

# The Mekong River

The Mekong River is one of the most important rivers in Southeast Asia and is the tenth longest river in the world, spanning for 4,909 kilometers. Originating in the Tibetan Plateau, it continues its path through China, where it is called *Lancang Jiang*, then on through Burma, Laos, Thailand, Cambodia, and finally it flows into the sea at the delta in Vietnam.

In Thailand, the Mekong River forms a natural border between Northern Laos and North and Northeast Thailand. This border begins at the Golden Triangle, where the northern most region of Thailand touches the states of Laos and Burma, then flows southwest as it continues to form this border until jutting into central Laos. The major tributaries that flow into the Mekong from Thailand in this border area include the Kok and the Sai Rivers. These rivers originate in the Shan State of Burma and flow through Chiang Rai on their way to meet the mighty Mekong. This area is quite ecologically diverse and is marked by flatlands, wetlands, lakes and a long stretch of mountain ranges that run from north to south.

As the Mekong River continues along its path in Laos it veers back south to once again form the border with Thailand in the Loei, Nong Khai, Nakhon Panom, Mukdaharn, Amnaji Charoen, and Ubon Ratchadhani provinces of Thailand. The major rivers that feed into the Mekong in this region include

คำให้การของคนท้ายน้ำ..

the Songkram River in Nakhon Panom and the Mun River in Khong Chiam District, Ubon Ratchadhani.

The Mekong basin is even more extensive. In the Thai territory alone this basin covers 183,000 square-kilometers, most of which is situated in the northeastern region. The basin in this region is the second largest in all of the lower Mekong.



# The Mekong of the Past

Before the implementation of development projects, the ecosystem in the upper Mekong was pristine. The stretch of the river that forms border between Thailand-Laos and Burma-Laos has been home to many very complex ecological systems. These areas, which are very rich in their biodiversity, have been sustaining the livelihoods of local people and communities for countless generations. Also, this area is considered one of the most important wildlife sanctuaries in Southeast Asia.

During *Chao Baan Research*<sup>1</sup> conducted in 2004, which studied the ecological systems in the Mekong River, the village researchers were able to divide the complex ecological system of the Mekong River along the Thailand-Laos border into 11 subsystems. These subsystems include *Pah* or *Kaeng* (river rapids), *Khok* (Whirlpools), *Don* (beach), *Rong*, *Long*, *Nong* (swamp), *Cham*, *Rim Huay* (by the creek), *Rim Fang* (by the river bank) and *Kwan* (lake). Each of these ecological subsystems is highly complex and some are home to important aquatic plants, such as *Kai*, which grows on rapids when the water is low and then rots and becomes food for fish as the water rises.

## **Fish habitat and fishermen**

Some ecological systems, like the *Khok* (an area of the river in which the water is deep and contains whirlpools) are very suitable as habitats and

spawning grounds for various species of fish. During the rainy season, fish often swim from the deeper waters of the Mekong into *Khoks* in the tributaries to lay their eggs. During the dry season the fish that spawned in the tributaries swim back into the Mekong River supplying it with a significant percentage of its fish population.

If the season is normal, the water level in Mekong River rises in June until October during early rainy season. Locally, this period is called “Big Water Season.” The water level then starts to recede after the arrival of the dry season reaching its lowest level in early April.

As the level of the Mekong rises, its water floods many of the tributaries including Ing and Kok rivers. During this time, the fisher folk are able to catch many fish in these smaller rivers. This is beneficial to the fisher folk because it is more difficult to fish in the large rivers like the Mekong. During this season, some of rapids are also submerged becoming a fertile habitat for many species of fish.

Sao Rawangsri<sup>2</sup>, a 75 year-old fisherman, told us that, “the reefs and rapids in the Mekong are home to many fish. Some fish feed in the rapids. Our life is sustained by the fish that live there.”

Fisher folk in the area of the Mekong that forms the northernmost border between Thailand-Laos call their fishing ground *lung*. In the area from Chiang Saen to Wiang Kaen districts, there are 14 major *lungs* where villagers often go to fish.



Each *lung* attracts a significant number of fisher folk. For example, the *lung* at the Golden Triangle through to the delta of the Kok River is the fishing ground for more than 100 people in various villages, while the *lung* at Baan Had Krai near Don Pong and Don Waeng, attracts many fisher folk from both Laos and Thailand.

