#### CHAPTER IV

### CHANGING PROPERTY REGIME: ENCLOSURE OF THE BACKSWAMP

In this chapter, the external conditions of political policy and development activity that results in enclosure are explored. The chapter details how the property regime of Nong Bua has changed and become formalised from a relatively open common property accessed by several communities to an exclusive common property of one single community.

Three related groups of local people are differentiated according to their positions and roles that affect and are affected by the new management of Nong Bua. The discussion presents the response and adaptation of excluded groups after Nong Bua became enclosed. In addition, an inquiry is made into how much trouble the enclosure brings to the excluded fishers which results in how they have adapted to the new situation.

### 4.1 Policy and Project Interventions

Policy and project interventions have both a direct and an indirect impact on the changing property regime of Nong Bua. These policies are national, political and development policies encouraging producing for sale, decentralisation, and the Land and Forestland Allocation Program (LFAP). In addition, the fish stocking enhancement scheme has directly influenced changes in the research site. These policies and interventions are in line with the promotion of market economy development.

The first related policy influence on the enclosure is the encouragement of producing for sale and decentralisation. Laos is now in a period of transition to a market economy. The direction is changing from self-subsistence to production for sale. This policy has been promoted to all levels in the country since the

implementation of the New Economic Mechanism in 1986. The aim is to use the market as a mechanism to develop the country. Recently, a commitment was made to get rid of poverty and become a developed country by the year 2020 (World Bank 2000). The policy of decentralisation is also a significant element in seeking to achieve these aims. This is especially relevant since the country has been faced with coping with the global economic crisis of 1998. The existing natural resources and agricultural system of the country are the foundation of the transformation.

Before the economic crisis, the Lao government invested significantly inin increasing secondary rice crops. The construction of irrigation canals occurred where they were appropriate<sup>1</sup>. Fuel cost subsidies and credit were also provided for the farmers. This aimed to get rid of the rice shortage in the country, improve production, and sell the surplus in the near future. In late 1999, the government had to terminate subsidies and return to a real fuel price system since the government had to pay its debt in US Dollars. The decentralisation policy was then implemented at the local level.

Sanasomboun District has accommodated the government policy on decentralisation. A district official emphasises that now "we" (district and village) have to depend on ourselves; as they often say: "Ban kum ban, Meuang kum meuang, Khwaeng kum khwaeng" or self-reliance of each administrative level. This saying is expanded from the recent development policy on Khwaeng pen Yudtasaat, Meuang pen Ngobpamaan, Ban Jadtang Patibat. This policy divides duties and tasks of the provincial offices to offer strategies; the district offices to provide budget; and the villages to implement the tasks. People are expected to participate

In Sanasomboun District, the areas along the banks of the Sedone and the Mekong are target locations. This is because they use the simple method of engines to pump water to the rice fields. There are two types of pump engine, the big electrical engine and the small engine that uses fuel. Communities that have electricity are luckier as they do not have to suffer with rising costs of fuel. On the other hand, communities that do not have electricity, like Kaengpho, or communities with scattered rice fields, have to use fuel type engines.

actively and people should also try to find and initiate development activities from the potential in the village. In this way, the central government cut off most of the economic subsidies for the local level. Recently, the district announced an additional taxation on some domestic items<sup>2</sup>. This money will be used mainly in the district. Therefore, decentralisation here is rather an allocation of economic responsibility from the central to local authorities. In addition, there is an implication of increasing individualism so that each party has to compete for its own well being. This leads to natural resources being targeted as valuable commodities.

There is pressure on the provincial and district offices to achieve the requirements for country development. The local authorities, and also the villages, now have to change their roles and act as active agencies to develop the situation. People both at the household and the village levels, should not rely only on the usual activities or just "het yuu het kin" (work just for self-consumption). They should look for available resources to generate progress. However, this is not a forced policy, but instead, strongly encouraged by various levels of government authorities. This perhaps leads to competition in resource use between households and communities. Outside organisations are important in giving support to the local government and local communities to implement the policies.

According to an interview with the Head of the District Agriculture and Forestry Office (DAFO)<sup>3</sup>, Sanasomboun District, there are seven priorities of the

<sup>2</sup> The additional taxation on domestic items:

Buffalo, cow 500 kip/head
Engine boat 1,000 kip
Boat 500 kip
Motorcycle 1,000 kip
Bicycle 500 kip
Television 1,000 kip

<sup>&</sup>lt;sup>3</sup> The Head of DAFO is an active official and has a close relationship with people in the area. He was promoted to Head of the District Planning and Co-operative Office and •

district development plans according to the direction from the Party. They are: maintaining food security, producing for surplus, stop shifting cultivation, integrating rural development, improving politics and security at village level, human resource development, infrastructure development, and supporting tourism and service industries. He clarifies that all these development plans will not be implemented evenly. However, this is to set a uniform understanding among the district offices to prioritise the tasks when they are available resources such as from the national budget or when there is involvement from the outside agencies. This is the way in which the outside projects get involved in the development schemes of the district.

He explains further that even though the aim is to produce a surplus, the sustainable manner of using resources and participation from the local communities are also of concern in the district. He claims that the case of the fish-stocking scheme is to respond to this policy of producing for sale. Selling production from natural resources is intended to serve local markets, such as neighbouring villages or as far away as Pakse, rather than selling for export. It is thought that people's livelihoods will be improved and it will reduce aid from the government.

The second intervention is the Land and Forestland Allocation Program (LFAP). This is a national land titling program which began officially in 1993. It was introduced in Sanasomboun District in 1995. It started with the most accessible communities along the Road No. 13 using a budget from the government and some assistance from international organisations. These communities have simple land use patterns or practice permanent farming. However, the program implementation depends a lot on available budgets. The district sometimes receives donated funds

recently was promoted to be a Deputy to the Permanent District Governor. He has been involved with the SWIM project since it started when he was posted at DAFO. He is one of the significant key informants for this research, especially on matters reflecting government

from development projects. At the time of this study, the program had been about two thirds completed for the whole district. However, the program had been widely acknowledged for some time.

One of the objectives of the program is to clarify property regimes for the whole country. This will allow for outside investments. A detailed cadastral survey was taken on household rice fields, gardens, residences, and included forests and public areas. Land and forestland are measured and divided separately. Another aim is to collect tax<sup>4</sup> but it is still small and affordable by the farmers. Land and utilised forestland that are allocated to individuals will require tax each year while communal land or forestlands are tax free. Before the detailed demarcation in LFAP, the government collected less tax than it was entitled to as people under reported the size of land.

