to deepen the reservoir’s basin. This proposal was not well received by the Irrigation Office until 1997, when part of the dam’ structure collapsed due to water leakage. Another improvement was done in 2000, again, to
dredge out of the basin, as there had been complaints that the task done in 1997 was not sufficient and the reservoir was still too shallow.

Figure 4: Huai Tat reservoir in February 2009

Until now the water in the reservoir has been commonly used to water cattle grazing in the upland fields. The initial purpose of it as an irrigation source for dry-season crops has yielded benefit to only a few families. The main beneficiary was Prachit’s family. In any good rainy season, which would raise the level of water in the reservoir, Prachit or his son-in-law would go out and release the excess water to prevent it to from flooding his farmland. In the dry season or if the rain is delayed, he would use his own water pump to deliver water from the reservoir in his fields close by. It seemed that the matter of water control within the reservoir for the production of agriculture rested mainly in the hands of Prachit. Only rare cases that other fellow villagers would be bother adjusting water level in the basin. Ironically, this contradicted the call for communal maintenance marked on the board erected by Irrigation Office upon the completion of the reservoir. The communal irrigational system of Tat reservoir here, like many other irrigation sites in Isan, has been left ‘incomplete, non-existent or in serious despair’ (AIT 1978: 20). As Wathana (1986: 62) argued 20 years ago, in many cases operations and maintenance procedures have been left to the local people with little explanation or assistance from the irrigation agencies. It can
be argued that the practice of the state officials here, to a certain extent, was based on what Walker (2001) calls ‘community simplifications’, the assumptions about community that is homogenous, customary yet capable of changes, equipped with the will to improve, and hence ready to manage their ‘communal’ natural resources and development project together (See also Li 2007; Ratana 2003; Parnwell 2007).

**PUMP IRRIGATION AS A POLITICAL REWARD**

Despite the disappointment with the utilization of the reservoir project, in 1985 the people of Ban Nawaeng were again eager to learn that another irrigation system would be soon set up in their village. The project was ‘brought into’ the community by one of local Members of Parliament from the Social Action Party who won the elections during that time, being a political rival of Samart. The project, it is said, was a ‘reward’ for, or reciprocal gesture to (khongkamnan topthaen namchai), the community and its leaders in return for their votes (thansiang) in earlier elections. The pump irrigation project– was devised by then the Office of National Energy Authority (NEA)³.

The claim of the project perceived as a ‘reward’ from the local MP in return for political support is not unusual in Thailand where a lot of government programs are repackaged as personal patronage in this way. In this particular pump irrigation scheme, however, there was a policy already implemented on national level to sponsor electric pumps in Isan where a reliable water source from the river exists. Ban Nawaeng, of course, was one among many other communities on the shortlist to benefit from such national policy. Since the mid-1970s, the Lower Mekong Development Committee had been receiving funds from the United Nations Development Program to stimulate the development of irrigation and practice of year-round agriculture along the lower stretch of the river. In Thailand, the funds were allocated through the NESDB and the NEA to set up a pump irrigation system in the arid zones of Isan where existing irrigation projects, mostly devised by RID, could not reach. The objective of the project was to promote double cropping in the area along suitable rivers in the Northeast. It was hoped that this would lead to an increase in the incomes of farmers in the project area (Wathana 1986: 65). In fact, prior to the financial support of Mekong Committee, the NEA, in cooperation with the

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³ NEA was under National Economic and Social Development Board (NESDB), now Department of Energy Development and Promotion (DEDP) under the Ministry of Science, Technology and Environment.
Department of local Administration, had already launched several pump irrigation projects, mainly in the riverside communities of Northeastern Thailand (Wathana 1986: 63-64). In Ubon province, there was even the Provincial Center for Electric Pump Irrigation Service set up in order to take direct control of pump irrigation projects in the province. The main tasks of this provincial center were to conduct engineering, economic and cadastral surveys; construct pump irrigation projects; inspect engineering problems; collect water fees; as well as supervising pump control units and give advice to the ‘Water Users’ Group’ which later would be established in each community receiving a project (NEA 1980). In short, the region-wide plan of pump irrigation was already in the process of implementation. But a powerful MP knew how to insert his claim for personal patronage into such development plan to improve his own future election prospects.

Development intervention by state agencies in Ban Nawaeng continues to focus upon what Li (2007: 275-276) calls ‘an incarcerated local’ in which ‘properly guided villagers are expected to improve their own conditions by their own efforts’. Before the pump irrigation scheme was implemented, the NEA had set up criteria in selecting communities suitable for the project as follows:

1. The area must not be more than 1 km from a river source, which should have the capacity of providing water supply to meet the expected demand of the community all year long;
2. The area must not be more than 10 km from an electricity transmission line;
3. The agricultural area served by the project must not be less than 2,000 rai;
4. Villagers owning such lands must provide land for the construction of irrigation canals, pay for electricity to run the project, intend to use water for cultivation all through the year, be keen and ready to participate in the extension of modern agricultural techniques as well as willing to set up a water users’ group which is, in a latter stage, able to carry out the operation including maintenance under the form of Cooperatives;
5. The area for pump irrigation project must not be under the present and future irrigation plans of other agencies.
While the first three NEA criteria were about infrastructural and geographical features of the village, and the last one concerned the administrative matter of government’s development agencies, the fourth criteria most directly affected the villagers. As will be illustrated later in this paper when discussing the water users’ setting up of a cooperative, this obligation of readiness and participation in the state’s line of development ended up forcing the villagers to make use of irrigation projects, despite the lack of bureaucratic support and capitals for agricultural investment.

Let us now return to the people of Nawaeng and their initial participation in the new project. When the pump irrigation was about to be set up, there was an initial meeting organized by the kamnan to inform villagers about the plan as well as to determine the location of the pumping station and canal routes. The main physical components of the project included a pump engine and its small building floating on the Mekong mainstream, an electrical power system located by the side of the river, and two lines of a major canal. The decision for the location of pumping station was not a big matter. This was due to the fact that the pumping machine would be placed in the Mekong river and a small controlling station was assigned to riverside spot in a local school area – both considered as ‘communal’. But determining the canal routes was much more contentious. Unlike the pump station, irrigation canals had to be laid on private farm plots. This, of course, directly involved discussion and negotiation among community members. Some people wanted the canals on their land as they could have easy access water, while others did not want them being afraid of losing too much land. The NEA, the organization granting the project, did not attempt to get involved in local meetings and, like RID, there was no policy for any compensation, as it was viewed that the community was a united whole. As stated in the criteria mentioned earlier, the NEA expected that the targeted communities needed to come up with their decision in choosing land for the construction of irrigation canals. With this in mind, local people were afraid that if they could not come up with a ‘community’ solution to the location problem, the community would surely lose the benefit of getting the present project, and ones in the future. There were a few formal meetings and a number of informal talks among villagers debating the advantages and shortcomings of the project. An air of conflict often arose as the villagers tried to find practical solutions for the canal route. In one of the meetings, Tun, one of the project opponents I talked with, said that he ‘went to
the community hearing carrying along a machete’ – an action obviously aimed to threaten anyone who intended to force him to give up his land for the community’s canal.

In the end, three canal routes were ‘communally’ determined, and most of the villagers agreed to give up that part of their property for the sake of the canal. The first canal, only 100 meters long, was laid on the northern side of the lowland field. This is the shortest canal ever constructed in Ban Nawaeng. The reason behind it was that Tun who insisted on not giving his land to the canal made the canal line stop right before entering into his farmland. The second and the third canals were laid on the southern side of lowland field covering larger farming areas. Each canal was about 1,500 meters in length and ran into a parallel, southward direction. It could be said that these three canals were a result of several negotiations and compromises among villagers, based on their relations with others in the community as well as the asset of lands they actually own. There were few families who refused to give up their lands for communal benefit, arguing that this would risk their production and income. Yet, after the irrigation project was operational, those families who did not give up their land were still allowed to benefit from the canals. It is, of course, beyond the authority of individual villager or the community to determine who should be included or excluded from receiving benefits from the state project. According to the NEA, anyone who wished to benefit from the irrigation water and was able to access the supply should have the right to do so. This, as we can expect, was aimed at promoting the most effective use of the project and thus encourage the community to practice intensive agriculture according to the national agricultural development plan. However, the means of getting water from the irrigation canals was not easy. This depended very much on the relationship between farmers and their neighbors. In many cases, those whose lands lay next to the canals would reserve a small area in their farm plots for water-distribution ditches. Through those ditches, farmers whose lands were located away from the canals would then receive water which passed through their neighbors’ land. However, there are some cases, too, in which opening and closing ditches located in one’s own farmland became a matter of gaining advantage over others. Those farmers who had to rely on their neighbors to allow water to flow though their fields often felt indebted (ni bunkhun) and hence needed to payback. As this dependence of water usage occurred from time to time, some farmers whose lands were disconnected from the canals decided to buy their own
diesel-run water pump to transfer water from the canal to their farmland with PVC water pipes. People claim this has solved the dispute.