Poh Luang Boonkong Boonwat<sup>3</sup>, the village headman of Baan Pak Ing Tai, who presides over a village with more than 100 fisher folk, explained that up until 10 years ago all men of working age were engaged in using traditional gears to catch fish in the area where the Ing River meets the Mekong. Each day they would catch a variety of fish including *Plaa Kao* (freshwater catfish), mud carp, *Plaa Ka* (greater black shark), *Plaa Kung* or *Plaa Kerng*, *Plaa Pamai*, Wolf-herrings.

The village headman told us further that, “the fisher folk at Baan Pak Ing fish in both the Ing and Mekong Rivers. They go to the former during rainy season when, because of the warmer temperature of the water, the fish from the Mekong spawn in Ing River. Most of the fish caught in Ing River during this time migrate from the Mekong.

“The water in the Mekong River often floods the Ing River all the way up to Baan Sri Lanna. After the water in Mekong River starts to recede there are lots of fish in the Ing River then, during November through March, these fish swim down from the Ing to the Mekong.”

### **Kai: The Algae of Mekong River**

During the middle of dry season, from late January to early March, water in the Mekong River recedes and becomes clearer allowing sunlight to reach the submerged rapids and reefs. These are the optimal conditions for *kai*, the freshwater algae, to grow on these rapids and reefs. During this time the villagers collect this nutritious plant for their own consumption and for sale to generate income for their families.

Chaweewan Puangsombat<sup>4</sup>, a member of the Baan Had Krai’s housewives group in Chiang Khong district, who’s members learn to preserve *Kai* from the Mekong River and sell it, has a story about *Kai* which she wishes to relate.

“When the water is low, villagers come to collect *kai* on the rocky beaches and rapids – people in Laos collect on their side of the river, people in Thailand collect it here. People mostly come to get it at the pier of Wat Had Krai, including those from here and other villages. The environment for *kai* here in Baan Had Krai is the richest.”



“Most of people who collected *kai* are women, children and some older persons. Some took it back for food, some made it into sheets to sell at the pier of Wat Had Krai. There was a lot of *kai* then. For people on both sides of the Mekong, *kai* is food provided by nature and helps to generate income for us. During the peak time of *kai*, we may be able collect it three times a day, and this helps us to earn as much as 500-600 baht.”

### **Riverbank Gardens on the Mekong River**

During the dry season, from late October onward, people living along both sides of the river, particularly women, utilize the beaches on the banks of the river, some islets, and sand dunes to grow vegetables. This area is highly enriched due to the settling of sediment from the river during the high season. Common vegetables grown here are lettuce, ipomoea, and beans. It is also common for women to bring along fishing gears



including the hand nets and common life nets, to catch fish for food when they go to these areas to farm.

Mae Kiang Dhammawong<sup>5</sup>, a villager of Baan Sai Thong recalled that, “after the Buddhist Lent when water level lowered, the sand dune at Koh Saen would emerge. Villagers would go occupy the land and grow beans—some grew a lot, some little, according to

how much land they reserved before and after the crops. They did not have to water the crops, just leave them like that, and when it was time, they went to collect the beans. Some were kept for consumption and some were sold for income. When they went to tend to their beans, they would bring along some fishing gears. There were lots of fish then, and it did not take them long to have a good catch.”

### **The Community’s Kitchen**

The word that the local communities living along the Mekong River use to describe the islets, rapids and sand dunes roughly translates to “kitchens” or “market”. These areas are an essential source of food and livelihood for many in these communities. Several villages, like that of Pak Ing Tai,

do not have much land for growing food, so many families depend on the income they receive from selling fish to buy rice and other essential commodities and some have to grow vegetables on the riverbanks to generate income for their families. Others in the village are fortunate to be able to sell both fish and rice grown on the limited agricultural area. Working age people, who do not work outdoors, will often fish in the Mekong during their spare time in order to generate supplemental income for their families. As is evident, these “kitchens” provide just about everyone in the region with the essential supplies of life.

When the water level in Mekong River lowers, other ecological systems of the river such as *Khok*, beach, *Rong*, *Long*, and swamp are accessed. These areas are utilized in many different ways. For example men often fish at the *Khoks* while women grow vegetables on the fertile dunes.

Poh Oun Dhammawong<sup>6</sup> a fisherman from Baan Sai Thong, Chiang Khong district told us that, “the Mekong is an abundant river. In the past, women went for *kai* and men went for fish at various backwaters, beaches and rapids in the village. *Koh Saentor* islet was particularly popular among the fisher folk including those from Baan Had Buy, Had Sai Thong and Baan Don. No one owns the fishing ground.”

The normal fluctuation of water in the Mekong is an essential part of the complex ecological systems of the river. Without these fluctuations the rich variety of fauna and flora, which are an essential part of the food chain that affects people on both sides of the river, would not be able to flourish.

