

Community Ways of Life Before and after the Construction of Lampao Dam in Northeast Thailand

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Abstract: Lampao Dam is the biggest irrigation in Thailand, meant exclusively for agricultural purposes, construction of the earthen dike and non-electricity, was begun in 1963 and complete in 1968. Impacts of the Dam construction caused significant changes of the Lampao community ways of life in Kalasin province in the environmental, economic, social and cultural aspects. Therefore, the objectives of this research were to study the environmental, economic, social and cultural factors affecting community changes and characteristics of community ways of life before and after the construction of Lampao Dam. The study focused on three village communities in 3 different districts of Kalasin province: Sa-adnathom, Donyanang and Sithan in Muang, Yangtalad and Kamalasai districts respectively. A qualitative research, it started with a review of literature and related researches. Field data were collected by way of in-depth interviews, participative and non-participative observations and focus group discussion, involving 46 key informants consisting of village elders, formal village leaders, informal leaders, farmers, government officials and NGO workers. The data were descriptively analyzed and deductively interpreted. The research findings were found; before the dam construction, people in the 3 communities believed in the interconnectedness of traditions revolving around the worship of ancestral spirits and popular Buddhism which undergirded their unity and their sense of respect and protection of the environment. Their ways of life were simple. Their leaders served as links with the past and guides for future generations. After the dam construction, people in these three communities began to change all this; the changes were forced upon them by state authorities, most clearly manifested in the construction of Lampao Dam. Their traditional beliefs began to weaken. Capitalist ways of life began to creep in and eventually overtook them. However, after a few decades people began to realize the danger. They fought and sought new ways to get out of their debts and hardships. Finally, they have found going back to live in harmony with nature relying on natural resources for their livelihood pointed the way. Happily, this path coincides with the Royal philosophy of Sufficiency Economy. This is where they are now. But their future is far from being certain. In conclusion, the Lampao Dam will be there for good. Many villagers regard it as "the BIG Farmland" from which they can benefit. On the other hand, the Lampao Dam had drastically changed the natural environment as well as ways of economic, social and cultural life. In the case of the three villages under study, the changes have been at least problematic. Since the beginning they had not been consulted at all. The lesson, therefore, is this: before undertaking a project which will affect people's ways of life, the government authorities should seek people's participation and take their well-being into serious consideration.

Key words: Community ways of life, Lampao Dam, factors affecting changes in ways of life

INTRODUCTION

People's ways of life are shaped by both internal and external factors. This is true for both individuals and communities, at all levels, in all places and at all times. In

the case of Thailand, formerly known as the Kingdom of Siam, a few far reaching external impacts can be identified. The bowing treaty between Siam and England (1855) led Siam on the path of production to serve foreign interests. After the second world war Thailand found herself on the

same path, caught in the modernization syndrome, which by the 1960's turned into the struggle for national development. More concretely, the first National Economic Development Plan (1961-1966) adopted a development concept based on capitalism. In <4 decades, the western ways of life have effectively replaced the traditional communal ways all over Thailand (Vinai, 1998). The impact of such change is quite radical especially in communities around the big dams built by government for either water or electricity power or for both. The construction of such big dams has in effect brought about serious changes in the environment and in community ways of life both positively and negatively.

E-san or Northeast Thailand is the poorest region of the country. In the name of development, the central government has taken away their land to build big dams. At the same time, with the financial aid and ideological prompting from the United States, building dams was also meant to show that the Thai government care for E-san people, thus keeping them from joining with the communists. At any rate, development strategies of the Thai government, as clearly manifested in the successive Plans during the next four decades followed the current top-down model, their impacts vastly encroached on various community ways of life (Suthep, 2005).

The Lampao Dam in Kalasin: According to official document the basic feature of Lampao Dam include the following:

- The main purpose was to provide water for agriculture in Yangtalad, Kamalasai and Muang districts of Kalasin province, covering an area of 314,300 rai
- It is the biggest Dam in Thailand covering an area of 5.960 km^2 with the capacity to store 1.430 million cubic meters of water
- In the rainy season the Dam can irrigate 313,800 rai and 189,000 rai in the dry season
- In effect, the Dam serves 29,174 households with the population of 145,870 in 248 villages in the 3 originally intended districts plus another one-Khongchai district, Kalasin province
- In addition to providing water for agriculture, Lampao Dam also prevent floods in the areas below the Dam

Lampao Dam is the biggest in Thailand, meant exclusively for agricultural purposes. It's construction has destroyed forests, taken lands from people and forced them to relocate. It has brought in full-range money economy to replace the traditional subsistent one, along with excessive debts. In short, it has brought changes to the environment and community ways of life.