Under LFAP resource regulations, especially communal resources, are assigned clearly within the village and are announced to all neighbouring communities. This means that every inch of land has an owner or manager to use and take responsibility for it. The DAFO of Sanasomboun claims that the usual pattern of resource sharing still continues but those who access another's resources have to make a formal request. In fact, As the program creates an atmosphere that resources are becoming scarce, it is getting harder to share resources which is true. The point is that many resources are becoming more valuable including common property resources that used to be exploited for het yuu het kin of individuals. As a

policy applied to a range of levels. I refer to him in this thesis as in his original position of the Head of DAFO.

housing area

3 kip/m<sup>2</sup>

garden area

8,000 kip/ha

unused land

16,000 kip/ha

paddy land

20 kg of rice/ha

<sup>&</sup>lt;sup>4</sup> Some tax collection rates of the studied area in year 2001 are:

result, resource-use patterns in villages have become stricter and the negotiation between communities for gaining access to one another's resources has become more difficult.

Aside from land and forestland, rules governing resources depend on each community. Many communities have local practices and customary, for example spiritual beliefs. Therefore, the LFAP is a government umbrella that applies general controls to certain types of land and forestland but the villagers define specific rules, especially regarding other kinds of resources. Water bodies are not specified in detail in the LFAP but they are recognised by the state under the land law. People seem to continue local practices of fisheries management. Regarding the grazing land, regulations are agreed upon between communities. Sometimes there are disputes about cattle damage. This is partly because of the expansion of rice fields and the policy supporting a second rice crop, thus reducing grazing land. However, all cases are resolved locally. Therefore, there is not much difference comparing the regime of communal resources before and after LFAP in this area. The common practices in this area have been continued with adjustment and adaptation among related communities. This differs from the areas that practice shifting cultivation, where customary land use conflicts with the government policy.

Regarding the case of Kaengpho village, LFAP was recently completed in 1999. The pre-existing boundaries of Kaengpho and its neighbours have been legalised. According to the long established wet rice farming area, the communities in the area have experienced the evolution of land surveys and tax collections<sup>5</sup> so

<sup>&</sup>lt;sup>5</sup> The chronology of tax collection for agricultural section in the history of communities in this area has been activated during the new Socialist political regime that started in 1975. Tax collection has evolved during each period. In 1978-1981 the period of naa samakkhi (collective farming) farmers helped each other to plant and harvest rice but production belonged to the landowner. Khao Sahakorn (co-operative farming) involved an in kind tax amounting to some of the village rice harvest being given to the co-operative. In 1981-1983 Kaengpho entered the co-operative so that farmers shared labour and would

people already had sense of village territory. Moreover, Kaengpho already officially divided land with Saelabam in 1994. Therefore, Kaengpho has formalised their territories for a long time and LFAP is not the first or only means that demarcates the boundary in the area but it is rather the last in a series of steps.

The clearly, legal village boundary resulting from the LFAP does not mean all resources within the boundary are used according to the defined property regimes. There are some resources that people from various communities still share across borders. One of the reasons for this is that those resources are still for subsistence use. However, the idea of clearly defined property rights has gradually affected how people think about, their use, and the rules governing them. Problems may occur when there is population pressure and resources become scarce. This can create a disadvantage to people and communities that rely on open access resources or informalised property regimes.

Another intervention that directly influences the enclosure in the study area is fish stocking enhancement in the backswamp. This scheme is enthusiastically supported by the Lao government. Generally, local Lao villagers stock fingerlings themselves, though it is more common with private small-scale aquaculture. People may buy the fingerlings from available and convenient sources such as from the provincial fishery station, local traders who may bring in fingerlings from Thailand

receive rice according to how much labour they offered. Some amount of rice from each cooperative was deducted to give to the district. During this time, the rice fields were surveyed for the first time. This collectivisation in Sanasomboun ended in 1983, as the system could not control the fair rice distribution among farmers. In addition, the system did not help to produce more rice but it increased the rice shortage instead. In 1983-1985 rice was still an in kind tax. The government categorised rice fields into three types according to the rice yield and tax was collected at a different rate. In 1986, the second land survey was done to collect *phasii kasikam* (an agricultural tax) and money was for the first time collected as tax. In 1994, the third land survey was done again to collect *phasii thiidin* (land use tax). The three surveys were made approximately or in some areas were just an estimation, and it surveyed only the farming land for the government to collect tax.

and many catch the fry directly from the rivers. There are a few communities that manage to stock fish in communal backswamps, for example in Vientiane Province.

Fish stocking by the state is still limited due to budget restrictions, unless there is support from outside projects. Some known examples are found in Savannakhet Province, north of Champassak Province with support from AIT outreach program since 1991 (Garaway 1999), and recently in Champassak Province supported by the SWIM project. This community-based management of backswamp enhancement is termed "community fisheries" (Garaway 1999) and "community backswamp" in particular.

The backswamp is targeted as a possible water body for fisheries enhancement for several reasons. The backswamp is a small water body with a size that can be managed more easily by communities compared to other types of water bodies. In addition, the backswamp has clear boundaries to stock and confine fish for a certain period before harvesting. Moreover, as the backswamp is a kind of communal property, the enhancement will benefit the entire community, not only individuals. In Laos, there is a study about this scheme in Savannakhet Province, by Garaway (1999). The results show that fish stocking is a significant fisheries enhancement that involves people participation. Its outcomes are perceived as a good strategy to improve both fisheries and people's livelihoods. In addition, it helps mobilise collective action. Hence, the scheme seems to be suitable in the circumstance of Laos.

This idea has gained the interest of the government, and the Department of Livestock and Fisheries (DLF) in particular. DLF is responsible for aquaculture development. DLF is keen to support communal fish stocking enhancement. The reason claimed by the state is that it is government policy to support the full participation of local communities, especially those who depend on natural resources. So, communal fish stocking will bring success and sustainability to the development program, aquaculture in particular (Singkham 1994). Another crucial

reason is because the government has allocated a very limited budget to fisheries development (Garaway 1999). In fact, there are still many areas that have potential to develop aquaculture but there is still a problem of the supply of the fingerlings, especially for remote communities. This is caused in part by the limited capacity of the local government offices in producing fingerlings and promoting the scheme to the local communities. Therefore, recently the government has planned to develop the fishery station at the district level and also to encourage communities to produce fingerlings for local supply. This aims to expand the conditions for development locally.