Figure 5: NEA staff making sure the project in Ban Nawaeng was technically accurate

Sacrificing farmland for the construction of irrigation canal, however, was not the only issue in the implementation of irrigation routes in Ban Nawaeng. In fact, there were other farming areas that, in the initial process of project planning, were not included in the targeted area. There were some farmers I knew whose land was excluded from the plan but wished that the canal would reach their farmlands and had raised their request – for example, in the community meeting – but were not accepted. It was partly personal connections that acted as an effective strategy in bringing state’s water scheme to one’s advantages. One obvious example was the case of the southern canal route, which passed...
through the communal ‘sacred’ forest area to deliver irrigation water to an extensive tamarind orchard owned by Prasit, a former policeman who was also a main supporter of the local MP in Khemarat district. This case came to my attention few days before the ritual worship of the community’s guardian spirit (pu ta) located at the heart of a dense forest preserved as a sacred area. I was walking to survey the area near the house of the spirit when I found that there was an irrigation canal passing the spirit house through the dense forest. The canal was dried up, out of use, obviously due to the lack of maintenance for several years. Following the canal route, I finally ended up at Prasit’s tamarind orchard located on the far south side of the community, separated from the village and lowland field by the spirit forest.

About 600 meter beyond the edge of the forest lie extensive tamarind orchard. Most villagers knew very well that the orchard area owned by Prasit was not included in the initial plan for pump irrigation. However, during the construction period, Prasit had built up his personal connections with the officials both at the construction sites and in the provincial office. He had also used his connection with the local MP. This particular MP owned a construction and machinery company in Ubon that had acquired concessions to build many development projects in the province, including the canals for this pump irrigation project. It was said that besides his journeys back and forth between the village and Ubon, Prasit also spent a lot of money buying pigs and chickens, not to offer to the guardian spirit, but to feed the construction managers and local workers. So, despite the distance and the unsuitable terrain, the irrigation canal was finally laid down to deliver water to his large tamarind orchard. People in Nawaeng seemed to have less concern about the legitimacy of the canal construction that led to Prasit’s orchard than the fact that the canal had to cut through the sacred forest. Such disagreement became explicit when the company’s construction trucks and other machines broke down from time to time during the construction near the spirit house. After several technical mishaps, the construction team found themselves condemned by villagers, who claimed the problem was caused by the spirit as the canal construction had intruded into his territory without asking for permission. A ceremony to apologize to the spirit was soon held by Prasit and the construction team, while the whole community was invited to witness the ritual and get some share of the sacrificial chickens. After the ceremony was held, the construction team
continued and the canal was completed in a very short period of time in order to ‘avoid further troubles with the spirit.’

Figure 6: Transferring water from irrigation canal through pipe into rice fields

Unfortunately, when I walked along the canal in 2007, the part from pu ta forest to the orchard field of Prasit was totally out of use, with no sign of maintenance for several years. Is this simply the failure of technical knowledge and design in canal construction or, in fact, because of power relations in the community that set out the decision where the canal should be laid at first? Of course, the lack of canal utilization was associated with local topography and the distance, which affected the amount of water that reached that part of the canal. In this case, however, there was also a social factor. The primary reason was the lack of cooperation from other farmers in the community in their annual maintenance of that part of irrigation canal. As I discuss later in this paper, water users cooperate to clean up the silt carried by pumped water that had collected along the bed of the canal. This deposition of sediment slowed, or even obstructed the flow of water along the irrigation
lines and thus needed clearing every year. Without cooperation from other farmers in the village, Prasit’s part of the canal was left uncleaned. In addition to that, even during the first few years after the canal had started to operate, the water was not able to reach the end of the canal where the orchard field was located. This was due to the fact that farmers who shared the same canal with Prasit often diverted water from the canal into their farmland before it reached the canal’s end. From the very beginning, Prasit’s orchard was therefore connected to the pump irrigation system due to his connections with authority. But due to the lack of community cooperation and commitment, the orchard was left non-irrigated. Though Prasit might be successful in prompting the authority to lay the irrigation canal to reach his farmland, the lack of precise planning and construction as well as the lack of social cooperation from fellow villagers left the system unworkable.

**Water Users’ Group**

After the physical construction was completed by NEA, the Water Users’ Group (*klum phuchai nam*) was set up among the local villagers. However, the Group’s formation was not through the support of NEA. Rather, the project’s implementation and Group management was carried out under assistance from the Provincial and District Agricultural Offices. The Group was considered as a requirement as it was part of the long-term project establishment and handing over of managerial responsibility to the farmers who utilize the pump water. When the Group was organized in 1985, there were 20 farmers registered as initial members. The orientation and training was organized by agricultural extension staff working for the sub-district (*kaset tambon*). They instructed the villagers on how the pump irrigation project should be managed communally. Documents, technical know-how, and rules and regulations were provided by the Agricultural Extension Office as well as from Regional Office for Irrigation in Ubon. One member was selected and appointed ‘head of water distribution’ (*huana sainam*) to oversee and coordinate setting up a timetable for pumping water, collecting the electricity fee, as well as controlling the effective flow of the water along the irrigation canals. Electricity costs to run the pump’s engine was 1.17 baht per unit (or kilowatt-hour), but only 60 *satang* for each unit would be charged to water users. The NEA, in cooperation with the Regional Electricity Authority would share the rest of the electricity cost. The pump engine was only allowed to run from 8 in the morning to 6 in the evening to prevent clandestine use during the night.
Figure 7: RID’s instruction booklet on setting up Water Users’ Group
During that period, the national agriculture policy, very much based on the NESDB plan, emphasized agricultural extension through irrigation management and the development of modern agricultural techniques. Many publications and instruction brochures were disseminated among farmers in the area to inform them about appropriate ‘codes of conduct’ in modern agricultural practices. These included ‘how to appropriately irrigate paddies’ (hai nam kae khao baep nai chueng cha di), ‘how much water plants need each day’ (phuet tongkan chai nam wan la thaorai), and ‘water can increase productivity’ (nam ko phoem phonphalit dai) (RID 1984a, 1984b, 1984c). There were also instructions on how to grow wet rice, raise fish and cattle, and how to add chemical fertilizer in rice paddies. The organization of farmers into a water-user group was also part of the organizational techniques used to encourage modern agricultural practices.

One of the government’s instruction booklets was called “than cha dai arai chak kan chattang klum phuchai nam chonlaprathan” (What would be benefits from setting up Water User Group?) (RID 1984d). The leaflet contained cartoon illustrations and simple messages which depicted how the farmers would gain many benefits by setting up and participate in the Water-Users’ Group. These included: having representatives to voice their concerns; being surrounded by good neighbors so that they could discuss things without formalities; receiving assistance whenever it needed; being able to access irrigation water widely, sufficiently and in a timely manner; and receiving supervision from irrigation officers on field’s water management from time to time.
According to the NEA regulations, if farmers would like to use pump water to irrigate their fields for dry-season crops, they had to start their farming activities at the same time so the water could be used most effectively. During the rainy season, the farmers were more likely to rely on rain for their farming as this would save them the cost of electricity to run the pumping machine. However, if the rain was delayed, farmers could also organize themselves and ask to use the water pump. Beside such communal requirements set down early by NEA, there were other rules concerning irrigation activity imposed on the Group after the orientation given by the *kaset tambon*. These rules, adapted from the Official Irrigation Act (1942) and the Canal and Waterway Act (1962), were formally listed in the RID (1986) booklet given to the group members. The expectation was that these would be strictly followed. The rules were:

1) Don’t do anything to obstruct the irrigation water.
2) Don’t do anything which may prevent others’ lands from receiving an appropriate amount of water.
3) Don’t do anything that would waste the water by letting it drain out from irrigation areas.
4) Don’t use or divert water from irrigation canals without permission.
5) Don’t open or close sluice gates unless given authority to do so.
6) Don’t do anything that may prevent water from flowing into nearby lands and its destination.
7) Don’t use or divert water from irrigation canals which may cause damage or disturbance to others.
8) Don’t plant or build anything in irrigation routes, canals, and their perimeter.
9) Don’t dig canals or any water route to connect with irrigation canals or sub-canals without permission.
10) Don’t do anything that may cause leakage to irrigation canals.
11) Don’t let any domestic animals into irrigation canals.
12) Don’t do anything which may cause damage to the canals, irrigation building, poles, telephone lines, boards, level markers, or any other devices used for irrigation.
13) Don’t throw rubbish, sewage, or toxic matters into irrigation canals.
14) Don’t do anything to impair the operation of levees, canals, sluice gates, or any other devices used to control water.

15) Don’t neglect to dredge and provide maintenance to levees, canals, sluice gates, or any other water controlling devices within your own lands to keep up good water distribution within the irrigable area.