# An Overview of the Development Projects in the Upper Mekong

Since the 1980s, China has played an important role in the development of the Upper Mekong due to its 'Go West' policy and the Lancang Economic Belt policy. These policies have led to the creation of cascade hydropower dam projects, industrial estates, and the upper Mekong navigation channel improvement project, which is an attempt to allow large cargo ships to navigate from Simao in China to Luang Prabang in Laos PDR.

## **Cargo Ship Navigation and Rapid Blasting**

The cargo ship navigation project is a joint-venture between four countries in the upper reaches of the Mekong River. This project, which includes rapid blasting, has been spearheaded by China and supported by Burma, Laos and Thailand. A detailed survey, which was made possible by USD \$4.3 million, has already been carried out and the implementation of this project has been broken down into three phases.

*Phase One:* Blasting 11 rapids and 10 shoals to make possible the navigation of at least 100 DWT ships during 95% of the year.



*Phase Two:* Blasting 51 rapids and shoals to make possible the navigation of at least 300 DWT ships during 95% of the year.

*Phase Three:* Canalization to make possible the navigation of at least 500 DWT ships during 95% of the year.

As of now, the rapid blasting and canalization of the Mekong along the border of Burma and Laos has been completed and 300 DWT cargo ships can navigate to Chiang Saen. However, the plan to blast Khon Pi Luang rapids on Thai-Laos border has been halted due to a Thai Cabinet resolution issued on 8 April 2003. This resolution requests that the Ministry of Defense complete a new Environmental Impacts Assessment and a new waterway Terms of Reference before this phase of the project can be completed.

Recently, in late November 2005, the Yunnan authorities and the authorities of Northern provinces in Laos met to discuss plans for the canalization in Huayxai (opposite of Chiang Khong district in Thailand) through to Luang Prabang, where 15 dangerous rapids were cited as the obstacle to ship navigation.

### **Cascade dams in the Mekong River**

There are many dam projects in the works for the Upper Mekong. China plans to construct 13-15 dams for power generation including Manwan, Dachaoshan, Xiaowan, Jinghong, Nuozhadu, Ganlanba, Mengsong, Gongguoqiao, Gushui, Wullong, Lidi, Huangdeng and Miaowei.<sup>7</sup>

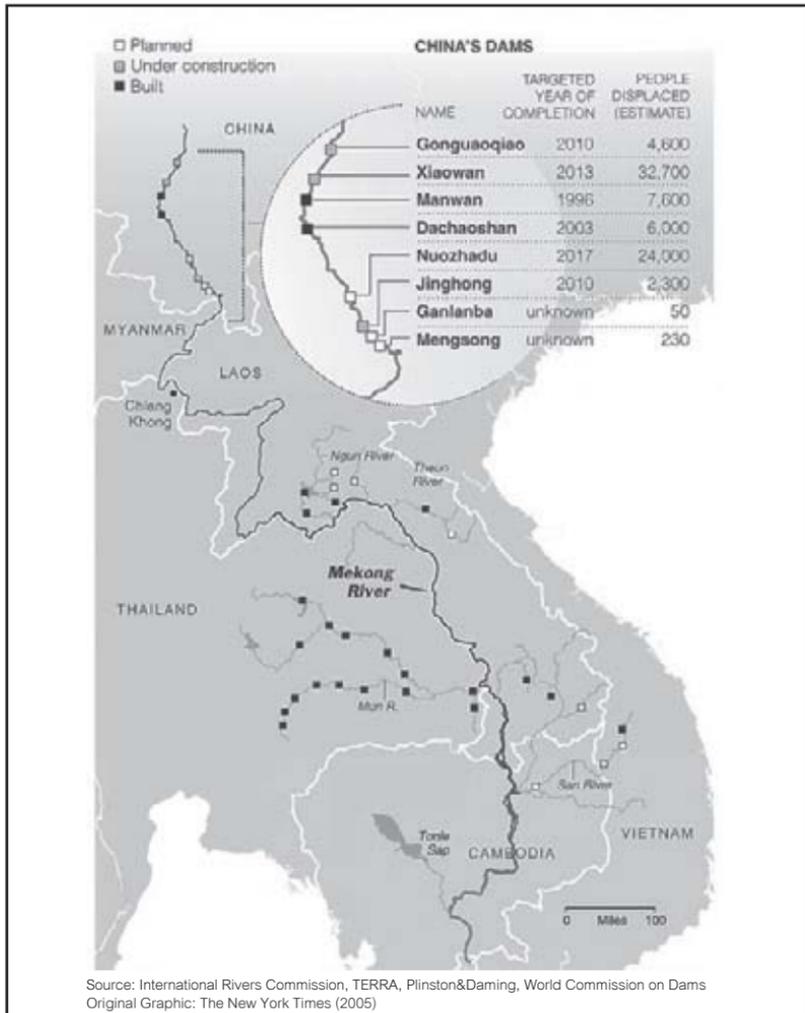


Jinghong Dam under construction

In addition, more dams will be constructed further upstream, north of Yunnan province, including Gushui, Huangdeng, Wunonglong, Lidi, Miaowei, Tuoba and Dahuaqiao.