In this case study, this scheme had been implemented with support from the IFDMP/SWIM project<sup>6</sup> which began in 1997. The objectives were to improve food security for local communities, as there had reportedly been a fish decline, and also to look for low cost development activities by enhancing the capacity of natural water bodies. Additionally, the project focused on this task at the community level to avoid the ordinary aquaculture development that tends to support individual households. Stocking indigenous fish species has been one of the conditions of the fish-stocking program. This is because of the awareness that introducing an exogenous species will affect the local aqua-ecosystems. The stocking specie is paa paak, Silver Barb (Barbodes gonionotus)<sup>7</sup>.

<sup>&</sup>lt;sup>6</sup> The Indigenous Fisheries Development and Management Project (IFDMP) had been working in southern Laos since 1992 with funding by IDRC. IFDMP at first concentrated only on biological aspects of the mainstream Mekong. The socio-economic component was added in 1997. Small-scale Wetland Indigenous Fisheries Management (SWIM) will continue until the end of May 2002. SWIM has focused more on the potential intervention for co-management of the small-scale water bodies, which are backswamps and streams.

<sup>&</sup>lt;sup>7</sup> Even though it is an indigenous species, there is a bit of a difference with the ordinary paa paak found in the area.

Nong Bua, located in Kaengpho boundary is one of the four backswamps in Sanasomboun District, Champassak Province that received subsidised fingerlings. By the popularity of the program, this activity has been expanded to another four backswamps of Phonethong, a district across the Mekong in Champassak Province. Fish nursery and breeding trainings are also provided as requested from the district. Some communities are working very well while others fail. Others still create changes in property regimes that lead to problems between communities. This also implies that the success of community-based management requires strong local institution.

In brief, according to the chronology of events, fish stocking in Nong Bua and the enclosure began in late 1997. The LFAP was then established to demarcate and regulate resources starting in study area in 1999, a few years after the start of the fish-stocking scheme. These interventions and policies on decentralisation provide an important political and development context that promote market economy development by encouraging and opening the opportunity for people to shift the property regime from self-subsistence to producing for economic gain.

# 4.2 Differentiated Groups Involved in the Enclosure of Nong Bua

The enclosure of Nong Bua involved various groups and each group has different roles that contributed the outcome of new management. In addition, the result from the new management has a different reaction from each group. In order to understand this case well, the institutional analysis approach is applied to differentiate the involved groups. The institutional school divided actors into three hierarchical levels: constitutional, collective choice, and operational groups. They are three groups of the local government group, including the SWIM project, the local decision-makers group, and local people group respectively. Each group intentionally or unintentionally contributes to the enclosure and its performance of new institution of Nong Bua. The details and roles of each group are discussed as follow.

The first group is the local government. It refers to the Champassak Provincial Agriculture and Forestry Office (PAFO), Provincial Livestock and Fisheries Office (PLFO), the Sanasomboun District Agriculture and Forestry Office (DAFO), and the SWIM project. Their positions in property regime are at the "constitutional choice level". These organisations have duties and responsibilities in directing the government policy. They also have an obligation to develop people's livelihoods under their administration. This relates to the policy on increasing production, producing for surplus, and enforcing natural resource management. Their decisions and ability in applying the policy and their actual actions result to the collective choice level or the set of rules designed by the local decision-maker group. In addition, the local government by its position, has authority and is legitimate in introducing the interventions, which in this case is the fish-stocking scheme.

The Lao local government has limited resources and capacity to reach this goal. They have to depend greatly on the available resources in the existing situation, or they may receive some support from outside organisation. Thus, the SWIM project, which plays a supporting role to the local government to subsidise the fish-stocking scheme, is included. The SWIM project consists of a director of PLFO as project leader who now is the deputy head of Provincial Agriculture and Forestry Office (PAFO). Others in the project team are one administrative staff from PLFO, and two staff, one from each DAFO of Sanasomboun and Phonetong Districts. All of them work for the project on only a part time basis. Villagers see them as government officials who bring the project, into the villages and is seen as development according to their definition, therefore the project reflects local government development direction. There are other three external foreign advisors who work part time with the project I am one of these advisors.

The SWIM project first planned to focus on pure research but it is very difficult for foreign projects to insist this idea in Laos. Therefore, the fish stocking

has been requested and implemented. The aims are to look for the low cost ways of producing more fish for communities as a whole so that it will improve their livelihoods. It is also expected to have equitable distribution to people. The community-based natural resource management approach is also the priority to promote people participation. These are expected to be manageable and sustainable activities for the communities. It also aims to facilitate local community and government to co-manage the available resources in the area. The local government and the SWIM project share some agendas in strengthening the local communities to manage their resource in a way that will improve their livelihoods. However, the purpose of marketing the fish had not been clarified between the local government offices and the project in the beginning, which has led to the enclosure of Nong Bua.

The second group is the decision-makers at the local level. They are the group of village committee and the respected elders that the committee regularly consults with. The village committee is a very crucial core in initiating the new project or activity, designing the rules, mobilising collective activities in order to change, and maintaining the property regime. The final decision comes from this group. At the same time, the village committee and respected elders are also resource users that may be affected from the new management.

More importantly, the village committee has to interact, facilitate, compromise, and negotiate with the local government, the project, the other communities and the villagers. In addition, they have two roles government representative responsible for implementing policy, and at other times a village representative. However, it cannot be concluded that the village committee represents the state or the will of each member in the village every time. The local decision-maker group is separated into two groups: 1) the Kaengpho as the excluding group, and 2) the other communities as the excluded group.

The third group is the local villagers, they are at the operational level. Their rights and duties change according to the decision of the local government and the

village committee. Even though the decision comes from consensus, the resource users have little role in initiating and making final decisions related to resource management. Therefore, the user groups are at the operational level. The agreement or disagreement and the actions of this group result in performance of the new property regime. It shows that the actions of the higher level group tend to affect the actions of the lower group. At the same time the responses from the operating group, or villagers about the result they face from the new property regime, can indicate the efficiency of the new regime.

The local villagers are divided into two main groups, the group of Kaengpho as the excluding community and the group of villagers from the excluded communities. Each group has both the users and non-users of Nong Bua. Some are resource users who are affected from the new property regime. The others are the members of the villages who may not be in the user group, but also take part in the outcome of the new management.

This demonstrates the three interest groups relating to the enclosure of Nong Bua. These groups are divided according to their roles and duties toward the change of property regime- constitutional group, collective-choice group, and the operational level group. The excluded groups have different, scattered that cross over in reaction to the enclosure of Nong Bua. The reactions may be both positive and negative from different groups and they are perhaps not static in their positions. This set of groups will be used in the next chapter to investigate how different groups legitimise the claims for the new property regime.