All of the above problems are of great academic and professional interests, worthy of a careful in depth study. Therefore, the objectives of this research are twofold: to study the environmental, economic, social and cultural characteristics of community ways of life before and after the construction of Lampao Dam and to study environmental, economic, social and cultural factors affecting community changes before and after the construction of Lampao Dam.

MATERIALS AND METHODS

This is a qualitative research. Three village communities in 3 different districts of Kalasin province were chosen for case studies. They are Sa-adnathom village in Muang district, situated just below the Dam; Donyanang village in Yangtalad district, about 20 km from the Dam, along the Lampao river and Sithan village in Kamalasai district, about 50 km further down from the Dam.

Following the review of literature and related researches, field data were collected by way of in-depth interviews, participative and non-participative observations and focus group discussion. A group of 46 key informants were purposively chosen, consisting of 10 formal leaders, 9 community leaders, 3 local market leaders, 11 farmers and 13 outsiders (government officials and NGO workers).

The data collected were systematically conceptualized and categorized. Then the treated data were interpreted and deductively concluded into the body of knowledge required by the objectives. The research was carried out according to process and stages specified in the conceptual framework (Fig. 1).

Village community ways of life before Lampao Dam:

Before the construction of Lampao Dam community ways of life in the Lampao basin were quite simple. A few decades before the Lampao Dam construction the environment, was rich with biological diversity-blessed with forests and natural water resources (Rithidet *et al.*, 2005). All these rich natural resources were more than enough for the livelihood of the people living in the three communities during the period from 1892-1962. There were not so many people either, due to limited communication with the outside world. Travels then had to rely on foot, ox-carts, horsebacks or boats (Chattip, 2003). The water for agriculture on the Lampao riversides solely depended on the rain. Thus in some years, it was flooded and in other years it was drought causing famine. In such event many residents, migrated to big provinces in all parts of Thailand. Meanwhile the Thai government began to

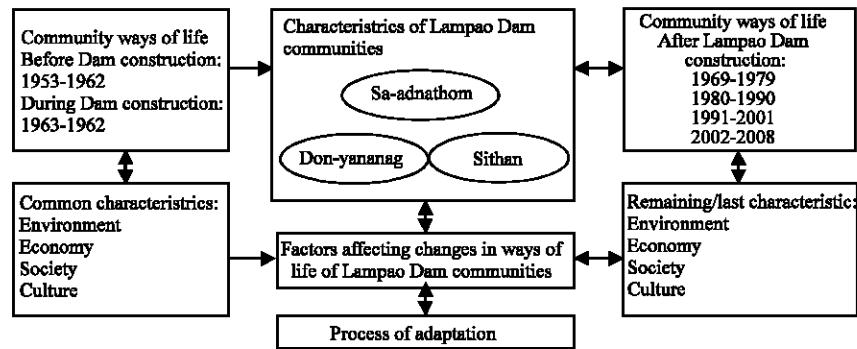


Fig. 1: Conceptual framework

implement the first National Economic Development Plan (1961-1966) in order to prevent flood as well as to utilize the Lampao water for agriculture. This led to the Lampao Dam project, which started construction in 1963 and completed in 1968. The Dam caused significant changes both in the environment and community ways of life in its surrounding communities (Table 1).

Community ways of life changed during construction

1963-1968: The construction of Lampao Dam brought the loss of people's and community lands. Forest areas were widely destroyed. About 4,000 households lost their farmland with little compensation, 110 baht per rai, hardly enough to buy new plots. And it was delayed until 1965, when the villagers received their money. Only 10% of the households could still hold on to their lands and remained to live along the curvy rims of the Dam.

During the Dam construction drastic changes took place, affecting community ways of life in Sa-adnathom village. Some people changed from farming to fishing; while those who grew vegetables did so for commercial purposes (Rigg, 1996) exploiting the high lands and utilizing the Dam water. Income increase attracted people from nearby provinces to the area. Land became more expensive. But still people migrated there to make fishing as their occupation. At the same time they could do other things to earn. Besides, tourism added to their income.

Towards the end of 1968, the Provincial Electricity Authority introduced high-power connection into the Lampao Dam area, causing lots of grown trees to be cut down. The community became barren, no woods for neither shades nor fire. People began to change from wooden fire cooking to electric utensils. Radio and electric fans came along. Use of electricity became a new way of life (Table 2).

Community life after Dam construction, 1969-2001: The existence of the Lampao Dam seriously affected people in

all 3 communities but in different ways. The Sa-adnathom villagers continued to live along the high earth dikes surrounding the Dam, less than 25 m away from the main dike. Yet, they could not make use of the Dam water for agriculture. They have to fetch water from a single common well some 3 km away. They can use the Dam water for fishing only. However, when the water level receded, they could plant vegetables for a short period of time, such as beans, Bombay hemp, watermelon and small cucumber.