After the Group had been organized, the members of the Group were well aware of the rules they had to comply with. Among the rules, the main concern centered on the issue of timing and amount of water each farmer would get each year. Every year, Group members would hold a meeting to discuss their schedule of water distribution as they were instructed to do. Their mutual agreement was that farmers who had agricultural plots at the tail-end of each irrigation canal should receive water supply before those whose lands were located close to the head of the canals. Only if water had been sufficiently released into those remote areas, could farmers whose lands lay next to the canals, then open canal sluices to divert water into their farmlands. This is obvious. However, in practice, farmers often discarded the rules and everyone seemed to direct water from irrigation canals into their plots the first day the irrigation pump started to run. Worse, it was said that some villagers who at first did not express their intention to get water from pump irrigation were diverting water from the canals into their farmlands. This was covertly done to avoid the burden of sharing the cost of running electric pump. Every year in the meeting, there were complaints from member farmers whose farmlands were distant from main irrigation lines. Complaints also came from those farmers who requested irrigation and found other villagers outside the registered water users’ list using the same irrigation water. Informal gossip and criticism among farmers continued over the years without any measure to directly solve the problems.

After the pump irrigation project was completed, the change in agricultural practice in Nawaeng exactly followed what the NEA or the Ministry of Agriculture had anticipated when devising the project. The primary objective of setting up the pump irrigation system, and in fact all other kinds of irrigation projects in Thailand, was to encourage farmers to grow a second or third crop, within an agricultural year. In addition, providing that there is water security supported by effective irrigation, it was long assumed that modernization of
agriculture could be delivered and implemented in every corner of the country. As a result, it was hoped that this would significantly increase income from the agricultural sector. In the case of Nawaeng, however, there were some other factors beyond the presence of irrigation itself that influenced the change in agricultural patterns. As some villagers pointed out, there were some technical problems experienced among farmers of pump-irrigated lands after the project had been implemented. It was found that some of the farm plots in the project area received no irrigation water because they had no ditches connecting the fields to the main irrigational canals, while some were located on terrain higher than the level of the canals’ sluice gates. There were some farm plots that, while connected to the system, did not receive sufficient water for dry-season cropping. Moreover, as Wathana (1986: 74-75) points out, there was little relationship between adequacy of water provision and the utilization of land for second cropping. In other words, the decision-making on the use of irrigated land did not appear to be wholly influenced by the adequacy of water supply. As we shall see in the next part, social and economic factors have played crucial roles in the determination of the Nawaeng farmers to start and choose agricultural products for their dry-season cropping.

For the first decade or so, people still had no incentive to intensify their rice and other crop production, despite the fact that irrigation water was ready to be delivered into their farm plots all year round. The reason behind this was that there were no government agencies which came up to promote dry-season agriculture in the village during the early years after the project completion. Initially, water from pump irrigation was used among the farmers merely to supplement rain water during rice production especially when the rain was delayed. It can be said that for the first several years, Nawaeng farmers had not started to change their farming pattern much even though there was irrigation provided for them at hand. Even though people were aware from the very beginning of the benefit of having irrigation, this by no means meant that they would soon jump into agricultural intensification and opt in the modern techniques, once brought to them seven eight years ago by kaset tambon, for their farming practice. Without constant supports and close supervision from state agencies in promoting agricultural extension, farmers of Ban Nawaeng found the intensification of crops on their own risked production failure and
being overburdened by electricity cost if water had to be pumped to irrigate whole fields during dry seasons.

During that particular time, the government, however, was rather more concerned about national security along its northeastern border. Despite the underutilization of pump irrigation, in 1987, the military came to the village intending to build another irrigation canal to connect to the existing pump water’s distribution system. The use of military group under the Internal Security Operation Center (ISOC), instead of water engineers or construction technicians from NEA or RID, to build an irrigation canal may sound absurd. But, as I argued in the first part, the water projects were used as an anti-political machine under the auspices of development to allow military and government to insert their roles into the very margin of their territory. At that time the military group had already based its operation in the community, then being named ‘Self-defense village’, for border petrol along the Mekong river as well as ‘educating’ the villagers about the threats of communist from the other side of the border. Following the order from headquarter in Bangkok, the military group expanded their anti-communist operation further into the development of Isan communities. In Ban Nawaeng, another 800 meters of canal was laid down on the southern side of the lowland field by a special operation of military development units.

**THE COOPERATIVE**

In 1991, the NEA sent its officers to evaluate the utilization of pump irrigation and the maintenance of the canals by villagers. The result was quite disappointing to inspection staffs as most of the canals were left idle and there was no dry-season cropping that year. As a result, the NEA informed the villagers that if the pump irrigation continued to be underutilized like that, the authority would stop providing them with further irrigation support and agricultural development. In addition, the existing water pump engine and the electrical power system should be soon removed from the community as they could be more useful in other communities in need of irrigation. Nawaeng farmers, however, were not ready to invest their labor and financial resources for the second crop merely to respond and demonstrate their willingness to use the pump irrigation to its full capacity. As an immediate reaction to the demand of NEA seeking to see their irrigation project being effectively utilized, the villagers proposed to rent the irrigable lands to farmers from Yasothon province to grow watermelons for a very low rental fee.
After the dry season which ranged from November 1991 to April 1992 had passed, the people of Ban Naweang came up with a long-term solution for the management of pump irrigation. Community meetings were held to discuss the existing problems of water distribution and non-conforming use of water as well as the management of the electricity cost, the supervision of the pump, and so on. Besides their communal meeting, villagers also requested some assistance from the district agricultural office for further instruction and support. Soon after, the district office sent their staff to the village and then they started to learn about how to set up an agricultural Cooperative to handle the irrigation project. A community meeting was once again held and finally the community agreed to have the first formal organization for irrigation management. As a consequence, the Water Users’ Cooperative of Nawaeng Pump Irrigation (sahakon phu chai nam) was registered in September 1991 under the Ministry of Agriculture and Agricultural Cooperatives. To apply to be a shareholder, each villager had to deposit 200 baht for each Cooperative share (hun sahakon). An establishment budget of 20,000 baht was provided by the District Office of Agriculture and Cooperatives.

Following the establishment of the Cooperatives, the initial fund was used to buy some chemical fertilizers at wholesale cost and sell to farmers at retail price to generate further income. This would, according to the first head of the Cooperative, create a 20 baht profit from each bag of fertilizer sold. Later on, the Cooperative also loaned money to villagers and charged eight percent interest per year. But the main change concerning the management of pump irrigation was the collection of the electricity fee. In order to guarantee profit to the Cooperative, the water price was calculated by adding five percent to the actual electricity fee. The total cost was shared among water users based on the amount of land being irrigated.

As a result of NEA’s assessment of the project, in 1992, seven years after the pump irrigation had been set up, people in Ban Nawaeng started to grow corn as a second crop. The villagers had adopted dry-season production from Ban Pho Sila villagers in Hua Taphan district of what is now Amnat Charoen Province. For some time, Ban Nawaeng people had a close relationship with people from Ban Pho Sila as they often traded fish and agricultural products through ox-carts. Later on, the villages developed further social ties through inter-
marriage. When Nawaeng villagers were to start their first dry-season crop, as a response to
the NEA’s evaluation discussed below, they went to consult people in Ban Pho Sila as well as
get some corn seeds from them. A few years after, they added beans, cucumbers, and soy
beans so as to ensure sufficient income to pay off the water fee. In addition, some villagers
had adopted modern agricultural techniques, including the selection of crops, from advice
of their neighboring community which has already undergone some transformation.
However, not all of the households in the pump-irrigated area had been able to fully utilize
their irrigated farmlands. This was due to a feeling of uncertainty among farmers on market
access, the method of modern agricultural practices mentioned in the government
promotion leaflets, as well as the lack of financial and other agricultural resources such as
seeds and fertilizer.

After those first few years of dry-season crop trials by some families, the corn yields
were quite successful. However, the villagers found that they lacked access to an adequate
market. As an immediate solution to the problem of excess supply of corn, farmers had to
boil them in salted water and sell to nearby villagers and in the local market for individual
buyers. Some people tried to use their staple rice seeds to grow as a second crop as to
increase the yield and keep them as a secured food bank instead of selling to the local
market or rice mills. But still, the production was still the same. The intensification of rice
production was, then, simply a double production within an agricultural cycle but not an
increase of yield per crop. People in Ban Nawaeng found the pump irrigation useful, to a
certain extent, in their agricultural activities but the problem in front of them was how to
integrate their production with the marketplace. Without good access to market and a
satisfactory price, the villagers found second crop agriculture a risky activity to secure their
incomes. For nearly a decade the villagers persisted with their rain-fed agriculture, and
using irrigated water merely as a supplement, despite the technically soundness of the
water project.