# 4.3 Enclosure of Nong Bua and Changing of Property Relations

Enclosure of Nong Bua has begun when the fish-stocking scheme was implemented. This was requested from the DAFO to the SWIM project to subsidise four communities in Sanasomboun District with some fingerlings. Kaengpho was one of the four. Consequently, this has resulted in formalised ownership of the

backswamp and management exclusively to Kaengpho over Nong Bua. In 1998, Kaengpho village, with other two communities in Sanasomboun District, received a small grant (700 USD) from the Community Activity Scheme, the Australian Agency for International Development (AusAID) to construct a sluice gate at the outlet of the backswamp. The goal was to keep water at the certain level so that more fish could survive the dry season.

According to the new formalised common property regime, the organisation of Nong Bua Community Fishery Management Committee is established by Kaengpho people and approved by the DAFO. The objectives are to manage collective activities in Nong Bua such as fish raising, maintaining of the backswamp, harvesting, selling fish, distributing the benefit, and stewardship. The committee of Nong Bua is composed of thirty-two people in three groups. The first tier is advisory and authority group. The second tier is operating group and has five people. It takes care of fish nurseries, raising, weighing, and selling. The third tier structure has four units from the existing administrative village and each unit has five people. This group takes responsibility catching fish during the harvesting time to sell. In addition, they are assigned to guard the backswamp at night with the village police. This is so that every group shares responsibility in the community.

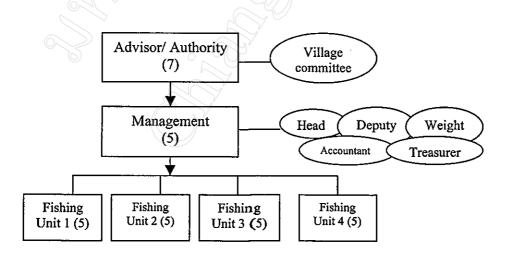


Figure 4.1 Structure of "Nong Bua Community Fishery Management Committee"

This structure is rather formal and is similar to other types of new committee that are organised and supervised by the local government. Most of the members in the Nong Bua committee share positions in the village committee and only few are newly elected by villagers. The committee explains that this task is new for them so that village committee takes responsibilities for this task. Therefore, the Nong Bua committee already has power and somehow represents the will of the villagers.

Apart from the formalised organisation, the new rules and management have been designed and added into the existing traditional institution with close supervision from the DAFO. The rules basically prohibit fishers from other communities to access Nong Bua during the stocking period and harvest fish for sale. Kaengpho people are still able to access to Nong Bua year round but prohibited to use certain gear. The new rules are written and again are approved by DAFO. The table below shows the fishing pattern in Nong Bua after the fish stocking. It demonstrates detail of fishing patterns by different fishing techniques at each month compared with fisherioes of Kaengpho and the other communities.

Table 4.1: Nong Bua: fishing access after the fish stocking

FISHING GEAR	MONTH											
((	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Cast nets	m	m			9							
Bare hands	Kaengpho people are not skilful with this technique.											
Sawn: Shrimps	fc				12	I				ffc	ffc	ffc
Floating hooks	m		0	706		-		m	m	m	m	m
Collecting snails:			^ G	Y								
Day time	cm	mc	cm	mc	mc	mc	mç	mc	cm	cm	cm	cm
Night time	cm	mc	cm	mc	mc	mc	mc	•				
Set gill nets	m	mm	mm	mm	mm	m	m					
Collective harvesting						_					mf	mf
Benefited to indv. of Kaengpho	**	***	*	****	****	****	***	*	*	*	*	*
Rice farming	*	***	*	*	*	***	**	*				

Remark: 1) Shading marks periods prohibited for large fishing gear, which are cast net and gill net; 2) m = male, f = female, c = children, mm or m or m intensive participation;

Source: From interviews with Kaengpho males and female fishers in December 2000.

<sup>3)</sup> Number of \* means intensity of activities; 4) Leading letter shows the leading role in that activity.

This table shows that the new management arrangement of Nong Bua prohibits the other communities access. The prohibition in the new tenure is different in seasons and different rights between Kaengpho and other communities. The prohibition is concentrated most during fish stocking period from October to April. Nong Bua is to public use from May to September. During the closed period, fishers from other communities are not allowed access using any gear. Meanwhile, Kaengpho fishers are allowed to use some simple gear such as hooks and scoop nets, but not cast nets, gill nets, *lawb*, *sawn*, and spears.

There is a set of penalties to control the infringement of these rules. For the first time offender, the penalty is 10,000 kips and working for the community for 5 days. The second time is 20,000 kips and working for 10 days. The third time is 30,000 kips and working for 15 days. If fish are caught, the person has to pay a fine of 5,000 kips per kilogram. There is only one case that a group of Kaengpho people encroached and broke the rules by using a cast net in the dry season. All of them were fined and had to clear up some weeds in Nong Bua to donate their labours for the community.

Kaengpho has gained both communal and individual benefit from the new regime of Nong Bua. The village has obtained community funds from harvesting fish in the dry season and selling them locally. There are some difficulties harvesting as the backswamp is so big, there are lots of weeds and water is not shallow enough <sup>8</sup>. The taboo of Nong Bua also does not allow the block an area otherwise people may divide certain areas to release fish and catch in small areas. Therefore, Kaengpho has to try many ways. In 1998 and 1999, the village had a fishing unit to catch fish to sell. In 2000, the village changed the way to harvest the

<sup>&</sup>lt;sup>8</sup> Normally, Nong Bua is almost dried from ??????May to April recheek, this is in fact the entire year??????. But since the sluice gate was constructed, the water is never very shallow. In the past, when the backswamp was shallow, fishers would step on the weeds to

fish by selling the fishing rights<sup>9</sup> for invited fishers from neighbouring communities for a day (see Appendix 3). Kaengpho picked up this idea from Solonoi, a village in the four communities that received subsidies of fingerlings from the SWIM project. This was not successful. In 2001, the village has adapted to produce fingerlings by themselves, with success. Kaengpho sells these fingerlings to individuals from nearby villages and puts some into Nong Bua.

Table 4.2 shows the income of Kaengpho gained from fish stocking and other sources related to Nong Bua since the scheme started in 1997 until 2001.

Table 4.2: Nong Bua: Investment and income gained from 1997 - 2001

Year	Economic parameters							
	Cost of fish fry and nursing (Kip)	Total harvest weight of stocked fish (kg)	Total harvest weight of wild fish (kg)	Gross income gain from fish (Kip)	Income gain from other sources (Kip)			
97 – 98	275,000	100.5	142.8	716,500	0			
98 – 99	280,000	16.9	Est. 20.0	369,000	<b>o</b>			
99 – 00	450,000	no data*	no data*	959,000°	1,489,500°			
00 – 01	450,000	early rain so not harvested	n/a	n/a	(4,020,000 <sup>b</sup> + 424,000 <sup>c</sup> + 45,500 <sup>d</sup> ) 2,000,000 (selling fingerlings from breeding in the village)			

Remark: \* 1999-2000 Kaengpho sold tickets for fishing rights so fish did not get weighted.