At present, 2 dams, the Manwan (completed in 1996) and Dachaoshan, have been completed, while two other dams, the Xiaowan and Jinghong, are under construction. The latest dam project in the pipeline, which was

scheduled to begin late last year, is the Ganlanba dam in Xihoungbanna near the Burma-China border.



# Cross-border impacts of the development of the Upper Mekong

The development of the upper Mekong is causing an increase in many kinds of trans-boundary environmental problems affecting the areas along the river. These projects are affecting the natural water level and seasonal fluctuations of the river causing the stocks of fish to dramatically decline.

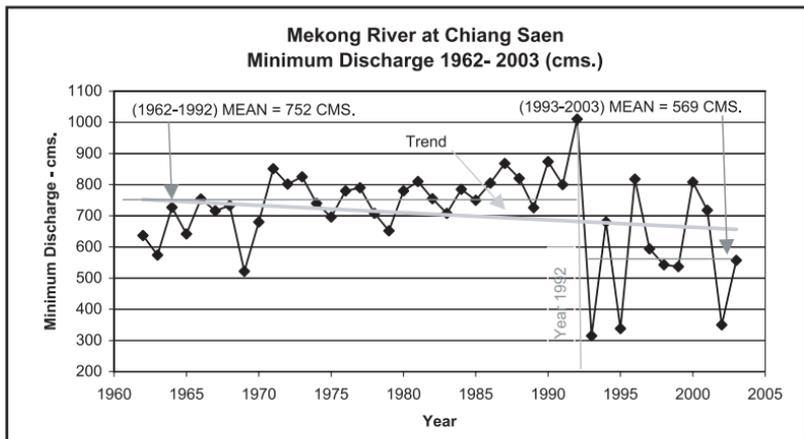
## **The decrease of minimum discharge**

During the dry season the discharge from the upper Mekong significantly affects the flow and fluctuation of the entire river. In the rainy season the discharge from the upper Mekong contributes very little to the water flow downstream because during this time water in the lower Mekong is supplied mostly from its many tributaries. This is not the case during dry season as many of the tributaries dry up and a greater percentage of the water is supplied by the upper Mekong. During this season, discharge from the upper reaches of Mekong has a significant impact on the water flows in lower Mekong.

Discharge from China may account for only 15-20% of the entire annual water flow of the Mekong, but during the dry season that percentage can rise to as high as 45% in Cambodia<sup>9</sup> and even higher in Thailand and Laos . This means that as the flow and fluctuation of the upper Mekong is disrupted and manipulated by the Chinese government all those who live

downstream will feel the effects of this manipulation. Without the normal seasonal fluctuations many of the native fauna and flora will wither away, taking with them the livelihoods of the people who are dependent on the river for their survival.

Recently, it has been found that the Manwan Dam has had a noticeable impact on the minimum discharge of the Mekong, especially in dry season. According to the Water Resource Department of Thailand's report on the water flow of the Mekong, the upper Mekong dams have decreased the minimum discharge of the Mekong by 25 % at Chiang Saen station. The study stated that during 1962-1992, before the Manwan dam construction, the mean of minimum discharge was 752 CMS (Cubic Meter per Second). However, during 1993-2003, the mean of minimum discharge was only 569 CMS<sup>9</sup>. He also found that there is a trend in an overall reduction of minimum discharge in the long term. This would mean that the entire volume of the Mekong water would be reduced.