Due to the government’s decentralization policy, after 2002 the pump irrigation
system was administered locally by the TAO in cooperation with the Cooperative. During
my research in 2007, the Cooperative had 180 members, of whom 78 percent were male.
Members were reported to hold 226,540 baht worth of shares. The Cooperative is presently
chaired by nine committee members (six females and three males) and two ‘advisors’, one of whom is also in charge of operating the pump engine. The role of the committee is to oversee any problems that may arise from the project. Often, their tasks include repairing the water pump when it breaks down, patching leakages along the main irrigation canal, scheduling the duration of pumping and the releasing of water, as well as submitting any further problems or requests from farmers to the TAO. In addition, the committee is involved in calculating the cost of electricity for pumping the water. Farmers who wished to use the water would have to pay for the electricity cost of water use when dry-season rice, planted in January, is harvested in late April. The overall cost of electricity was added up with extra five percent. This additional charge was put aside as a profit of the Cooperative and is used for other Cooperative’s administration and activities. Half of the overall electricity each year is subsidized by the TAO while the rest is under Cooperative’s management. In the preceding year (2006) it cost farmers approximately 220 baht per rai but, in some arid years, the cost of pumped water could rise to more than 300 baht. The TAO also pays for the staff in charge of controlling the pump and electricity station, takes responsibility for major maintenance tasks, and shares some urgent costs if there is a financial shortfall within the Cooperative.

Figure 8: TAO staff inspecting irrigation canal’s condition for renovation planning
The process of accessing the irrigated water has not changed much from the early instructions set up by NEA. Farmers who would like to have water pumped from the river have to gather at least three or four members and ask the committee to start the engine. However, the schedule of pump operation has been adapted to better match the nature of farming activity and the irrigated terrain. The period of time to run water pump varied each time. This ranged from three days to a week so as to be able to push the pumped water to the fields at the tail of the irrigation canals. Most of the time, however, there are about ten or more farmers submitting their intention to start the pump engine at the beginning of the agricultural season. In addition, farmers who wished to get water from the irrigation system for their dry-season rice and other agricultural production need to participate in clearing and maintaining the canals prior to the first flow of irrigation water which is scheduled to start on 20 December each year. The participation is required not only of those who have their paddies next to the canals, but also include those who have indirect access to water by diverting it from other farmers’ rice fields.

Due to the limited access to water from the reservoir and the Tat creek, the Mekong pump irrigation is until now the main reliable source of water in Nawaeng for dry-season cultivation. While the local farmers have to pay for the cost of using pump irrigation water, the system is satisfactory for them as the income has exceeded the investment. In this regard, the areas where pumped water can reach are more sought-after than those on the other side of the main road where upland field is located. In contrast to the first decade after the set up the pump, it is now difficult to find any pump irrigated area uncultivated during the year, as any fallow land belonging to families with limited labor is rented by other family with limited access to water. This is an important transformation. This was due partly to the fact that the system of using irrigation water has become somewhat better organized. But the management of the water-users’ group as well as the cooperative were not the only factors in linking irrigation to the intensification of crops in Ban Nawaeng. Rather, this had dealt with various incentive issues especially the access to markets, the flow of cash income into the village, their food security, existing labor force and off-farm job opportunities, other community’s development projects, government policies and local involvement with the authorities and so on. These politico-economic as well as social aspects all contribute to an insight into how this higher level of dry-season cropping in Ban
Nawaeng has come about. This, of course, is an issue beyond the discussion of ‘technicality’ of the water projects. Rather, it is a social fluidity of the community itself that comes into play in how the projects were to be utilized.

For the last few decades, Ban Nawaeng has grown in population, despite the out-migration of villagers for education and jobs in Ubon and other big cities. This is due to the in-migration of people from nearby districts and provinces seeking agricultural resources, especially in Mekong riverside villages. The continuing increase in population within the community has led to the extension of residential as well as farming areas. As a result of more population and the state’s development scheme, the community of Nawaeng has started to utilize the area of both upland field and lowland field all year round watered by rain and an existing, yet limited, irrigation system. The intensification of agriculture, the government discourse and schemes in development intervention, as well as the domestic change in village’s administrative structure have opened up yet another opportunity for the Nawaeng community to insert their need of water project to the government. In the next section, we will look at another irrigation improvement project in the community, and further explore their effects in terms of the manipulation of social connections, the channels of power, and resource flows.
The First Huai Tat Weir

Early in 2007, the people of Ban Nawaeng Mai wrote a proposal to the District governor of Khemarat requesting for financial support to construct a water development project. The proposal, neat and formal, was drafted by community members of the Nawaeng Mai, exclusively designated as village 12 - thus separating it from primary village, village 2, of Ban Nawaeng. The proposed project consisted of building a series of weirs along a local creek, the *huai* Tat, which flows from northwest to southeastern side of the community and finally empties into the Mekong. The creek, despite its erratic discharge during the years, has already been maneuvered by two water development projects upstream. *Fai chalo nam*, the first project built on Tat creek five decades ago, is a locally made weir set across the creek presently located below the reservoir just right above where strategic road was laid. The weir was said to be constructed by the local villagers themselves as to collect water for household consumption and cattle before the arrival of groundwater hand-pumps installed in the community by the ARD during communist insurgencies of 1970s. During the past few decades, the weir itself has not been utilized much due to the construction of irrigation dam and reservoir upstream. The reservoir allows only small amount of excess water from the basin to flow down along the creek and, again, be collected in the weir. In addition, as the southern side of the weir is occupied by community cemetery, there are not many agricultural fields around in need of irrigation. Presently, Nawaeng villagers even consider the weir’s pond as only suitable for buffaloes and cows to drink from (*hai wua hai khwai kin*), and not sufficient for irrigating rice paddies.

Formerly, the people of Ban Nawaeng primarily relied on rain (*nam fon*) and artesian water (*nam sang*) as household supply for drinking and cleaning, while bathing was mainly done in the Mekong River. Because in the earlier times, rainfall could not be sufficiently kept for an all-year reserve due to the lack of large-sized earthen containers (*tum*), artesian
water was therefore a fundamental source of water to the village. In addition, rain that fell onto grassy and mud-made roofs of traditional-styled houses was often not clean enough for drinking and even cleaning. In this, as well as in other villages in Isan, rainwater began to be widely used for drinking only after the introduction of metal roofing which most of the people could not afford until the past few decades (Seri and Hewison 2001). Water wells, dispersedly located within the community and in agricultural fields, served the most convenient water supply for the people of the Nawaeng. Most of the original water wells, however, were inundated by later-built reservoirs or otherwise lost by land arrangement and housing expansion.

It was not until the establishment of an underground water pumping system by the Department of Geology in 1994 that the community had running water directly delivered to houses. The pumping system, located within the main temple area, was set up to bring up underground water from 36 meters below. It was designed to provide enough water for about 300 households within its vicinity at that time. Only 1.50 baht was then charged per unit of water. With the expansion of population and residential areas, however, underground water shortage occurred a few years later. The community decided to request to the Department again to have Mekong water brought up to be processed for domestic tap water. This time a system with greater capacity was expected among the villagers. In 1997, however, the Department of Civil Works took charge of the project instead of the former authority - the Department of Geology. The new water pumping and processing site was set up in the extended residential area adjacent to the Mekong River. The community’s committee to oversee the regulation of the project was set up, and is now under local management of local government, the Tambon Administrative Organization (TAO). Initially the fee for water use was charged 3 baht per unit and is now increased to 5 baht due to the higher costs in management and maintenance over the years.

Though artesian water served the community primarily for their domestic uses, natural supplies of water from several small huai, both draining to and from Mekong river, have provided villagers of water for few other activities beyond domestic utilization since the community’s settlement. In terms of agriculture, however, most of the huai waters around the village only allow limited utilization such as in-field drinking supply for farmers.
and cattle. Only the main creek, huai Tat, provides fishing spaces, to certain extent, for villagers who do not own river boats. Despite the existence of several smaller huai in the area of the village, most of them, however, would dry out during summers. Only huai Tat flows during the dry season.

Figure 9: Fai chalo nam at Tat Creek after some renovation in 2007

With insufficient water supply to meet growing demand for agriculture and infield consumption, villagers began to build a traditional weir, or fai chalo nam – for short, fai, in 1957 to store water of huai Tat. The fai, set up by the then village headman with labor from volunteer villagers, was initially constructed simply by using dead wood, rocks, and mud to hold water to a higher level. The purpose was to store water in the area to improve humidity for adjacent areas, to provide an appropriate fishing space, as well as to collect water for human and animal consumption. Since the fai is to retain excess water and not primarily used for agriculture, there was no formal irrigational system to link water from such small catchments to rice fields. After the fai was built, villagers draw on water from the small emerging pond by using water containers to manually carry water for their household consumption. The pond could also provide water for domestic use to extended families that were later set up away from Mekong riverside. The fai had been fixed up and renovated from time to time by the villagers. It was said that five years after it was completed, villagers had to renovate it due to the slight change of the stream’s flow direction. Until now, the
community still keeps their *fai* and its pond intact as they are still able to provide water, although very limited, for cattle, especially in the dry season. For agricultural purposes, however, the *fai* has been little used.