Source: SWIM Project

catch fish. As a result, the weeds broke and did not expand fast as at present. However, there are lots of fish left in the backswamp; maybe even more than before.

<sup>&</sup>lt;sup>a</sup> income gain from selling tickets for fishing rights by the day.

b the donation value of tin roof and nails supported by the District Education Office.

c income gain from the donation for building the school on the selling ticket day.

d income gain from another source

This table demonstrates that Kaengpho does not succeed in gaining income from harvesting the stocked fish. This is Except in year 2000 when Kaengpho made some income from selling tickets and a big portion from donations. The donation is for building a simple three-room primary school (see Appendix 4). Kaengpho also received a partial grant from District Education Office to build a tin roof.

The benefit gained from Nong Bua is carefully managed. Fish, both either wild species or stocked, caught during the communal harvesting are communal property. Fish are sold to people in the village and other communities. Twenty percent of the income is given to fishers in the unit on the day of fish harvesting which they can take money or fish at the equivalent amount. Then the eighty percent is counted as the total again and divided into two parts. Thirty percent from this is allocated to administrative activities such as buying books, pens, travelling expenses for village representatives to attend some meetings. The other seventy percent is left for community fund that will be used for buying fingerlings in the next season, communal activities such as hiring more people to clean the backswamp, maintaining road, temple, and school. The management committee has to work hard to make this transparent as they are afraid that it would not receive trust from people. There are many examples that the committee collapses when there is unidentified expenses.

Beside the general benefit for the common, Kaengpho people, as individuals' benefit in various ways. Normally Kaengpho people fish from Nong Bua the most during the wet season. In addition, in October and November when the stocking is started, Kaengpho fishers can use big mesh size gill nets. Moreover, in dry season Kaengpho fishers are permitted to use simple gear of hook and scoop net, because

<sup>&</sup>lt;sup>9</sup> Three types of fishing techniques are allowed with different prices. A cast net was 6,000 kips, scoop net for 2,000 kips, and bare hands for 2,000 kips.

these gear are regarded as small exploitation, or some fishers can go to Sedone. Furthermore, Kaengpho people have the privilege to buy fish from the communal harvesting at a lower price than people from other communities<sup>10</sup>. When families in the village have ceremonies such as wedding or funeral, they can ask the committee to buy fish from Nong Bua at a special rate. These are contributions from the village to Kaengpho families.

In addition, after the community ends the annual communal fishing, it agrees to allow Kaengpho people to fish in Nong Bua freely for a day. Everyone can catch fish and eat at the backswamp and some fish may be brought back home but it is not for sale. This is a way that the committee explains to compromise individual loss of Kaengpho people by enclosing the backswamp. Kaengpho people are satisfied with these arrangements.

The satisfaction from its people has resulted in good co-operation and unity in the community. This allows the new management of Nong Bua to succeed. Besides, the cost for rules enforcement in the new institution is low. Nong Bua is close to the residential area so it is easy for stewardship. In addition, most people in the fishing committee are part of the village committee so they have experience and authority to manage the resources well. For example, guarding the backswamp is just a small extension of the normal village stewardship<sup>11</sup>. Moreover, Kaengpho is a small community that people all know each other so everyone can help monitor the rules. There is a case that the committee fines one Kaengpho fisher who catch fish

However, the prices of fish sold to Kaengpho and the other communities are lower than buying from the market. For example, 1 kilogram of snakehead fish sold at the market is 10,000 kips, the price for people in the community and the others is 7,000 and 8,000 kips respectively.

Guarding the village at night is common in rural Laos. This is the district policy for security in the area. There is rarely a problem but prevention is preferred. Village soldiers and village police groups take responsibility for this task.

by cast net during prohibited. The committee notices from his big meal and the fish species. This is because these conditions can be distinguished where the fish come from and what kinds of gear are used. These circumstances ease and strengthen the new formalised institution of Nong Bua.

As for the other communities, this formalisation of rules and ownership are in reality. The prohibited period is in the dry season which is the only period that fishers from other communities usually come to fish in Nong Bua. In the wet season, when the area is naturally open because of the flood, people do not come as they are busy with their farming. Also in this season, food such as mushroom, bamboo shoot, frogs and fish from new migration are abundant. They would rather collect food and catch fish from nearby streams and rice fields. So, the open period in wet season does not change the implications of the enclosure.

Two years after the enclosure, one of the Kaengpho village committee members claimed that they allow other fishers to use some fishing techniques, such as floating hooks and bare hand, but scoop net was still prohibited. This does not benefit the excluded fishers because fishing by hooks takes a period of over night from setting hooks in the afternoon and check them in early morning. Hence, it is not practical for people who do not live there. Moreover, since the sluice gate was built, the water has not been low enough for them to catch fish as easily as before. Therefore, selling fishing rights in year 2000 made it impossible for fishers who use only bare hands.

From the above changes, this situation is analogous to the term "enclosure". Enclosure is a changing of power relation in controlling the resources management and in distribution of the benefit, and restricting access to those who previously had a claim to the resource. The enclosure is often legitimated and the purpose is rather claimed the market economy development (Yos 1996). In case of Nong Bua that its ownership is modified and formalised, which has resulted in the conversion of property regime from relatively open common property governed by custom to sole

use and owned as communal property of a single community. Yet, in contrast to cases of enclosure involving full privatisation or individualisation of the resource, Nong Bua is still managed collectively as a communal resource. So, this reflects a situation in which common property functions as enclosure. The significance of common property arrangements, marketisation, and development discourses in legitimising the exclusion involved in the enclosure is dealt with in Chapter 5.

Normally, the enclosure occurrs on a large scale. The case of Thailand, for instance, the state is the agency that facilitates the enclosure through legitimate development programs. The dual contest is between industrial sector and rural or agricultural sector. The development such as green revolution and mono-culture cropping failed and it has caused local people to leave their lands for the city. There is no local resistance in rural areas as the change occurs and they gradually become a cheap resource for the urban areas (Yos 1996). In the Lao case, the large development programs or projects have not penetrated into the local yet. Moreover, the capacity of the government is still limited. In addition, rural Laos is still in subsistence economy so it prevents enclosure the way it occurred in Thailand. The regime Nong Bua is a dual contest. The case of Nong Bua can be considered an enclosure due to the process of power relations over resources. Eventhough in Laos the contestation is changing still at a small scale involving dual contestation.