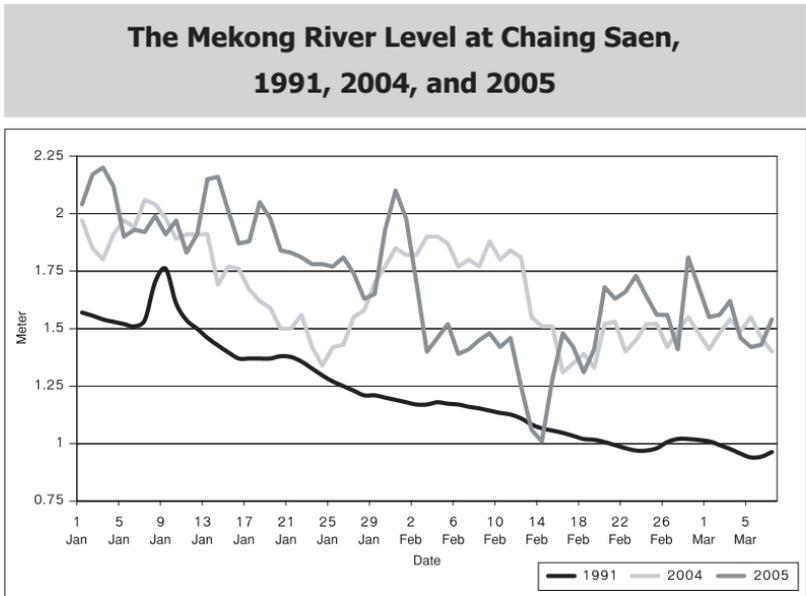


Source: Department of Water Resources (2004)

### Unusual Water Fluctuation

The development of the upper Mekong, including the rapid blasting for ship navigation and the construction of cascade dams in China, has inevitably impacted the downstream countries. The seasonal floods and droughts and the cycle of water levels in the Mekong have changed since the opening of the first dam.

Before the construction of the dams the water level in Mekong River peaked from August to December after which it receded to its lowest point in April. Since the dams have been constructed and the rapids blasted, the water levels in Mekong River have changed drastically, especially during dry season.



Source: Raw Data from Department of Water Resources

**December 9, 2005**



These pictures demonstrate the drastic and sudden fluctuation in the water levels at the Mekong River. The second picture was taken on December 13, 2005, just four days after the first at the village of Baan Cham Pong.

**December 13, 2005**





The constant changes of water levels due to power production of the dams and rapid blasting in Mekong River have had many negative impacts on the ecological systems in Mekong River. These development projects have directly impacted the fish and plant species and the way of life of people on both sides of the river.

### **The doom of the fish species**

Rapids blasting has caused extensive negative impacts on the ecological system of the Mekong River as it has destroyed the natural balance that once existed. An essential part of the ecosystem of the river lies in its many rapids. These areas play a significant role in the life cycles of many of the fish that live in the river. Rapids blasting destroys these essential habitats and causes the decimation the fish populations.

Dr. Chawalit Wittayanont, an expert on fish has said that, “if the rapid blasting of the Mekong River along the border of Thailand-Laos goes ahead, the impacts on the habitats and living grounds of fish will be immense.”

Based on the *Chao Baan Research*, we have found that the abnormal fluctuations of the Mekong have caused fish to stop migrating for feeding and spawning. This has led to a reduction in the amount of fish that the fisher folk can catch. Fish, such as barb (Pla Sroy) traditionally used for making fermented fish, used to be abundant, now they have become very hard to find because their migratory pattern has been disrupted.

# The agonies of the downstream people

The decreased water volume during the dry season and the severe fluctuations of water levels have gravely impacted the ecological system and communities on both sides of the lower Mekong River and its tributaries from Burma through Thailand. The following are some testimonies of local villagers living along the Mekong in Northern Thailand who have been affected by these changes.

**Poh Amnuay Sisai<sup>10</sup>** fisherman, Baan Naiwiang, Chiang Saen

“I used to fish up to Chiang Kok, Chiang Rak. There was a lot of fish there due to the many rapids for fish to live in. Further north from the Golden Triangle along the mountain range, the sand beaches are rare unlike in Chiang Saen where there are many rapids and fish can live in there. A lot of fish are there including big fish, at the Tang Or and Tang Slum. When I went to fish there, I stayed overnight on the rapids, but this is not possible now. I heard that the Chinese have blasted them all to allow the navigation of cargo ships. They need to remove them as there are many rapids in Tang Or and Tang Slum, and the channel flow is narrow. At the place where the port is being built, I could still manage to catch fish then. But after the port has been completed, no fishing boats can get near there as the waves caused by big ships might capsize our boats, so we have to move somewhere else.”

“In the past before the port was built, 20 of us could go lay the drift gill nets together, and if one of the gears got stuck on the wood under the water, some of us could dive down to release it. But now no one dares to dive, as we fear the waves from the Chinese cargo ships will capsize our boats. Since we’ve had this Chiang Saen port, the number of fish has reduced. More than 10 fishing boats parked at the bank of the river have been flushed over since the port became operational. When we went to report the ship’s owners that our boats have capsized because of their ships, they paid us very little compensation, maybe 1,000 baht, and some owners of the capsized boats got no compensation at all.”