Notwithstanding the underutilization of the *fai* in terms of irrigation, during one of community meetings I attended in early 2007, there was an attempt to improve the weir structure by using one of development funds directed to Ban Nawaeng, *village 2*, from the TAO. The meeting was held at the community center a few days after the New Year day of 2007 to consider using provision of fund amounting to 25,000 baht for improvement of the old *fai*. After two meetings, a decision was made to increase the height of the previous weir by 1 meter as well as to fix leak on one side, for an estimated cost of 24,500 baht for construction materials. With that budget at hand, the *fai* was very soon being renovated. The newly restored *fai* led to the increase of the size of the basin as well as the amount of water stored. Despite the larger amount of water the *fai* can now collect, however, the project still yields no pragmatic benefit in terms of irrigation to the existing nearby rice fields. The development of water management system for both domestic and agricultural utilization, the changing pattern of water usage in the village, as well as the varied sources of water supply now available in the community lead to the way Nawaeng people see the old *fai* as not so attractive resource and inconvenient supply, hence rarely giving much concern to utilize it over the years.

**THE ‘FAI MAEO’ PROPOSAL**

In March 2007, however, I had heard from one of the villagers of Ban Nawaeng Mai, the extended village of Ban Nawaeng, about the plan to build a series of multi-purpose weirs. After some discussions among leading figures in the village, they were convinced that this initiated project should be called nothing else but *‘fai maeo’*\(^4\), the very term endorsed by the present king and, later on, eagerly advocated by government and private sectors pursuing the so-called ‘sufficiency economy’ and ‘sustainable development’. The proposed location of the new project was along the *huai* Tat just below where the old *fai* presently locates. This was somewhat surprising to me since, for the past few years, it was known that the water discharge from Tat creek had been low and, in fact, the water was already kept by

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\(^4\) Check-dam
and large on the upstream part by the other two existing water projects: the state-built reservoir and the locally-made *fai*. Building another water project would not be a pragmatic idea as the new weirs would not perform its function effectively due to the lack of consistent supply of water. And in fact, in my view, it is quite unintelligible to build three more irrigation weirs along the Tat creek while the already existing one, despite being recently renovated, was rather being underutilized in term of agricultural purpose. But as I later realized, prior to the proposal of the *fai maeo* project, the people of *village 12* had found out that state and local agencies had allocated budget to *village 2* to improve their water resource. It was not long after the villagers in Ban Nawaeng was granted financial support to restructure the old *fai*, people of Ban Nawaeng Mai proposed the ‘series’ of *fai* along the same stretch of *huai* Tat. Despite being known before, now the people of *village 12* had come to be confident that the community, through the representation of administrative village, can benefit from proposing irrigation projects to the government offices. But this time, they would do it better than their fellow villagers in Ban Nawaeng. The ‘series’ of the project they proposed was discursively devised to fit more with state’s popular policy.

For the proposed project, it is hoped that the *fai maeo* would provide reserve water principally for the people of the *village 12*, or Ban Nawaeng Mai. Those farmers in the original cluster of Ban Nawaeng *village 2*, despite sharing agricultural lands, water, ‘community’ rituals and other social capitals were left out intentionally from the plan. To understand such inclusion and exclusion of intended beneficiaries for the benefit from *fai maeo* water project, it is necessary to flash back to accounts concerning the separation of Nawaeng community into two administratively distinct villages. Government’s administrative division had been implemented separating the extended compound from Ban Nawaeng of *village 2*, and designated as Ban Nawaeng Mai, the new *village 12*. The reason for community’s division was due to community’s internal dissent between the original people of Ban Nawaeng, whose kinship relations often dominate community’s administration and social activities, and those villagers living in the extended southern zone. People living on the southern part of the community, in several cases, felt underprivileged and marginalized from the state’s projects as most of the benefits from development schemes often fell into the hands of those within the original cluster. Besides, it is said that there were at least five subgroups based on social and political relations within
the former populace of Ban Nawaeng. With that fragmented groups contained by the community, as people claim, it was ‘difficult to govern’ (pokkhrong kan yak) and share benefits among villagers. In many cases, the social relations based on kinship and personal relations often led to exclusion and conflicts within the community. Thus, in 2003, the community was divided into two administrative villages with distinctive community leaders, governmental affairs, and development projects.

After the managerial demarcation, the people of Ban Nawaeng Mai found that there are many government projects awaited in which they, as a new entitled village, could easily exploit. This time the benefits from development projects would be greater and more convenient to maneuver due to the small number of people which had to be accommodated. The proposal of fai maeo by the villagers of Ban Nawaeng Mai can be seen as an attempt to connect the community aspiration in development with state through the bureaucracy of administrative villages. Here is where I will turn to have a close look at their project proposal written to state authorities. Like a throwing fishing net into the Mekong water, as one villager allegorically said, not only one but many copies of the proposal were made to ‘spread out’ to various government agencies in the province. This consisted of the Office of Civil Works, Office of Regional Irrigation, Provincial Office for Water Supply, as well as the District office of Khemarat and the local TAO.

The project proposal is drafted by the Strong Community Group (klum chumchon khemkhaeng), an assembly of village leaders in Ban Nawaeng Mai. The Group was led by several leading villagers in the community. Besides the village headman and his assistants, the group was also accompanied by a member of local TAO, local school teachers, a policeman, and some villagers who had personal connection with the local MP as well as other government officials in town. The name “Strong Community Group”, despite being simple, carried with it a strategic connotation of representing a benign, legible, and bureaucratic-friendly community ready to participate in the state’s development. As Walker (2009c: 11) argues, it is often that the only way in which local people can effectively engage with state development projects is by adopting the key symbols and institutional forms of local community. The Strong Community Group here is a good example of how the popular
concept of community is being created as a practical apparatus to catch the state’s attention.

In writing such proposal, several ‘environmental narratives’ - to use Forsyth and Walker’s term (2008) - recently promoted by government agencies were included to catch attention of the authorities. As Walker suggests, writing a project proposal is highly skilled work as it needs to be arranged by ‘the careful recitation of correct language’ (2009a: 7). In addition, the proposal was crafted by reconstructing the idea of community and its relation to environments, development, migration, and the national symbols such as the present king. Here, the village was selectively represented and simplified as ‘strategic community’ not as a resistance to the state, but as a productive space of maneuver in state’s projects (Walker 2009c: 15; see also Li 1996). As I am interested in how the rationale for the fai maeo project is formed within the context of strategically simplified community, I quote the whole message here:

Despite the fact that tambon Nawaeng is an area adjacent to Mekong river, in the dry season, however, the amount and level of water in the river are decreased. As a consequence, [farmers] cannot sufficiently bring up the water to use for [their] agriculture. This resulted in the lack of local [agricultural] works during the dry seasons and further caused the problem of people’s migration to Bangkok seeking for jobs. Local people, village leaders and the village committee, then, mutually conduct a primary site survey (thamkan samruat phuenthi bueangton). It was found that the lower stretch of huai Tat is a suitable location in constructing a public-purpose fai maeo. [The construction of fai maeo] is aimed for the benefit of agriculture and cattle in the dry seasons. In addition, the project will create a natural reproductive and nursing area for aquatic animals in which, later on, the conservation of fresh water fish can be put into action in accordance to the initiatives of HM the King (tam naeo phraratchadamri). In this regard, the people of village 12, Ban Nawaeng Mai, of tambon Nawaeng, Khemarat district of Ubon Ratchthani province, together set up this project [fai maeo] and would like to request government agencies responsible for water resource development to consider providing budget to support the proposed plan accordingly.
There are some interesting ‘local’ discourses here that I like would like to bring into our focus. The first is what Walker (2001, 2009c) calls ‘strategic use of community simplification’. As we see here, the way villagers themselves commence their proposal rationale was by stating that the community is simply an agricultural one. Consequent to that, the lack of water supply then can be highlight as the main cause in out migration of the community members. As several studies have shown, however, the out-migration of the northeastern people to Bangkok and other big cities is not solely a result of the lack of water and agricultural difficulties (Akin 1999; Mills 1993; Suchada 2000; See also Kanokwan and Thawai 2006). By pointing out the lack of water resource, and by linking it with the decline in community’s resilience, the narrative successfully draws us into its strategically simplified representation of the community. This kind of the selectivity in the narrative - pointing out to the decline of community by which the development policy is often singled out as a cause of the problem – is often used by academics and activists to challenge the national policy, the roles of government agencies and developmentalists. However, the selectivity should not be viewed solely from the negative side. In some contexts, as Walker argues, the selectivity of narrative about the community decline is often employed by local villagers as a strategy in pursuit of political mobilization and negotiation of resources (Walker 2009c). This case shows just exactly the way local people employed the popular narrative based on selective features of community’s ‘deterioration’ to construct a space of political mobilization and participation. The simplified narrative of community, in this case, was not to challenge or resist the state. Rather, it was a strategy to assert their participation in the state’s development schemes for the benefits which would derive from doing so.

