MZW-12 SOUTHEAST ASIA

Matthew Wheeler, most recently a RAND Corporation security and terrorism researcher, is studying relations among and between nations along the Mekong River.

Blasted River: Dilemmas of Mekong Navigation

By Matthew Z. Wheeler

JUNE, 2004

"The navigability of the Mekong ...there is a task worthy of raising the passions of our century with its love of great undertakings...." -Admiral Paul Reveillère, 1877

"This project is mainly to explode and remove the reefs and the rock plate protrudings [*sic*] hindering navigation. Construction methodology is uncomplicated and the state-of-art is ripe. Therefore, it is technically feasible."

–Joint Survey on the Feasibility of the Waterway Improvement Project on the Upper Mekong River from China-Myanmar Boundary Marker 243 to Ban Houayxai of Laos, signed by representatives of China, Laos, Myanmar and Thailand, 2000

CHIANG KHONG, Thailand–The fate of the Mekong, the longest river in Southeast Asia — the 12th longest in the world — is on hold. But just barely.

By the time I went to have a look at the Khon Pi Luang Rapids one morning this past April, it was the last major set of Mekong rapids upstream from this river town that hadn't been dynamited. All the other major rapids and shoals between China and Thailand had been blasted away by Chinese engineers as part of the Upper Mekong Navigation Improvement Project, a scheme designed to turn the famously difficult-to-navigate river into a smooth-flowing artificial canal for cargo boats.

Destruction of the last rapids had been averted in April 2003, when Thailand's Ministry of Defence, concerned that blasting might prejudice Thai border negotiations with Laos, prevailed on the Thai Cabinet to suspend the project. Pending



The Chinese boat at Khon Pi Luang, Mekong River, Thailand, April, 2004

ICWA LETTERS

Since 1925 the Institute of Current World Affairs (the Crane-Rogers Foundation) has provided long-term fellowships to enable outstanding young professionals to live outside the United States and write about international areas and issues. An exempt operating foundation endowed by the late Charles R. Crane, the Institute is also supported by contributions from like-minded individuals and foundations.

TRUSTEES

Bryn Barnard Joseph Battat Mary Lynne Bird Steven Butler Sharon Griffin Doorasamy William F. Foote Peter Geithner Gary Hartshorn Kitty Hempstone Katherine Roth Kono Cheng Li Peter Bird Martin Dasa Obereigner Chandler Rosenberger Edmund Sutton

HONORARY TRUSTEES

David Elliot David Hapgood Pat M. Holt Edwin S. Munger Richard H. Nolte Albert Ravenholt Phillips Talbot

Institute of Current World Affairs The Crane-Rogers Foundation Four West Wheelock Street Hanover, New Hampshire 03755 U.S.A.



Chinese workers doing who knows what to a Thai rock at Khon Pi Luang

a new environmental assessment and an agreement with Laos defining the border, the blasting of the Mekong's rapids stopped — or so they said.

So, I was surprised upon reaching the Khon Pi Luang Rapids to find a ship moored by the Thai river bank flying the red flag of the People's Republic of China. What was it doing there? And what about those gentlemen with hammers and drills and planks of wood doing, scrambling over the prominent black rocks?

"They shouldn't be here," said my boatman. He was also taken aback to see a Chinese vessel there.

I took photos as we motored past. Some of the men on the Chinese boat waved, but the boatman declined to get closer. I could just make out letters spelling "China" on the back of one worker's red jacket.

Later I learned from an environmental activist here in Chiang Khong that some Thai villagers had confronted the Chinese that afternoon, demanding to know what they were doing and by what authority. The Chinese produced a document from Thailand's Harbor Department. The document carried no signature, however, and the Chinese finally retired.

Whatever the Chinese mission that day (they may have been installing navigational aids), they were in the process of carrying out the "great undertaking" that had awakened the passions of French imperialist Admiral Reveillère. And although the Chinese, with the advantage of a century's technological advances, have so far carried out the project with a kind of nonchalance and sense of entitlement that suggests inevitability, the scheme to make the Mekong safe for large-scale commercial shipping can still stir passions, especially among environmentalists and fisherfolk who see it as a notso-great undertaking.

The Dream and the Scheme

Stretching nearly 2,600 miles, the Mekong River is the world's 12th longest, the eighth largest by runoff (or volume of water), and the longest in Southeast Asia. With headwaters in Tibet, the Mekong courses through China's Yunnan province, where it is known as the Lancang Jiang, before flowing between or through Burma, Laos, Thailand and Cambodia. Here, during the rainy season, the mighty Mekong reverses direction, swelling Cambodia's great Tonle Sap lake to four

times its dry-season size. Entering southern Vietnam, where the Mekong is known as Cuu Long, or "Nine dragons," the river splinters and drains into the South China Sea, depositing nutrient-rich sediment in the rice-growing region of the delta. The Mekong River ranks third in the world, after the Amazon and the Congo, in biodiversity. More than 60 million people live in the basin, many of them dependent on the river for their livelihood.

The Mekong is one of the least developed and least spoiled of the world's major rivers. Unlike the other rivers that flow through the valleys of mainland Southeast Asia—Burma's Irrawaddy, Siam's Chao Phraya, Vietnam's Red River—the Mekong never nurtured a unified political entity after the fall of the Angkorian empire in the 14th century. Peculiarities of geography and history conspired to make the Mekong a frontier, an international border river, and its basin a politically-fragmented economic backwater. The wars and ideological enmity that divided mainland Southeast Asia for the last



A bend in the river. The Mekong, with Laos on the far side, between Chiang Khong and Wiang Kaen.



half of the 20th century ensured that the river was neither blessed nor cursed by economic development.