The formalisation of ownership over Nong Bua has lead to the new management arrangement and new regime of the backswamp. In order to clarify what has changed in terms of its regime, rights, management, purposes, and the outcomes, the comparison of these aspects before and after the enclosure are shown in Table 4.3.

Table 4.3: Changing property relations of Nong Bua

	Before the enclosure	After the enclosure
Regime	<ul> <li>Informal with complex base on custom, seasons and fishers' skill</li> <li>Relatively open common property</li> </ul>	<ul> <li>Formal, linear and is influenced by the state</li> <li>Exclusive common property</li> </ul>
Right	Usufruct right to all communities	Collective ownership right to Kaengpho
Management	<ul> <li>Flexibility, no organised institution</li> <li>Management based on customary rules</li> </ul>	<ul> <li>Inflexibility: organised institution base on formal rules plus customs</li> <li>Management under the administrative village</li> </ul>
Purpose, function	Subsistence under moral economy	Commercial oriented under market-based economy
Advantages	<ul> <li>Open to all so benefit for the poor</li> <li>Good social relations between communities</li> </ul>	<ul> <li>Benefit exclusively for Kaengpho individuals and community</li> <li>Strong collective action, backswamp is maintained</li> <li>Increase number of fish</li> </ul>
		<ul> <li>Benefit gained for community development</li> <li>Response to government</li> </ul>
Disadvantages	<ul> <li>Uneconomic and unproductive in the government perception</li> <li>No collaborative action</li> </ul>	<ul> <li>policy</li> <li>Marginal fishers from the other communities. Especially affects the poor</li> </ul>
	Backswamp is gradually degraded and fish declines	Lessen the interactions between communities, become more community interest

Prior to the enclosure, the previous regime of Nong Bua was both flexible and complex. It was governed on traditional practices, belief, and certain circumstance of the area. There were multiple rights as the guardian spirits are exclusively worshiped by a single community but the access right to the backswamp was inclusively open for all. Therefore, it reflects open access resource of Nong Bua. However, it depends on seasonally changes, resource availability, and fishers' skill. All fishers are prohibited to use certain gear due to the taboos. Fishers from other communities would come only in the dry season when they were not engaged with other main farming activities and food was scarce. In addition, it is only fishers who can use appropriate gear at the time of access. For example, fishers who are experienced in catching fish with bare hands would come only in dry season. While, Kaengpho people use hooks, gilnet and they live nearby so they can fish in Nong Bua for year round. This shows that the property regime of Nong Bua was shifted from relatively open access to exclusive common property for Kaengpho fishers in different seasons according to various conditions at the local.

It also illustrates that the relationship between other communities to Nong Bua has only on one direction. They only took the resources from the backswamp, did not participate in any worship, maintenance or management of the backswamp. This differs to Kaengpho that has two-way direction to Nong Bua.

The functions of Nong Bua before the enclosure were an important source of subsistence basis and morality of communities in the area. Each year fishers from other communities would come to Nong Bua, also on the New Year, which was a kind of social interaction. Nong Bua serves as a fish breeding habitat for other water bodies in the area. This benefit nearby water bodies and fishers in those areas. This is a common attribute for relatively open access resources that provided benefit, especially for all users.

According to the analysis of the Institutional Economic School, fishers of Kaengpho and the other communities had equal right at the usufruct level. As,

Kaengpho could not determine the customary rules or exclude the others and they did not have any privilege more than the others did. This is true by the actual practices regarding right to access, however it perhaps differs from people's view. Kaengpho people express that "Nong Bua always belonged to us". Kaengpho people judge the "ownership" from different basis to the institutional school. The term "ownership" in the institutional analysis, the "owner" can manage, exclude the others and transfer the right to others, which refers to private property. In the understanding of local people, especially in this case, "owner" has the duty and responsibility toward the resources and it can be collective. In this case, Kaengpho people, as collective owners, have responsibility to offer worship and communicate with the guardian spirits when there are infringements.

This is similar to the case of territory in this area than in the past when communities were small and located far from each other, each community recognised where its territory was. People might not manage or take control of some areas, such as forest and grazing land. In other words, these resources were also accessed by people from other communities. However, each community had responsibility in its territory. A Kaengpho elder raises an example that when a buffalo died in ones boundary, that village had to manage the investigation and bury it. This shows that the each community had recognised the right and respected the collective ownership and the territory of the others.

There is another term of the institutional school on "management" that does not fit with the empirical situation in this case. In Lao translation, "management" is sometimes called kaan khum khong (protection and responsibility) and sometimes called kaan jad kaan (action with authority), different meanings. Before fish was stocked in Nong Bua, the state did not influence the management of Nong Bua. Thus, without government intervention rules were enforced by local custom. The officials and Kaengpho people would say there was "no kaan jad kaan". One of the village committee members explains that "the spirits govern all the access and use of the backswamp, we did not jad kaan". However, Kaengpho people emphasise that

they have *khum khong* (protected and looked after) Nong Bua for generations while the other communities were never involved. This shows that we should be aware of using words or concepts that may imply different meaning between the different culture and context.

Hann (1998) criticizes the term ownership and property in the institutional school's meaning, that it clearly exist in the market economy context but not totally right in the context of subsistence economy. This type of catagorisation shows the limitation of the rather rigid functionalist approach that its explanation seems to fit more with neo-classical economic society that property regimes are clarified and formalised. Therefore, the clear-cut levels of right categorised by the institutional school cannot explain the rights of Kaengpho in this case. This reflects that the property regimes, especially in traditional practices, are embedded in the complex situations related to political, social and cultural context, which is specific to the case.

Since the enclosure has begun, the new formalisation of property rights over Nong Bua has altered various attributes of the previous traditional regime. There are both advantages and disadvantages to different groups from this process. In the process of the enclosure, organisation, ownership, rights and rules are all defined and formalised. Rules of access are strict and inflexible. This reduces usufruct right of the other communities.

This formalisation has simplified the complex right, management system of the regime, and also the unit of management. The new regime is linear in terms of rights between communities as it allows only Kaengpho to manage the resources. At the same time it is too complex for Kaengpho to manage and compromise between individual loss of Kaengpho fishers, communal gain of the village, and social relationship with the excluded communities.

In formalisation of the regime, the local government plays influential roles in establishing the new institution of Nong Bua as it also serves a significant aim of the state in clarification of the resource. There is limitation in defining the unit involved in the management. As for the government, and often the development project, they have to define "community" according to the administrative village so that it is practical in terms of management and administration. At the same time, this automatically reduces the complex traditional management and excludes various users that live across the administrative villages.