“About 10 years ago, water from Mekong River was still drinkable. But now, it gets very muddy and itches me when I bath in the river. It can cause diarrhea. Water from Mekong used to be medicinal, now it has become toxic.”

**Poh Boonyoung Kaewdam, fisherman<sup>11</sup>** Baan Saew, Chiang Saen

“In the past, I used to go hunt giant catfish in a group. One person stayed on a platform or high ground with the river in full visibility and kept reading from the water flow what kind of fish would come up to see if there would be a big fish swimming upstream such as *Pla Kae*, *Pla Lerm* (*Pangasius sanitwongsei*) and giant catfish. The rest of us sat in at least 2-3 boats using big nets and those in the boats would listen to the person who watched the fish to learn which direction should we turn the nets. Then we sold the fish in the village and divided up the money among us.”

“But now there are fewer fish, We can no longer catch certain fish such as *Plaa Paimai*, *Plaa Ka*, *Plaa Sua*, *Plaa Lerm* (*Pangasius sanitwongsei*) and giant catfish.”

“Changes in Mekong River could be clearly observed since 1999-2000. Before that the changes were just trivial. Back then fisher folk like us lived a comfortable life. There were about 40–50 boats then, and those who were hard-working could fetch 30,000- 40,000 baht per month.”

“But now, the water fluctuates. The other day, the water rose, but today, it gets lower. Our fish traps can hardly catch anything now due to this abrupt fluctuations. Fish catch is quite minimal now. Comparatively, last year about this time, we could already catch *Plaa Mong*, *Plaa Mongyang*, *Plaa Kung*, *Plaa Kae*. But this year, none of us has even caught *Plaa Ka* (greater black shark) of more than 2 kilograms, which is normally a common species. Before, there were as many as 80-90 fishing boats in Pak Ing Tai village. Now there are not even 70 boats.”

“In the past 2-3 years, the fisher folk have had to use two layers of the nets to catch fish. Development in the Mekong River changes the directions of the water flow. Sand shoals in the middle of the river start to reemerge and the water current becomes stronger. The deep water channel, which used to be closer to the Lao side, now changes to near the Thai side.”

“The number of fish has reduced. Some can no longer catch any fish, they have to sell their land and move to various provinces to work in factories. Some have gone to sell things in the department stores or in the cities.”

**Thongpan Intawong, fish vendor and fisherman**<sup>12</sup> Baan Huay Luak, Wiang Kaen district

“About 10 years ago, there were lots of fish in Mekong River, but now even *Plaa Kao* (freshwater shark) is even hard to find. Since we catch

no fish, we can't sell anything and I cannot buy fish from other fishermen as no one has fish for sale. Now I have to quit buying fish, but I still manage to catch some, even though the number of fish has gradually reduced. There is no longer any pier for buying fish. It is not worth it, as there is no fish."

"There were lots of fish before, and I could buy and sell fish to earn hundreds or even several thousand baht. I used to earn a lot from this business. Scale-less fish cost 150 baht per kg., and I could sell it for 160 baht per kg. I bought fish from both villagers in Baan Huay Luak and from Laos, and also shipped the fish to various restaurants, markets, etc. Sometimes, they came to buy from us here."

"In the past, there were still many fisher folk, and lots of fish. We could earn up to 5,000 baht per month. But now it is hard to find. Some cannot catch anything even in a week. And the gas price keeps going up, so it is not worth it at all."

"Talking about changes in fish and the river, changes in past 5 years are much more pronounced. Compared to 10 years ago, the number of fisher folk has drastically reduced. People at working age who can no longer catch enough fish have gone to work in cities, even younger children."

**Poh Chaima Maikamwong, fisherman**<sup>13</sup> Baan Naiwiang Chiang Saen

"I started fishing when I was 10 years old. Mostly I went with my parents to fish in the Mekong River. There were lots of fish then. When I got married, the income from fishing helped me to sustain livelihood of my family."

“The Mekong was quite deep then but now it has become shallower. There used to be deep channels in various spots. Now it looks as if the riverbed has been flattened.”

“During dry season, Mekong River was low and it rose again during rainy season. Yes, when it went down, it was very shallow so that on certain spots we could walk across. But when the rain came, the water flowed over and the places that became swamps during dry season, were flushed away.”

“Compared to the past, fish catch has reduced immensely. Maybe more than 50%. We used to earn, say, 1,000 baht a day, now it's probably about 100-200 baht.”