In the other 2 villages, Donyanang and Sithan, the impact of Lampao Dam was quite different. Before the Dam construction, ways of life in the three village communities were similar. That is life of simplicity, relying on farming and natural resources for their living. After the Dam, as already mentioned the Sa-adnathom people gave up farming and turned to fishing. At the same time the people in Donyanang and Sithan continued to farm, making full use of water provided by the Dam all year round. Therefore, they grew paddy twice or even 3 times/year. They began to make more money. In their farming, however, they had to rely on chemical fertilizers, pesticides, modern technology and wage labour. In other words, they had to pay for everything. And everything was expensive. Thus, the former subsistent farmer became merchant farmer. Banks and other commercial facilities were built in the 2 villages. Their debts began to increase and caused them a sense of suffering. They kept on competing and in the process lost their traditional values of mutual care and share. Self-centeredness became their new ethos. Buddhist ethics were weakened. Their ways of life have basically changed. Money, interests, profits and debts-all these have become their main concerns days and nights. And of course, the environment has also changed. The soil has lost its fertility already full of poisonous substance, the merchant farmer put in more chemicals to increase production and profit. Changes in production means and ways to make

Table 1: Summary of common environmental, economic, social and cultural characteristics of Sa-adnathom, Donyanang and Sithan communities before the construction of Lampao Dam

Communities	Environmental	Society	Culture	Economy
Sa-adnathom	Rich bio-diversity remained intact in forest, river, swamps, marshes, etc.	Extended households based on kinship.	Belive in folk Buddhism	Subsistence economy: for family consumption and exchange in communy
Donyanang	Rules: common use of natural resources regulated by spirit power of land forest	Worship of common an central spirits of the families	Monks to propagate/elongate Buddhism	Rice farming as main economic occupation using human and animal labour
Sitham		Reciprocal mutual helps in house building, harvests Participation of funeral ceremony Making merit together in the 12 months traditions	Spirits worship receiving their powers through shamans. Respect of elders in communities. Values of reciprocal mutual helps	No chemical fertilizers No agricultural epidemics

Table 2: Summary of common environmental, economic, social and cultural characteristics of Sa-adnathom, Donyanang and Sithan communities during the construction of Lampao Dam

Communities	Environmental	Society	Culture	Economy
Sa-adnathom	Bio-diversity decreased richness due to the exploitation of forest, river, swamps, marshes, etc.	Extended households based on kinship.	Belive in folk Buddhism	Changes from subsistence economy to commercial economy in communities
Donyanang	Rules common use of natural resources regulated by worship of forest and land spirits	Worship of common an central spirits of the families	Monks to propagate/elongate Buddhism	Rice farming as basic economic crops began to use
Sitham	Regulations and laws began to regulate	Beginning of migrant labour Participation of funeral ceremonies Making merit together in the 12 months traditions	Worship of spirits, receiving Respect of elders in communities. Values of reciprocal mutual helps began to be replaced by wages.	Beginning use of chemical fertilizers their powers through shamans. No agricultural epidemics

Table 3: Summary of common environmental, economic, social and cultural characteristics of Sa-adnathom, Donyanang and Sithan communities after the construction of Lampao Dam

Communities	Environmental	Society	Culture	Economy
Sa-adnathom	Bio-diversity was destroyed	Solitary family system	Belive in folk Buddhism	Full entry into capitalist way of production for sale within and outside of communities.
Donyanang	Natural forests, rivers, swamps, marshes decreased richness	Worship of common an central spirits	Monks to propagate/elongate buddhism.	Change from farming to fishing
Sitham	Rules common use of natural resources regulated by orders, laws and many official agencies	Migrant labour Consumerist society/luxury Making merit together in the 12 months traditions.	Worship of spirits, receiving their powers. through shamans Reduction of respect for elders turning to elections Replacement of mutual helps by wages labour	Rice farming twice a year for sale Use of machines Chemical fertilizers and pesticides Agricultural epidemics spread

their living have also brought about changes in the environment. Public utilities system, communication with outside world, roads, electricity and other basic structures came into being. People in the community see the Lampao Dam as a big farmland on which they can earn more income both from fishing and tourism. They have come to depend more on the market and less reliance on natural environment. Technology for production, investment for farming equipments and more use of chemical fertilizers have deteriorated their health. More income but higher expenditure. These changes in community ways of life took place slowly at the beginning but more and more rapidly in later stages. But it all took place because of the push by the power and policy of the state with the intention to create the consumerist system of economy.

The consumerist community ways to produce for sale have made people careless about their own life and families. During 1969-1979, destruction of natural resources and the ecological system as well as community health commenced. Market-oriented culture and dependence on government and others began to take root. People began to retreat from traditional ways of community life.

During 1980-1990, the Lampao Dam community environment was more seriously destroyed. Having adopted the consumerist ways, the ecological system was incessantly destroyed; the fertile land was contaminated with poisonous chemical substance and insecticides damaging the productive quality of land. Thus, people turned to more chemical fertilizers. More and more poisonous chemical substance flowed into the water, harming both animals and people.