Kaengpho now has collective property rights and *de jure* right over Nong Bua as the "owner". This fits to the explanation of the institutional analysis school that the village now takes full part in *kaan jad kaan* and *kaan khum khong* over Nong Bua that it can exclude the others from accessing the resource. This is similar to the private property regime. This is compatible to the territorialisation process, where resources are managed with a linear system under the defined boundaries and owners. Meanwhile, fishers from the other communities, who used to have *de facto* right, becomes "non-owners" that have little right to defend. It then mitigates participation and network of social relations between communities of resource users. This questions the rigid community-based approach that tends to claim to be a passage to sustainable development.

In the case of Nong Bua, new rules are added into the existing management. The traditional belief has not been diminished by Kaengpho people or the local government. On the other hand, the belief in spirits has helped Kaengpho to legitimise and establish the new property regime. This will be discussed more in the next chapter. This differs to what Bromley and Acheson (1989) foresee that the outside intervention may destroy the customary practices. However, in the case of Nong Bua the change does not need to occur after the intervention. The existing customary practices of Nong Bua today may be altered in the near future. As the village committee starts talking of blocking a certain area in the backswamp in order to falicitates raising and catching fish. Also, if there is no fatal response from

ignoring the taboo in this case, people may go further to drain the backswamp or do something else. This shows that rules and rights in property are dynamic and they may have been changed according to the situations and context at the time.

Advantages gained from the enclosure of Nong Bua are for economic purposes, mostly exclusive for a single community-both for the common and individuals. As for the communal benefit, Kaengpho could gain some community fund to implement communal activities such as maintain school and temple. The state rather sees this as a sign of "development" because the village can rely on the village fund instead of requesting from the state. Even though their community fund is small, it attracts the additional support from the district and outside projects.

There is another communal benefit for Kaengpho village. Communal fish helps the villagers to have a source of food to use when there are village guests or visitors. Normally, each village has a small rice bank that can be lent to poor families and also used when there are visitors in the village such as officials or project staff. Therefore, if the village has fish for common use, the village committee does not have to be concerned where and how to get food. From my observation, before Kaengpho claimed Nong Bua, the committee often took fish that they caught for their families or kill their chickens for visitors. Otherwise, the committee had to use some money in the small community fund or ask for contribution from each family, which made no one happy. This is common in rural Lao communities.

Regarding the advantages for individuals, the community fund lessens households need to contribute cash for collective activities in the village. As demonstrated in Garaway (1999) study, having more community fund instead contributes to the poor families more than to the community. Normally, the village committee has to collect money from families each time before some communal activities. The money will be collected in range according to different economic status of each family in the community. However, the poor always have difficulty to

contribute. Therefore, this greatly reduces pressure on them. Also, it reduces complaints to the village committee. This partly strengthens village unity.

Another benefit for the individuals is increasing opportunities for the poor. There are more people catching fish and shrimp to sell both in the village and to other communities in the dry season when fish is rare. In the past, there were many competitors from the other communities but since they are not allowed to fish in Nong Bua, they have to buy fish and shrimps from Kaengpho fishers, who mostly are the poorest. One female fisher explains her case that normally it takes her about three hours to catch half a small basket, which can be divided into about 8-10 small bowls and each bowl can be sold at 1,000 kips. It might take her daughter half a day walking and sell shrimps or fish to other villages. Now it takes only few hours to sell. As a result, the enclosure indirectly helps the poor fishers of Kaengpho.

In terms of fishery resources, the new regime does not change the ecological function. Indigenous fish species are added into nature and the water remains in the backswamp. Fish go to nearby water bodies during the wet season hence it benefits some neighbours of Kaengpho and conditions of backswamp seem to be improved.

In addition, the new regime of Nong Bua causes strong collaboration among Kaengpho residents. This is because of a strong and respected village committee. Moreover, people are satisfied with the outcome of the new management and they have been active in many communal activities more than before. The village heads tell me that the successful case of Nong Bua increases trust from the villagers and this allows the committee to mobilise the communal activities easier. The village committee confirms that "people seem to be more handy (easy to call for action)

than before". I also have noticed the enthusiasm of males and females in the village meeting<sup>12</sup> when the topics related to Nong Bua.

Therefore, the new formalised regime of Nong Bua has brought a great benefit to Kaengpho. First, the village is able to reclaim the sole right over Nong Bua, which has brought benefit to the community as a whole. Second, I analyse that as consequences of the new formalised property regime that guarantees full ownership over Nong Bua, it brings improvement of the backswamp and village unity. This is meaningful especially for local authorities to administrate activities in the village. It also means that enclosure in this case causes collective action and solidarity in certain groups, which differs to the enclosure by individuals.

According to the Institutional Economic School, this new property regime of Nong Bua as a communal resource, passes all the criteria of the long-enduring common-pool resource institutions (Ostrom 1990), which are clear boundaries and ownership in particular. However, this does not mean it is an only good formula. There are other types of common property that are rather open and inclusive for people to access. Therefore, to follow the same criteria without suitable conditions may cause exclusion of some groups.

In brief, this illustrates changing property regimes from the traditional to formalised institution, which in this case has changed the way people control the resources. The state has been involved in the process to formalise the new institution using market as incentive and mechanism to promote the shift of resource institution. This has resulted in thinking of resources as commodity for the benefit of both individuals and administrative communities. Changing function and purpose of managing resources has led to changing property relations, which also affects a

<sup>12</sup> Most of the village meetings are related to administration. So, people do not participate much in sharing opinions. The more participative meetings are when they

network of social relations in the area. This indicates the transformation of changing property regime in relation to the development of markets.

## 4.4 Resources Exclusion, Responses and Adaptation

The changing of property regime to formalisation results in exclusion of the other communities. This has forced the excluded groups to adapt themselves in response to the new situation. The reactions from the excluded groups vary from opposition to agreement. This helps to clarify the degree of problems and options they chose. The groups that will be discussed are Kaengpho fishers who are restricted to use some fishing gear at certain period. More importantly, the excluded communities, Naa Nai, Naa, Saelabam and Nongphai as the focus for my study.

Kaengpho fishers are affected from the new regime. However, there is much more positive impact to Kaengpho village. There were about ten fishers who regularly fished in Nong Bua for sale with the prohibited gear<sup>13</sup>. They are not poor and many of them are members in village committee. Therefore, these people do not mind losing some individual gain Nong Bua in exchange for a greater benefit as a whole village. Regarding effect to gender, the male fishers who use gill net and cast net in dry season are affected. There is no impact on female fishers as they only catch shrimp by scoop net. However, there are not significant differences, as both males and females still share food they collect.

discuss about village festivals or other social events.