“Since the installation of Chiang Saen port, the number of fisher folk in this area has greatly reduced. There used to be more than 100, now it's about 60, maybe about 50 local people. The number of fisher folk has reduced because we can no longer catch enough fish. The number of fish has reduced, not because the number of people has increased but because the river has changed. Rapids, which are home for the fish, have been completely been removed. Where else can the fish live?”

“Maybe in the next 10 years, we will not be able to fish in the Mekong River anymore and we will have to resort to eating canned fish or fish from the farm.”

“People who live with the Mekong River know about this abnormal fluctuation, but the business folk, how can they know?”

**Poh Son Intharawong, fisherman<sup>14</sup> Bann Pak Ing Tai**

“There used to be a lot of fisher folk in Baan Pak Ing, and lots of fish catch, too. But now the fish catch has greatly reduced, so has the number of fisher folk. Fishing is no longer our main occupation, though we still fish in the Mekong and Ing Rivers all year-round for food and to earn some income. It is not much, but enough for survival. We were not indebted then, so it was more comfortable. But now that we are heavily indebted, we have to keep looking for money.”

“The Mekong River in the past is so different from now. At the pier here, we were still able to grow vegetables. Now it is not possible. There is sand, the water channels have changed and soil erosion has become more critical. In the past 3-4 years, the water current has become stronger. The deep-water channels used to be nearer to the Laos side, now they have changed the course, and even at the delta of Ing River, you will find the sedimentation of sand. It was not like that before.”

**Poh Thonglor Chaiwaong, fisherman<sup>15</sup> Baan Champong**

“The water in the Mekong River rises a great deal during August and starts to recede in around December. 10 years ago when it lowered, we could walk across. But it has changed now.”

“Now, during dry season, we tied up the boat at the bank of the river in the evening, in the morning, the river was completely dry. Sometimes, the river rises for three days and lowers for two days straight. Water fluctuation like this makes us unable to fish. Some folk went over to Baan Dan to fish, as there were deep channels there. But they could not catch big fish like in the past anymore. There used to be over a hundred of fisher folk in Baan Champong, now, it's probably about 50-60.”

**Poh Luang Boonkong Boonwat,**<sup>16</sup> fisherman and headman of Pak Ing Tai

“The fisher folk in Baan Pak Ing fish in both the Ing and Mekong Rivers. They go to the Ing during rainy season as water from Mekong floods the Ing, and there are lots of fish from Mekong swim to spawn in the Ing. Water in the Ing River is warmer than the Mekong. Most of the fish caught in Ing River were migratory fish from the Mekong. Water from the Mekong can flood the Ing River up to Baan Sri Lanna, and just overnight, the water level lowers and there are lots of fish in the Ing River then. But during November–March, fish swim from Ing to Mekong River, as the water level there lowers.”

“But now the water fluctuates and once the number of fish in Mekong reduces so does the fish in the Ing as they come from the same source. Fisher folk like us have to grieve as we cannot fish.”

**Mae Chaweewan Puangsombat, *Kai Women Collector Group***<sup>17</sup> Baan Had Krai, Chiang Khong District

“We could then clean the *kai* three times a day and dry it out to sell for 300-500 baht. Women got together and collected *kai* to generate income. The Mekong River gave us everything. Women grew vegetables and collected *Kai* on the bank of the river, whereas men went fishing. We lived happily then.”

“But now, Mekong River fluctuates and becomes muddy and dirty. *Kai* cannot grow in these conditions. Sometimes when it shoots up, and suddenly the water recedes, it dies. Oil spilled from big ships and the dirty sediments makes the *kai* dirty and inedible, not like before.”

“In the past 4-5 years, we have hardly been able to collect *kai*. The housewife group suffers as we have no income. We have to go buy

*kai* collected from Ngao River in Laos because we can find none of it here in Had Krai. The Mekong River has changed.”

**Mae Wan Suwat, fisher and *kai* cultivator<sup>18</sup>** using small fishing gears near the river bank in Baan Hua Kwan, Chiang Saen

“I was born and raised here and have been fishing in the Mekong River with my parents since I was very young. Our *lung* (fishing ground) was near Koh Padam-Koh Manokhet (islets) next to Baan Saew. 10 years ago, Mekong River was very rich, most people in this village fished. Some fished for their consumption, some for sale. We caught many fish including *Plaa Kod* (a kind of catfish), *Plaa Khob*, *Plaa Bok* and some rare fish such as the giant catfish and *Plaa Lerm* (*Pangasius sanitwongsei*).

“During rainy season in the past, the color of Mekong River was muddy red like the dirt and some wild grasses and logs floated along and we could collect them for firewood. Now, the color of the river has changed to dark grey and there are less wild grasses and logs, only more garbage.”

