

Summary of Thai Baan (Villagers') Research at Chiang Khong

Thai Baan Research at Chiang Khong had been undertaken by 146 village researchers from 13 Mekong-riverside communities of Chiang Rai province. The research area covers the Mekong River from Khon Pi Luang raids in Chiang Khong District to Pa Dai, Wieng Kane District. The research addressed the following issues (1) fisheries, (2) river ecosystem, (3) plants and vegetation, (4) traditional fishing gear, (5) dry-season riverbank vegetable garden and, (6) social, economic and cultural issues in local context.

The methodologies were developed from the first Thai Baan research undertaken at Pak Mun. The methodologies applied to each issue involved participatory observation, focus group discussion, in-depth interview, validation of data by local experts, data classification and analysis. For each research issue there are research volunteers who helped the Thai Baan researchers in practicalities and logistics of conducting the research.

This report presents a summary of the findings of the Thai Baan research conducted during August 2003 to June 2004.

The research found that the Mekong River at Khon Pi Luang Rapids area hosts a complex riverine ecosystem consisting of 11 different sub-ecosystems, which is dependent on seasonal water level of the Mekong River. For in stance, *Pha*, *Kok*, *Don* (sand bar), *Haad* (sand or pebble beach), *Rong*, *Long*, *Nong* (pond), *Jam* (larger rapids that make whirlpool), *Huai* (stream), *Rim Fang* (riverbank), *Gwan*, etc. Some of these sub-ecosystems are vital habitats and spawning grounds for fish, as well as important fishing ground for fishers. For example, the *Kok* sub-ecosystem, in dry season when the water is lower than five meter, is fish habitat and spawning ground. The sand bar that emerged during dry season is also habitat and spawning ground for many bird species.

It is found that there are 100 fish species in the Mekong within the research area. Among these fish species, 88 are native species (39 without scales and 49 scaled), while 11 are alien species. Out of 88 native species, 14 are rare species. These fish species live in the complex ecosystem of the mainstream Mekong, while some migrate

to tributaries for reproduction. One of the critical endangered and rare species is the Mekong Giant Catfish, the world's largest scale-less fresh water fish, which can be found only in the Mekong and its tributaries. The research found a spawning ground of the Mekong Giant Catfish in the Mekong along Baan Muang Karn to Baan Saew.

Fishing gear was an important issue to address for several reasons. Fishing gears are good indicators of how traditional knowledge is passed from one generation to the next, and contain a web of knowledge about how nature and community interact with each other. Fishing gears also represent the rights and relationships among community members as fishing gears serve as markers of each fisher's fishing ground. The research found that there are 71 traditional fishing gears used by the local fishers, 9 of them are no longer used.

The rapids are also where various plants live. Out of 201 plants recorded by the researchers, 65 species live on the riverine sub-ecosystems. These plants are utilized by the locals in many ways including food, herbal medicine, fishing gears, etc. One of the most important plants is *Kai* or Mekong seaweed, growing on rapids and pebbles during dry season when the water is clear with sunlight. *Kai* is important for local economy, especially for women who can earn income from *Kai* picking. Moreover, *Kai* is also an important food for fish.

During dry season, emerged sand beach and sand bar are riverbank gardens for the locals in both Thai and Lao soil. Many kinds of vegetables such as soy beans, cabbages, lettuce, and corn, are grown on this seasonal agricultural land. The land for riverbank garden is also common property, shared among villagers. Each year the land emerged is different in size, but always manageable by the villagers. Since dry season of 2003, the unusual water fluctuation of the Mekong, and riverbank erosion, has destroyed many gardens especially in Baan Don Ti.

It was found that local fishers are organized into groups, sharing "*Lang*" or fishing ground, which is considered as common property of communities. Fishers have to respect the rules of each *Lang* set up by fishers in communities. Along Thai-Lao border in Chiang Rai province, there are 11 important *Luang*, managed by fishers in communities.

Communities along the Mekong River believe that there are spirits that protect the river, as well as fishing ground. When they fish, fishers pay respect to the spirits and ask for a good catch. There are ceremonies related to the river, such as Lai Rua Fai that villagers pay respect to the river.

The research suggests that the changes of the Mekong River caused by Upper Mekong development have affected the local livelihoods in many ways. During the last few years, changed waterway, bank erosion, and water fluctuation, have led to the destruction of the riverine ecosystems, reduction of fish population and *Kai*. Bank erosion has made villagers lost their homes and farmland. River bank vegetable garden has also been affected by the unusual water fluctuation.

The impacts have been more fatal during the Mekong rapids blasting along Burmese-Lao border since 2001. Fish migration pattern has been affected by the changed ecosystem. Fish haul has decreased for 50 percent.

For the Mekong fishers, the unprecedented crisis of the Mekong does not only threaten their food security and well-being, but also their livelihoods and self-reliance. Many of them are landless fishers who fish for their living and have no other options available.

The crisis on the Mekong still continues with two more dams under construction in China and many more planned dams will block the flow. More rapids along Thai-Lao border will be blasted for navigation.