<sup>13</sup> Often, fishers who use gill net and *lawb* are not the poor. This is because gill net is a bit costly for the poor. As for *lawb*, this gear is put in the small stream or backswamp and fishers will check it every 2-3 days. Therefore, the poor fishers do not tend spend so much time on this. They rather prefer daily gain.

Regarding the excluded communities, among the four, it is only Saelabam that has responded strongly and publicly to the enclosure of Nong Bua. The group of Saelabam's excluded fishers had support from some village elders and opposed to the change publicly many times. The first time was when Saelabam denied invitation from Kaengpho village committee to attend the fish releasing day in the first year. Many village representatives came but not from Saelabam. Then, during the dry season of the following year, during the prohibition of the outsiders, there were groups of Saelabam fishers mostly women who came to catch shrimp in Nong Bua. Kaengpho village committee recorded the infringement six times. There were 8 to 34 fishers who infringed the rules each time. Kaengpho village committee reported this to a Saelabam's elder but fishers continued to come. In the end. Kaengpho committee fired the gun into the sky to chase these fishers away then they stopped coming. The third time was April, 2000. Saelabam village committee refused to support by returning all fishing tickets to Kaengpho. On the contary, the response to the change of Nong Bua new property regime from other excluded communities is rather subtle and not shown in public. This will be discussed in detail in chapter five.

Regarding adaptation of Saelabam, there are various streams and good fishing grounds of Sedone. People do not have to go further for fish. The exception is shrimp that are more available in Nong Bua. Saelabam still benefits from fish that go to Nong Bua Noi and their rice fields nearby. Saelabam fishers report that they caught some stocked fish, Silver Barb from their rice fields.

In contrast to Nongphai fishers, the poor have the greatest impact from the property regime change of Nong Bua as there is limited water bodies in the village. People are familiar with fishing in small water bodies and they do not have boats or big gear to fish in the river. The twenty fishers who often fished in Nong Bua in the past about half in this group fish as a main occupation and some catch fish to exchange for daily rice consumption. After the prohibition of Nong Bua, only a few fishers had proper gear go to fish in the Mekong and Sedone Rivers. As for fishers

who have only basic gear, they have to find other ways, such as catching frogs, collecting non-timber forest products, or labouring to buy rice daily. Some female fishers do more cotton spinning. Many have changed to collect dung that is in demand recently during the dry season. However, collecting dung is quite hard work, takes time, high competition and less pay compared to catching fish. Moreover, neighbouring villagers do not allow them to collect dung in the others' territories.

Some fishers go to fish in open backswamps within other villages. Yet, some backswamps are in the far distance of other districts. This means they have to spend more time travelling to other water bodies. There are some new dug community ponds resulted from the road construction, for example at Khiilii located next to Nongphai. Khiilii sells fishing rights to the outsiders. In the first year of the arrangement, Nongphai fishers could catch lots of fish by cast nets and bare hands, they used skilful techniques. In the following year, the new rule prohibits use of bare hands. Nongphai fishers guess the host village is afraid that they would empty the ponds. Prohibition of certain water bodies and techniques excludes some fishers to access resources. This illustrates the impact to some fishers of Nongphai community who have not many options for their livelihood, except to go water bodies and work harder.

According to interview with fishers from the three communities, (Naa Nai, Naa, and Saelabam) they are not very impacted by the enclosure of Nong Bua. Naa Nai, as its location is at the bank of Sedone, residents already catch fish in the Sedone regularly. Besides, some Naa Nai fishers who, are relatives of Kaengpho residents are still able to fish in Nong Bua under the same rules of Kaengpho fishers. Some Naa Nai people buy shrimp from Kaengpho.

Naa fishers have fished less after the enclosure. The streams in Naa are quite far and the one in the middle of the village is dried up in April. Naa has tried releasing some fingerlings into one of their backswamps expecting to gain

community fund as Kaengpho does. Naa harvested released fish the first time in January, 2001 with small outcome but they plan to try again the following year. However, Naa women who used to catch shrimp in Nong Bua, are busy with cotton spinning. Hence, they do not bother going to fish so much anyway.

In brief, in comparison among four excluded communities, Nongphai fishers are affected the most from the enclosure of Nong Bua. This is because some poor families relied on selling fish caught for rice consumption daily as their primary source of household income and food during the dry season. While, other excluded fishers mostly caught shrimp, which was only substitute source of household consumption. So, they are not affected much on their food security.

Among these four communities, it is only Saelabam that people express their reaction publicly, regardless of their better resource conditions. While the other communities and even Nongphai, seem to have only subtle responses. There is no apparent contestation. This is perhaps due to the natural characteristic, Nong Bua still serves as fish breeding habitat for various water bodies in the area. In addition, the enclosure does not close all the subsistence security of the excluded groups. Therefore, people are able to adapt to find other sources for their livelihoods. These are economic reasons that may soften the dissatisfied atmosphere between communities.

# 4.5 Summary

This chapter shows the case of changing the institution of property regime from traditional communal property to formalised exclusive property right of a backswamp. It does not change the function of ecosystem but the social relations among related parties. This case is on the one hand seems to be a successful development scheme for Kaengpho and the local government. On the other hand, the result of this success is exclusion of the other 16 communities.

The analysis of the institutional economic school in strengthening the clear institution of property regime results in enclosure in the case of Nong Bua. In addition, its analysis on the property regime and levels of right do not fit well with the situation of the traditional institution of resources management. The specific context is necessary in helping to understand the situation better and caution must be exercised to not use the analysis in a rigid way.

Marx and Polanyi saw that capitalism leads a drastic force that destroy embedded social forms of property relations. However, while culture and other social context are embedded in property relations, in capitalism (Hann 1998). Capitalism here means the facilitating of market, increased production, and also the enclosure of the resources for exclusive ownership. This case shows that these aspects of capitalism are culturally accommodated well in the property relations.

This case of enclosure shows the significance of decentralisation, production for sale, and clear-defined property rights. These policies open opportunities and motivate people to manage the resources in a way that promote market economy development. This process has directed clear ownership rights that fix people with defined boundaries. This leads to the question of sustainable development.

The next chapter investigates further why the enclosure has been accepted and by what factors that people who dwell in an agrarian society with mutual dependence manage to continue relationship between each other. The next chapter will discuss about this through the legitimation of the enclosure that notion of development and cultural contexts are very much related.