“Mekong River has constantly changed, but the changes were most pronounced about 8-9 years ago. There has



been more soil erosion, more shoals emerging at odd places like at the pier here, particularly during the dry season in 2004.”

“*Kai* grows a lot in Koh Padam Nok and at the pier of Wat Baan Saew. We had some bamboo strips by our wrest and go for *Kai* and clean it, and use the strips to tie it in bundles and carry them back home at the ends of a pole across our shoulders.”

“But as I have observed, in the past 6-7 years, the number and duration for cultivation of *kai* has reduced and the water in Mekong River fluctuates. From predictable timing, now the water rises and lowers at odd hours, and the *kai* cultivators have to suffer.”

**Mae Wai Boonnak, vegetable grower by the Mekong River**<sup>19</sup> Baan Had Krai

“Since 2003, the banks [of Mekong River] have become narrower. But as there are more people who want garden, we have to learn to share the land.”

“Most of the vegetables grown are for sale at the morning market in Chiang Khong, In some evenings, we sell them at the market in Baan Had Krai. Sometimes, people come here to buy at our place. They sell like hot cakes. We can sell them for around 300 baht per day. It is hard to imagine why so many people want to buy them. This is probably because I don’t use any chemicals with my vegetables. That’s why so many people want to buy them.”

“But since they started to blast the rapids in the upper Mekong, the water channels have changed their course and more water flows to our side causing soil erosion until we have little land to grow on. It is not reliable to place hope on the banks of Mekong, as during some years, the

banks become very narrow, though some years, they may be large. The land there is very fertile though due to the natural fertilizers flushed by the river. We do not have to add fertilizer.”

“When the water lowers quickly, we have more land to till. But now, it lowers quickly, but rises quickly, too, very unpredictable. The vegetable gardens of people in Baan Wat Luang have often been flooded due to this unpredictable fluctuation.”

“I am quite old and have no way out to earn my living. Those who have enough money can find something else to do. But I have been living like this for too long, and it is difficult for me to change. I don’t have the skills or the money.”

# Recommendations

1. There should be more timely and systematic efforts to conduct research and compile information that will help to document the impacts of the development projects in the upper Mekong.
2. All riparian governments in the Mekong basin should review their decision-making methods and policy concerning large-scale development projects by heeding the 7 strategic recommendations made by the World Commission on Dams<sup>20</sup>. They should particularly abide by the strategic recommendations regarding the utilization of international rivers for peace and the requirement to consult with downstream countries whose livelihoods depend on the river before any project implementation

## Footnote

- <sup>1</sup> "Mekong: The River of Life and Culture", Chao Baan Research (Thai Baan Research) , by the research team of villagers in Chiang Khong and Wiang Kaen districts
- <sup>2</sup> Interview at Baan Wiang Kaew, 4 April 2005
- <sup>3</sup> Interview at Baan Pak Ing Tai, 17 December 2005
- <sup>4</sup> Interview at Baan Had Krai, 7 January 2006
- <sup>5</sup> Interview at Baan Had Sai Thong, 8 January 2006
- <sup>6</sup> Interview at Baan Had Sai Thong, 8 January 2006
- <sup>7</sup> Xinhua Yunnan Channel, July 21, 2004
- <sup>8</sup> Blake, David (2001), "China's Lancang Dams Endanger Millions both Upstream and Downstream." International Rivers Network World Rivers Review, Vol 16, No 3.
- <sup>9</sup> Department of Water Resources, Report on Water Flow of the Mekong River, Bangkok, 2004.
- <sup>10</sup> Interview at Baan Nai Wiang, Chiang Saen district, 21 October 2005
- <sup>11</sup> Interview at Baan Saew, Chiang Saen district, 25 September 2005
- <sup>12</sup> Interview at Baan Huay Luak, Chiang Saen district, 24 October 2005
- <sup>13</sup> Interview at Baan Nai Wiang, Chiang Saen district, 21 October 2005
- <sup>14</sup> Interview at Baan Pak Ing Tai, 17 December 2005
- <sup>15</sup> Interview at Baan Cham Pong, 10 December 2005
- <sup>16</sup> Interview at Baan Pak Ing Tai 17 December 2005
- <sup>17</sup> Interview at Baan Had Krai, 8 January 2005
- <sup>18</sup> Interview at Baan Saew, Chiang Saen district, 25 September 2005
- <sup>19</sup> Interview on 16n January 2006
- <sup>20</sup> World Commission on Dams (2000), Dams and Development: A New Framework for Decision-Making