A way of life threatened

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Laos

The Nam Theun 2 hydroelectric project will double water levels in the Xe Bang Fai River in central Laos and destroy the self-sufficient lifestyle of the thousands of people living along its banks

Living all of his life on the Xe Bang Fai River, Sombath has been ferrying people from their villages to the market at the Route 13 bridge and back for more than 20 years. "I wake up early to catch fish for my family." he says, "Then I drive my ferry to help people go to the market."

Asked if he had heard about the proposed Nam Theun 2 Hydroelectric Project, Sombath laughed as he drove a boatload of passengers. "We have heard of it – more water, more fish!!"

But Sombath became serious after dropping his passengers off at the bridge. "We do not know much about the dam. We hear that it will change our Xe Bang Fai, with much more water. We are worried. How could we live if the dam damages our river? How could we live without fishing?"

One of the few remaining large rivers in the Mekong Region that is not affected by a large dam, the Xe Bang Fai River flows through Khammouane and Savannakhet provinces in central Laos. Riding in a boat along the Xe Bang Fai, one can see a way of life that has all but disappeared along dammed rivers like the Mun in northeast Thailand and the Sesan in northeast Cambodia.

From its headwaters in the Annamite Mountains to its lowland flood plain at its confluence with the Mekong, hundreds of communities and tens of thousands of people depend on the fisheries of the Xe Bang Fai as a source of food and income.

The Xe Bang Fai River is home to one of the most productive fisheries in the Mekong River basin. During the dry season, local people fish in the deep pools and rapids. Every year, from May to August, and from October to December, the seasonal rise and fall of the Xe Bang Fai's waters trigger massive upstream and downstream migrations of fish within the Xe Bang Fai basin, and between the Xe Bang Fai and the Mekong rivers.

"Fish from the Xe Bang Fai swim into the smaller rivers and streams, then into the wetlands and fields," says a fisherman who lives on the Xe Noy River, about 20 kilometres from the Xe Bang Fai. "Some fish stay in the Xe Noy during the dry season and we catch them in the rapids. But around the twelfth month [around November], most of the fish we catch are swimming down the Xe Noy, returning to the Xe Bang Fai."

Fish catches vary considerably by season, with highest captures within the Xe Bang Fai occurring during the dry season. While the Xe Bang Fai is the greatest source of fish in the area as a whole, other sources, including tributaries, swamps, back ponds and paddy fields, are highly significant, collectively equalling some 44 per cent of the total annual fish catch. Within the Xe Bang Fai as a whole, fish catches are some 20 per cent higher in the dry season than in the wet, according to a socio-economic study done by provincial authorities.

The importance of fishing, as well as collection of other aquatic animals like snails, crabs and shrimp, to local families and communities is obvious everywhere along the Xe Bang Fai River and its tributaries. The

harvest of fish during the dry season is accompanied by the cultivation of vegetables on the fertile river banks. As the water levels drops after the rainy season, families plant a large variety of vegetables along extensive areas of riverbank.

Many communities along the Xe Bang Fai engage in community-managed fisheries, particularly during the dry season. During the rainy season, the river floods natural ponds and depressions in the land. When the waters recede, many fish remain in these ponds and depressions, unable to return to the river. Often a community will decide to prohibit fishing in these areas for a few months, then choose a day when the whole community can come together to catch the fish. These are great social events and have a party-like atmosphere.

"On the day of fishing, first we all have a ceremony for the village spirit, and we ask the spirit to provide our village with fish," says a village elder in the Nong Sok wetlands. "Then we wait, and then the fish begin to swim close to the surface of the water."

This shows that the village spirit is happy, and the fishing begins. There are 80 families in the village, and on the day of fishing each family is able to catch about 20 kilograms of fish.

An uncertain future

Unfortunately for the people of the Xe Bang Fai, their fisheries and way of life are facing a grave threat. A consortium of French and Thai companies is proposing to build a large hydroelectric dam, the Nam Theun 2 project, that would change the river and the lives of these communities forever.

(On the Nam Theun, one hydropower dam, the Theun Hinboun, has already been built and began operation in April 1998. Four other dams, the Nam Theun 1, 2, 3 and 4 remain in the planning stages. Of these the Nam Theun 2 is at the most advanced stage of planning.)

The World Bank and the Asian Development Bank will soon make decisions about providing funding and risk guarantees for the project. The 1,000-megawatt hydroelectric project would be built to export the electricity to Thailand. At a cost of more than US\$1 billion (Bt41.5 billion), it is by far the largest infrastructure project presently proposed in Laos.

The dam would be built in the Nam Theun River Basin, but the water from its reservoir would be diverted into the Xe Bang Fai River Basin. According to project plans, Nam Theun 2 would divert up to 330 cubic metres of water into the Xe Bang Fai every second. This would almost double the amount of water in the Xe Bang Fai from its natural volume of 7,745 million cubic metres (mcm) per year to 14,645 mcm per year.

The increase in the volume of water in the Xe Bang Fai would result in water levels up to 4.5 metres higher than natural levels. During the dry season, the water levels in the Xe Bang Fai would be similar to levels that naturally occur only during the rainy season.

The impacts of the massive diversion of water into the Xe Bang Fai are predictable. River-bank vegetable gardens would be permanently flooded. Riverine forests that are an important rainy season habitat for fish and other aquatic animals would be destroyed. Aquatic plants, snails, mussels and shrimp – important sources of food and protein for local people – would disappear. The frequency and depth of natural floods that occur in the lower Xe Bang Fai basin, which sometimes damage rice crops, could be increased by the water released from Nam Theun 2.

Most worrisome, the main impact of the Nam Theun 2 project would be on the fisheries of the Xe Bang Fai River. As the natural, seasonal rise and fall of the Xe Bang Fai would no longer occur, fish migrations between the Mekong and the Xe Bang Fai rivers might stop or be severely reduced, as would the

movement of fish between the Xe Bang Fai and its tributaries and wetlands. The permanently high water levels would flood the rapids and deep pools that are essential for fishing during the dry season.

"A collapse in the aquatic food chain in the Xe Bang Fai is predicted to occur," according to the Social Development Plan of the Nam Theun 2 Power Company (NTPC).

In a World Bank-organised workshop about Nam Theun 2, held recently at the Asian Institute of Technology in Bangkok, NTPC representatives were unable to provide accurate figures of the total number of people whose lives would be affected by the collapse of the Xe Bang Fai food chain.

Chris Flint of NTPC claimed that "according to our experts, only the Xe Bang Fai will be impacted, not the tributaries or wetlands."

"Your experts are wrong," a workshop participant immediately responded.

For the tens of thousands of people in the Xe Bang Fai River Basin, the future is starting to look very bleak.

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