Another discourse is a narrative that demonstrates villagers’ capability of ‘technical’ knowledge on local water resource. This articulation of knowledge, however, needs to be done in the way in which the state’s technical knowledge would be recognized, and at the same time not being compromised by the knowledge of the local people. ‘Despite the fact that tambon Nawaeng is an area adjacent to the Mekong river’, the proposal tactically starts by emphasizing the potential year-round water supply in their locality. ‘However’, the narrative continues, ‘the amount and level of water in the river are decreased, and as a consequence [farmers] cannot sufficiently bring up the water to use for [their] agriculture’. The statement deliberately chooses to point out to the changing nature of the river that is
beyond human and state’s control. This narrative is, however, problematic. In fact, the lack of water or, to be more precise, the lack of efficiency, especially of Mekong pump irrigation, to water rice paddies in the proximity of village 12 is not due mainly to low level of the Mekong river during the dry season. As I mentioned in the previous paper, the pump irrigation canal was laid into farmlands in the late 1980 and provides most of its water to those na lum paddies adjacent to village 2 of Ban Nawaeng. Despite the subsequent extension of the canal later on, it did not improve water flows to lands owned by villagers of village 12. This is very much a matter of project’s ‘technicality’, as well as local politics behind it, that obstructs the access of irrigation water. But by ascribing the limitation of water to the natural phenomena like Mekong water level, the villagers of village 12 can, firstly, avoid criticizing the ineffectiveness of state’s project that had been ‘given’ to the local farmers in the early days. Moreover, since the villagers realize the constraint of the pump irrigation they have as well as the difficulty of getting another pump irrigation built particularly for their recently opened paddy lands, they can convey state agencies’ attention to other water resources in the locality, huai Tat for example, by portraying the drawback of the Mekong in term of irrigation. In that way, the villagers can objectively continue to say that they have already ‘conducted a primary site survey’ and found ‘a suitable location in constructing a public-purpose fai maeo’. At this conjuncture, the local ‘technicality’ of villagers’ survey and feasibility appraisal, thamkan samruat phuenthi bueangton, can be rightfully inserted into their water development discourse without any condemnation of the ineffectiveness of state project.

The third discourse concerning the development of huai Tat weirs is the articulation of collective wills to improve their livelihood among villagers. As Walker (2009a) points out, project proposals often gain legitimacy from creating a plausible framework of collective action and united purpose. Reading the proposal of Nawaeng Mai villagers, it obviously articulates villagers’ united will to grow second crops, prevent out-migration, generate local occupations, as well as communally conserve natural aquatic resources. Here we see that not only state and development agencies that always carry with them ‘the will to improve’ (Li 2007), local rhetoric also stresses the same will. However, the villagers’ actions and the effect that comes after the will can be distinct from its original claim or intention. The issue of local practice concerning the will to improve according to state’s policy and objectives of
development intervention is a delicate matter. As we see from the case of Ban Nawaeng Mai here that villagers, as a group, call for a support from state agency for their local irrigation project by claiming their will to pursue what state’s agenda tried to promote during the past decade. Within local initiated development proposal and plan for their improvement, however, like the states’ intervention programs proposed to improve human condition, there is a gap between what is promised and what is delivered.

Another appealing discourse ‘manipulated’ by the villagers for their water development is the employment of the term fai maeo to name their locally initiated project. The fai maeo project was designed as ferro-concrete weirs, each with a 1.5-meter height. According to villagers’ proposal, the three weirs together would produce basins to accumulate water about 15,000 cubic meters and was aimed to irrigate agricultural lands covering 1,000 rai in the proximity of Ban Nawaeng Mai, Ban Nawaeng, and the other village nearby with total population of 465 households. The anticipated cost was about 195,000 baht which is directed from the district office of Khemarat. The name of the project, fai maeo, unlike the old fai, is a newly derived term in local usage. In fact, the term was coined by the Royal Project in Chiang Mai, north of Thailand, to identify one type of small-scale weir traditionally developed by the Hmong ethnic group, who are also widely known as ‘Maeo’. Of course there is nothing that the people of Ban Nawaeng could relate themselves with the Hmong or if they learn to build an effective weir from the ethnic group. Fai maeo, to the people of village 12 here, is an articulation of their enthusiasm in water management following the King’s model as well as to commemorate the 60th anniversary of the reigning monarch in that year. In fact, besides the deployment of King’s development term such as fai maeo here, people of Nawaeng Mai also expressed their enthusiasm in the overall notion of ‘sufficiency’ development proposed by the King and carried out widely by government agencies during the past decade. This can be seen from the statement of community’s vision (wisaithat pracham muban) which reads ‘The community of Nawaeng Mai harmoniously develops and lives well according to sufficiency concept’ (chumchon nawaeng mai ruamchai phatthana samakkhi kin di yu di baep phophiang). In addition to the use of well-perceived term, the fai maeo proposal also stresses the importance of fai maeo in promoting a ‘sufficiency economy’ in their community as, ironically, the project is expected to ‘stimulate local economy and improve incomes’ to the villagers.
Not only popular rhetoric was used to entertain government agencies, people of Nawaeng Mai also employed maps to strategically convey the necessity of having a water project in the area. In the project proposal to the district office, there is a map drawn by villagers of village 12 showing the location along the creek intended to build three weirs. It is interesting to see here how the map is projected and what items are included by the people of Nawaeng Mai. The hand-drawn map shows, at the very first glance, a large area of rice paddy fields. Next to the paddies, there is then huai Tat that drains into the mainstream of Mekong river. The size of the creek, as appeared on the map, is considerably large when compared with the width of the Mekong. On the left side, the map shows a cluster of village households, and the house of village 12’s headman is clearly marked. This crowded residential area portrayed on the map, in fact, includes those houses located in the area of village 2 to convince the density of population residing within the ‘community’. While numbers of houses in both villages are covered by the map, however, there is no water development project initially built before the division of village administration being shown; only household water project (prapa muban) of village 12 is illustrated. In addition, the map is cropped into a part where the nearby reservoir and the old fai can be excluded.
from the scene. Likewise, the pump irrigation canals, which are exactly laid on the rice paddies shown in the map, are intentionally left out as if there is nothing to support irrigation in such fields.

How, then, can we consider such map as a discursive practice of the people of Ban Nawaeng Mai? The fai maeo project here can be viewed as an attempt by the people of Nawaeng Mai in initiating their own water management project without having to share the budget and decision-making process with those in Ban Nawaeng. The RID’s reservoir and the NEA’s pump irrigation, two main existing water projects in the community before the division of village administration, were considered as an advantage to the original people of Ban Nawaeng. This is due to the fact that most of residents of village 12, since the beginning, are able to claim their farmlands in the heart of na lum as well as in the na don adjacent to the former Tat creek, the area which later was turned into a reservoir. Considering these two main water projects for irrigation in the community, it is obvious to the people of Nawaeng Mai that they only have little access, if any, to the use of water managed by the projects. When the time of proposing their own water projects comes, it is without hesitation that they would disregard those schemes as belongs to their village. By drawing a map without the existing water development projects, they hoped to be more convincing to state agencies. In that sense, the map drawn here can be viewed as a simplified representation signifying not the ‘total’ or ‘traditional’ community. Rather, it was, to use Haughton’s term (2009), a ‘community of common interest’.

PROPOSAL IN ACTION

Late in June 2007, the football field of Ban Nawaeng’s school was transformed into community ground to host an important visit of the chairman and council members of Ubon’s Provincial Administrative Organization (PAO). Along with the visit, the chairman of the PAO also brought with him mobile service under the banner ‘Caravan for People Project’. The caravan consisted of various booths of government agencies involved with different kinds of development affairs. The services, ranging from healthcare, livestock treatment, agricultural consultation, local industry promotion, and rural education support, were all provided on-site for the people of Nawaeng and Nawaeng Mai with free of charge. Facing the football ground, a large stage was set up as a venue for whole-day entertainment. Some time before noon, the stage was occupied by the PAO chairman, his council members,
Khemarat district chief, the chairman of TAO, kamnan of Nawaeng as well as the village headmen of both Ban Nawaeng and Nawaeng Mai. Many came to welcome the chairman of the PAO, which was accompanied by a report delivered by the kamnan on the general information and situation of the tambon. The recently-released motto (khamkhwan) of the tambon had been cited to express the issues deemed important in the mind the local people: community of development, harmony, rich traditions, and sufficiency lifestyle (chumchon phatthana, samakkhi, loet lam prapheni, kin di yu di baep phophiang).

Dressed up in yellow, otherwise blue, shirts - the auspicious colors which symbolized the King and the Queen, respectively, as well as the expression of loyalty among people who wear it – the chairman commenced his speech by referring to the rural development works carried out by the King throughout his reign. The chairman also commended the motto and the desire of the villagers in taking an active step to improve their living, while still holding the very concept of ‘sufficiency’ proposed by the King. As the speech went, the chairman further elaborated the importance of development and reassured to the people of Nawaeng that, as a chairman of PAO, he would continue to support development projects following the path that has been laid down by the King. Citing his own Caravan project as an example, the chairman emphasized PAO’s proactive policy in the eradication of people’s poverty,
illicit drugs, agricultural problems and household suffering. At the end of his speech, the chairman affirmed his enthusiasm in intensification of agriculture as the way of community development. To encourage people to grow more second crops each year, the chairman proposed that he would provide several on-farm machines such as tractors and mobile water pumps for communal use to any village that shows its capacity in growing second crop in the next few years. At the end, the goodwill speech was followed by a game of eel-catching, an activity to tighten up relation between the chairman and 'his people'. Ten minutes of competition in catching eels from mocked muddy pond ended up, intentionally or not, with the chairman catching the most fish and hence the winner. Everyone was happy with the result.