During 1991-2001, use of technology for production increase intensified, leading to even more violent damages of land, water, air and the environment. But most troublesome for them was their excessive debts (Table 3).

Factors affecting changes of Lampao Dam community ways of life: In the analysis of the changes of Lampao Dam community ways of life before and after the Dam construction the following findings were obtained. The changes were effected by the factors of power relations between the central state authorities and the people of Lampao river communities. Before the Dam construction such relations were exploitative. Then the people paid both levy and poll taxes. After the Dam construction, the village farmers changed from production for own consumption to production for sale. At this point, the ruling class and the paddy traders took away production means from the farmers, because they had to sell their paddies or buy farming fertilizers through either the Agricultural Cooperatives or the Bank for Agriculture and Agricultural Cooperatives. The market monopoly system came into existence (Sati *et al.*, 2005).

People in Lampao river communities were not able to set the price for their agricultural produce. Therefore, whenever their production decreased or was repeatedly flooded, the farmers faced hardships. Some households lost their farmland. The Lampao river basin economy was in crisis because of the top-down state policy, with no opportunity for people participation.

Besides, with regard to the relations of state authorities with the social structure and with individuals, Buddhism teaches people to accept their fate and look for merit rewards in the future (Akin, 1996). This teaching was expressed in the common behavior of Lampao river basin people-their respect for elders and community leaders as well as their acceptance of the rules set by the central state policy. This was the reason for people's acceptance production to market capitalism. They used modern seeds and more production technology mechanic plowers, chemical fertilizer and pesticides. In the process, they incurred debts and more debts. It can be seen that in spite of the benefits, development also brought negative results. The central state authorities should give opportunities to the communities to exercise their decision power in community development so that the outcome would truly meet the needs of people in Lampao communities.

The three communities sought alternative way to rehabilitate the environment, 2002-2008: Faced with

such problems as deterioration of the environment and natural resources, villagers in the 3 sought alternative way to revive the environment back to its wholeness. They organized study groups to learn production strategies which would not destroy the environment such as organic agriculture, adopting sufficiency ways of living, decreasing the use of chemical substance in planting. A group of NGOs and academics came in to assist them with self-reliant agriculture, to lessen dependence on market and machines and to turn back to live more with nature. Such efforts were not enough to withstand the societal trends because the villagers had already sunken deep in the luxurious culture from outside. Nevertheless, most people in the 3 communities held fast in their belief that they would be able not only to rehabilitate natural resources and the environment but also to revitalize their ways of life. They would not give up.

The villagers' greening of Lampao Dam communities:

The people in the 3 communities are Buddhists. They have always lived their life in relation with Buddhist temples (Mibun *et al.*, 2007). Therefore, they have turned to the Buddhist teaching of sufficiency way of life as conceptual framework for community culture (Chattip, 2003). This concept jives with the new theory on Sufficiency economy advocated by his Majesty the King of Thailand. Applying this philosophy as their principle for environmental rehabilitation, the Sa-adnathom villagers have begun to organize alternative occupation groups, emphasizing sufficiency economy such as organic agriculture, organic fertilizers and bio-extracts. They also planted trees on the highlands and along the dikes around the Dam. These efforts have served to rehabilitate water resources and to restore natural balance. At the same time they reduce mono-crops while engaging in mixed agriculture. Slowly they have succeeded in the greening of the area. Together they have started a common learning process on the conservation of nature and the environment. Never again would they allow their environment to deteriorate. But the struggle is much more difficult in Donyanang and Sithan villages, because here their ways of economic social and cultural life have been deeply penetrated by market economy and consumerism. Thus far, they have tried to unite and fight against more powerful external exploitation.

CONCLUSION

The environment changes caused by Lampao Dam construction brought about economic, social and culture

changes in the surrounding communities. That is, they have changed the ecological system as well as the relationship of people and production technology. When capitalist economy entered the agricultural society of Lampao communities by way of state policy through, the construction of Lampao Dam and related social organizations, linking Lampao Dam communities with national capitalist economy, their environment and ways of life have been seriously affected. The Lampao Dam has brought not only benefits but also real damage to people's life. Realizing the danger, social organizations were found to solve the problems, change production structures and rehabilitate the environment. To achieve such goals religions and cultural wisdom from old days were called upon to integrate with the concept of Sufficiency economy, to reorganize and revitalize their ways of life.

RECOMMENDATIONS

The process which brought about the environment changes to the Lampao Dam communities was imposed from outside by the state without participation on the part of the community. Nor were they given time to prepare for the changes. Therefore, central state authorities should seek community participation in the formulation of policy which will affect the environment and the ways of life of the community concerned before any action can be taken.

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