The visit of the chairman of PAO brought to the community a one-day show on various government service and the promises of livelihood enhancement projects. It was also an excellent opportunity for the kamnan and village headmen to discuss local problems and development plans with the chairman in person. Among the people in Ubon, it is well recognized that the chairman of the PAO has power not only from his own position in local government. He is also a brother of a well-known local MP who manages the biggest construction company in the province. Coming to the caravan fair, it was not surprising to see the headman of village 12, Ban Nawaeng Mai, carried along with him the paper of project proposal that he and his village committee had proposed to the Khemarat district office about 5 months ago. The event of the Caravan had opened up a scene where the headman can approach not only the district chief but also the chairman of PAO and his council members all at the same time. Unfortunately, I was not able to hear how the afternoon conversation between the local leaders and the ‘seniors’ (phuyai) on the proposal of Tat creek weir went. But as the headman later told me that the locally initiated project seemed to be a very promising one in the eyes of those senior administrators.

Six months after the talk between the leaders of Ban Nawaeng Mai and the high-ranking officials of the province, the headman announced to his villagers through the community’s speakers on one early morning about the approval of the fai maeo project. Before that, the villagers continued to be active. From time to time, some leaders of the village who also hold position in the TAO would stop by at the district office, otherwise at
the Office of Civil Works in Ubon, asking for the progress of the project consideration whenever they have chance to attend meetings in town. Once a while, the kamnan also explicitly expressed to his fellow residents that he wanted to see his tambon a drug-free area. For the past few years, Nawaeng subdistrict has been listed as one of the sensitive area regarding the control of transborder illicit drug trafficking. By showing such eagerness and active conformation to the state’s pressing concerns, it was hoped that this would please the high-ranking officers in city hall, and hence more support on development projects from the authorities. On the top of that, while the village headman of village 12 often visited the construction company which is run by the local MP, it was Prasit who had close connection to the MP that always received information about the progress in exchange with his report on the minor political issues from the ground. As a result, this kind of regular visits and reciprocal actions that the local leaders had endeavored throughout the past several months were now gaining its ground as the fai maeo project get the approval from the Regional Irrigation Office in Ubon.

It was not very long after the local MP became Deputy Minister of Interior in February 2008 that the proposal for the construction of fai maeo started to materialize. However, as the villagers later received information, the name of the project was changed from fai maeo as earlier proposed by the locals to fai huai Tat, or the weir of Tat creek. This was to correspond to the larger size of the newly proposed capacity of the reservoir which was expected to carry about 700,000 to 1,000,000 cubic meters of water. The former concept of fai maeo as a small-scaled and locally devised one, obviously, would not fit with the grandness of the new scheme. In addition, with some bureaucratic alchemy of development authorities at the national level as well as in Ubon, the project, with locally proposed budget of 195,000 baht, had been revised into a 20 million baht scheme. All in all, the leader group of the village claimed this was a positive result from local participation in the process of initiation and planning. Some of the leading figures mentioned they were asked by the technical officials from the province of the size of the reservoir the villager wanted to have. Despite having stated in their proposal for 15,000 cubic meters of reservoir, the village leaders replied to the officials that they would prefer something bigger than the Tat creek reservoir located on the upland fields of village 2, Ban Nawaeng.
Not only had the leading figures in the village participated in deciding the reservoir size, they had also been involved with the selection of project location. The group of villager’s representatives under the name of Strong Community Group had once led the technical officials to the three construction sites as drawn in the proposal map. During the site survey along the creek, Chamnian, the son-in-law of Prasit, asserted that the TAO considered the site near the confluence with the Mekong the most appropriate location. Prior to the official survey by irrigation engineers from provincial office, Chamnian and others villagers had gone to the site to mark on rocks and trees along the creek as to signify the area where Mekong water would flood into during the rainy season of every year (nam kaeng). When the engineers and other irrigation officials came to the site, the villagers were ready in presenting their information, along with the assertion that the place being marked was exactly where the new fai should be constructed. The reason for this, as the villagers claimed, was of that the designated area proved to be able to receive water from three sources altogether into its reservoir. These three sources were from the upstream of the creek itself, the irrigation water that flew out from the canals and agricultural fields down into hong mueang, or drainage canals, and emptied onto the swampy forest, locally called pa tham, and lastly the annual inland flood from the Mekong river. As the local point of view and information were presented, the officials saw no reason of rejecting the given rationale.
and responded with positive assurance. Several months thereafter, when the project started to clear the land for the construction of the fai, it was that exact location proposed by the group of villagers that was chosen to be a suitable site for the project. As we see here, ‘local knowledge’ was well received and incorporated into the ‘technical’ design and construction of government’s project.

Learning from the shortcoming of previous reservoir project on the upland field of village 2, the leaders of village 12 started to look forward to avoid problem of the lack of water distribution system. The group of villagers had mentioned about writing another proposal to local government, the TAO, as well as some offices in the districts especially those concerning agricultural development, to request financial support to buy some diesel-run, water pumps to rent to some farmers who might not have direct access to the water from the new reservoir. But this project, by the time of my field research, was still under consideration as the villagers would wait to see the result of the new reservoir first.

When the project was about to be implemented, there was a public hearing organized in the village. The hearing was held in the village's meeting hall and eagerly attended by villagers, village headman, the members of TAO, as well as officials from the district and irrigation officials from Ubon. First, village headman gave speech to welcome participants and especially thanks were extended to the officials being present at the hearing. The session was followed by a brief presentation of the overall project information by an irrigation official. Instead of focusing on technical aspects of the project - such as estimated inundation area, exact reservoir capacity, duration of construction, the height of the weir, and the company being hired to do the construction works – the official spent most of the time talking on the enthusiasm of the irrigation office in working with the community as well as the benefits of having the fai in the area for agriculture and other purposes. As a short reply before moving on the hearing session, the headman expressed his gratitude of ‘receiving’ the project from the office. He also complemented his, and his fellow villagers’, appreciation toward the support of the local MP, the chair of PAO, the members of TAO and all the head of the irrigation office who was not present on that day. After all the ‘ritual of gratitude’ finished, the actual hearing then proceeded.
In the hearing, there was only one family of uncle Pong who expressed their worry about the inundation of farmlands. As mentioned earlier, the proposed site for the project was a communal swampy forested area on the rim of the community compound. In that regard, there were only two families whose farmlands were located nearby the project site. Pong’s paddy, of course, was one and the other was of Chan’s family. While the Chan’s family was assured by the headman of having no impact from the project, Pong’s family, especially his wife, was seriously still in doubt. Besides the case of Pong, others relatively minor concerns and questions had been raised, and answers were delivered. The hearing ended just before noon by simple referendum of participating villagers. All the hands were raised to support the project except from the two people in distress, Pong and his wife. In May 2009, when the project workers started to clear up the landscape and construction materials were transferred to the site, it was Chan and Pong who were hired to work as security guards. The deal was also accompanied by a quota to propose two of his relatives to work at the site during the whole construction process. Each would be paid 220 baht a day.

I left the community before the project was completed and hence was not able to discuss further of how the project yields its result. As I have mentioned early, my focus in study of water development projects here is not much on the success or failure of state’s policy, let alone the technicality of the projects themselves. Rather I am interested in looking how the process of project making comes into terms and what are the effects of them in relations to power relations and arrangement. My ethnography on development projects in both Ban Nawaeng and Ban Nawaeng Mai shows how the cooperation, negotiation, and conflicts aroused, existed, and solved not only between community and the state, but also within the community itself. In that sense, I recognize the state, the community, and the development projects as hydraulics of power that continues to flow in and out through the social connection and political channels. It is indeed an endless motion of power.
CONCLUSION

THE HYDRAULICS OF WATER PROJECTS

In Bangkok, the very word 'Isan' is almost a metaphor for poverty. For centuries, Isan has been baking under a merciless sun, growing steadily dryer and poorer- with just enough good years along the way, to give its people an unshakeable faith in the power of prayers, hard work, and virtue to extract blessings- or, if not blessings, then pity- from the fickle spirits that control sky, earth water, life, and death.

-- Excerpt from A Child of the Northeast, page 8.

MERCILESS SKY & MUNIFICENT STATE?

Seeing from the eyes of a child of the Northeast, if Isan is blessed with more water from the sky, the region and its people today might have different experience in regional development from what they have been facing for several past decades. But, unfortunately, since the water supply of Isan region is far from what a child of the northeast has longed for, and despite the fact that there are several region-wide water schemes that failed to deliver sufficiency irrigated water to uplift agricultural production and alleviate poverty and insecurity of the people, the water development scheme is, still both an absolute aim and means, always considered as high priority and a popular means in tackling the regional development problems.

In Anti-politics Machine, James Ferguson (1994) argues that, by and large, any 'development' project is a politically-led apparatus in which, paradoxically, works to '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' (1994: XV). In the case of African county like Lesotho, as he argues, in order that 'development' project to be able to work as a depoliticizing
mechanism, some crucial discourses and discursive practices need to be effectively established. In that regard, the Lesotho, and maybe other developing countries and regions as well, has been reconstructed by the discursive regime of development in which it inevitably led to the fixation of generic definition and simple portrayal of the country as being ‘less-developed’.

As argued by Ferguson (1994: 71-72), prior to and during the intervention of international and state agencies in developing the Lesotho, there are some crucial discursive construction that is essential in order to allow the roles of development project to be readily inserted, and acts as a machine to guarantee bureaucratic presence, in the region. As he shows, first, the region being developed has to be depicted as ‘aboriginal’ or being less likely to incorporated into a modern, cash-based economy. The social marginalization through political narratives toward people in need of development is often acted as an initial step to insert modernity and technocratic bureaucracy into the area of deficiency. Besides being in a ‘primitive’ state, the region must be agricultural which will, in turn, allow state and other development projects to exert their roles through the specialized line of agricultural intensification, rural extension, irrigation improvement, and technical solution to natural resource utilization. In addition, the region must be presented as constituting or having impact to national economy. By claiming as such, state would be able to claim their legitimate authority in designing the regional economic plan which tends to benefit national economic development as a whole rather than the emphasis on local needs. And lastly, it must be subjected to the very principle of neutral governmentality by the state. That is, the attributes of social, economic and political conditions of the region must be within the surveillance and control of a central government as to be able to provide effective solution to the local issues along side with national problems.

Looking back into the case of water development in the Northeast of Thailand, it can be seen that natural water sources such as river, ponds, and creeks have been used as a symbolic as well as practical space of political configuration both in contesting and integrating Isan into the Siamese, and later, Thai, state. The ‘Mekong people’ whose culture and social organization were bound to the river and links it provided were forced into the
modern nation-state demarcation. We see such example from the construction of the first road line in the region that turned the Mekong river from a route of passage to a borderline.

However, recent water development schemes in Isan have been much more politically delicate and ambiguous than in their initial stages. The region has been exposed to various kinds of nationalist and bureaucratic discourses that, first and foremost, aimed at portraying the region as politically insecure and economically deficiency. Like what Ferguson suggests from the case of Lesotho, the region under development target has to be depicted as a primitive, ineffective and poorly connected with the market and national economy. In that sense, there were pressing needs of providing the region with infrastructure as to link the region with the central economy. Moreover, the already agriculturally based society of Isan also allowed wide-ranged of development projects in exerting its specialized technical solutions to the local problems. This, in turn, encouraged the presence of ever more centralized bureaucratic system into regional and local affairs, thus allowed the development schemes to work as an anti-politics machine within such a high-political stake of communist insurgency and other political instability in the region.

Under ‘the anti-politics machine’ schematic practices, appraisals of success and failure of a development action is not restricted to the development problems it was articulated to tackle. Rather it is what Ferguson, following Foucault (1979), call the ‘side effects’ of development apparatus (Ferguson 1994: 151-154). As, Ferguson argues, ‘what is most important about development project is not much what it fails to do but what it does do; it may be that its real importance in the end lies in the ‘side effects’ (1994: 254). The ‘side effect’ here was the expansion of state’s bureaucratic power that has lucratively been channeled through the exercise of development actions. Moreover, while the exercise of state’s power is made possible through development projects, the local problems that development project is planned to solved is, at the same time, reduced into merely technical problems that successfully hide from view any political factors that entangle in it. In the case of Lesotho, Ferguson (1994: 256) points out how development projects politically act as an ‘anti-politics machine’:

For while we have seen that ‘development’ projects in Lesotho may end up working to expand the power of the state, and while they claim to address
the problems of poverty and deprivation, in neither guise does the ‘development’ industry allow its role to be formulated as a political one. By uncompromisingly reducing poverty to a technical problem, and by promising technical solutions to the sufferings of powerless and oppressed people, the hegemonic problematic of ‘development’ is the principal means through which the question of poverty is de-politicized in the world today.

In the case of Isan water development, the success and failure of development projects can not be easily evaluated in terms of its outcome in solving designated problems publicly announced such as drought, irrigation underutilization, agricultural underproduction, and poverty. The promise of water resource development to green the region as well as the irrigation plan for agriculture intensification and poverty reduction are only a schematic point of departure that, to a greater extent, allows other political ‘side effects’ to emerge and operate. To equate with the case of Lesotho once again, water development here in the Northeast should be considered not as a machine to alleviate poverty that is incidentally involved with the state bureaucracy. In fact, we can see from the cases above that water schemes have been used as a machine to expand and intensify the authority of state and military powers into the northeastern region in order to build up national security, e.g. the ARD’s anti-communist insurgency, or pave the way for certain kinds of political accomplishment such as in the case of military-run Greening Isan project and the New Aspiration Party. While power play at the regional level has been established to attain its schematic goals, there is not much to see of the political implication of water development projects at the local scene. The politics behind most of the water problems has been over-ridden by technical solutions and the management by authoritative expertise.

THE COMMUNITY OF FLUID MODERNITY

In the recent book on communities and the states in mainland Southeast Asia, Walker (2009b, 2009c) argues against the presumption that exists among scholars and activists working on community development issues that there is a dichotomy between state power and local culture. Studies on community development, he argues, often portray the state as ruling and locality as resisting. Employing study cases of distinctive communities, Walker proposes that rather than being destroyed by the ‘penetration’ of the authorities, those communities have been, or being, created as a result of dialogue with
state power (2009c: 23). Such creation of what he called ‘modern community’ can be observed from the process of participation in rural improvement projects initiated by both the government agencies as well as by the locals with support from the government. ‘These projects’, Walker writes, ‘are sites of institutional elaboration where forms of community organization represent the blurred interface between state and locality’ (2009c: 11-12). In other words, in many contexts of ‘modern community’, the boundary between state officials and local residents is negotiated, indistinct and dynamic.

To international development workers, NGOs as well as social scientists, the concept of community may be notoriously slippery to defined (Reynolds 2009: 27). But to the villagers, such ‘slipperiness’ may do well in facilitating the hydraulics of power and resource into their locality. As we have seen, the ‘community’ of Ban Nawaeng and Ban Nawaeng Mai has been narrated as a strategically simplified community. This could not be done if the concept of community is too solid and firmly fixed in place. As articulated through the writing of project proposal, the strategically simplified narrative on community proved to be a useful apparatus in rendering themselves legible to the eyes of the state. The proposal was where the villager could express themselves as a benign community consisting of people with the will to improve, agricultural-oriented, and loyal to state’s development agenda. In addition, the proposal was a strategy in which they can draw boundary and indicate development facilities that serve their benefits. As we can see, while the pumped water that flown through the paddies of Ban Nawaeng and later drained into the creek was seen as the community resource of both villages that should be used effectively, the pumping machine and the irrigation canals that brought such water were not considered as belonging to Ban Nawaeng Mai. The proposal was also a simplification of social relations. Finally, the narrative of resource utilization was simplified as to match externally oriented goals.

In addition to the creation of modern community through the simplification process of representation, we also see here, as argued by Walker (2009c: 23), that often times the community being actively created as a result of dialogue with state power. Like other cases of community dealing with state development schemes (Li 2005, 2007; Forsyth and Walker 2008; Walker 2009a, 2009c), people of Ban Nawaeng seek more involvement with the state
agencies as long as they see their involvement as productive. The formation of local people’s group, the writing of development proposal to many government agencies in the province, the engagement with local government agencies’ activities, the patronization of political relations with the authorities and local MPs are all testament of how the villagers of this recently-administered community represent themselves to the political channels they found useful in order to establish dialogues with the state.

We see here how the power and resource can be manipulated through the way in which the community constructs itself to match the eyes and mind of the state. The ways local people make themselves legible to the authority, as I would argue, suggest to some critical reflection on the work of Scott (1998) that portray how the state see community through their simplification lens. Learning from the case of Ban Nawaeng Mai, it is not only the state officials that ‘aspire to a uniform, homogenous, and national administrative code’ (Scott 1998: 35; see also Walker 2001) kind of community. But the villagers themselves have also played a crucial role in constructing their community in a way that suit not only state’s expectation but also to serve their own aspiration in community development. It is this kind of strategically simplified representation, the channels of political connection, and the local ambition to participate in state’s creation of ‘modern community’ that the hydraulics of power is actively maintained. It is a power that anyone who knows the morphology can manipulate and tap into one’s own benefits.
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