In the 19th century, the Mekong appeared to French imperialists to be a promising "river road" to the commercial promised land of China. Several ambitious French naval officers, and the men they commanded, expended enormous but fruitless effort to realize a dream of river trade between China and their Indochinese colony. They were defeated above all by the Khone Falls, below Si Pan Don (the 4,000 Islands), where the river today leaves Laos and enters Cambodia. By the early years of the last century the French had surrendered the dream, and though small boats continued to be used for cross-river trade, it fell to the Chinese to revive the notion of the Mekong as major international trade route.¹

China first proposed destruction of reefs and shoals in the upper Mekong River as far as Luang Prabang in Laos in 1992. The plan aimed to make the river safe for navigation by boats much larger than the narrow 40- to 60deadweight tonnage (DWT) vessels used by Lao long-distance traders on the Mekong. The kind of large-scale commercial transportation envisioned by China demanded changes to the natural state of the river.

It is no coincidence that the Chinese proposed to "improve" the upper Mekong in the early 1990s. The Mekong had been a Cold-War frontier, dividing the communist countries of Indochina from capitalist Thailand. With the end of the Cold War and a settlement of the conflict in Cambodia came talk of a "peace dividend" in Southeast Asia. This was the era of "turning battlefields to marketplaces," in one former Thai Prime Minister's memorable phrase. The Mekong, which had for so long evoked war and turmoil, appeared ripe for regional cooperation and economic development.

A number of initiatives and institutions were launched to capitalize on the newly-achieved regional peace. In 1992, the Asian Development Bank launched the Greater Mekong Subregion (GMS) project, a series of infrastructure and trade promotion schemes designed to integrate the economies of mainland Southeast Asia. In 1995, the Mekong River Commission was established when Cambodia, Laos, Thailand and Vietnam signed the Mekong Agreement

on Sustainable Development of the Mekong River Basin. Tracing its roots to the Mekong River Committee established with U.S. support in 1957, the revived MRC is an intergovernmental organization that, according to its "vision statement," seeks "an economically prosperous, socially just and environmentally sound Mekong River Basin."

Beijing has declined invitations to join the MRC, fearing that participation could constrain China's development options and impinge on its sovereignty. Nevertheless, China was eager to capitalize on the emerging spirit of Mekong-region economic cooperation, which offered opportunities for development in Yunnan, one of the PRC's poorer and more remote provinces. In the early days, the preferred initiative was the Upper Mekong Economic Quadrangle, comprising Yunnan Province, Upper Burma, northern Laos and northern Thailand. The Economic Quadrangle concept reflected the 1990s craze for

¹ See Milton Osbourne, *River Road to China: The Mekong River Expedition, 1866-1873,* London: Allen and Unwin, 1975. INSTITUTE OF CURRENT WORLD AFFAIRS transnational geometric economic plans - socalled growth circles and triangles designed to exploit complementary economic resources across borders of neighboring countries. though the Quadrangle concept has been largely absorbed by the ADB's GMS project, the logic of the growth-area is unchanged. In this case, the idea is to link untapped natural resources, especially in Burma and Laos, with markets and industrial capacity in Thailand and Yunnan by developing transportation links and promoting trade between the four countries. In addition to building roads linking northern Thailand to Yunnan's capital Kunming via Burma and Laos, China proposed to clear the upper Mekong of obstructions to permit commercial-scale navigation.

The Chinese rationale for using the Mekong for trade was simple and seductive. The grow-

ing agricultural and industrial output of Yunnan needed markets and the means to reach them. Until very recently, road links between Yunnan's capital Kunming and Chiang Rai in northern Thailand via Burma's Shan State and Luangnamtha in northern Laos, where they existed, were terrible. The Mekong River offered the shortest distance between Yunnan and Thailand's excellent highways, ports and the world beyond.

Most export cargo from Yunnan is shipped via river or rails to Shanghai or other east coast ports. That trip may take from two weeks to a month or more. As the director of the Thai port at Chiang Saen explained, "Produce from Yunnan takes weeks to reach the sea via Shanghai. If it comes down the Mekong river to Chiang Saen before being trucked to Laem Chabang [port in Bangkok], it takes only two days." Chiang Saen port is the first link between the river and the Thai road network. The navigation project, then, is not only about Sino-Thai trade, but also about southwest China's access to the world.

The "Agreement on Commercial Navigation on Lancang-Mekong River Among the Governments of the People's Republic of China, The Lao People's Democratic Republic, the Union of Myanmar, and the Kingdom of Thailand" was signed by transport ministers on April 26, 2001, in Tachilek, Burma. The agreement provides for the opening of river ports in each country and freedom of navigation for vessels of the signatory countries.

There remained the problem of upper Mekong navigability. In its natural state the upper Mekong is studded with rocks, reefs and shoals that make navigation treacherous. Chinese authorities making a case for the navigation-improvement project noted



A typical Lao cargo boat, about 60 DWT. These boats are used mostly for trade between Luang Prabang and Chiang Khong/Huay Xai and can navigate the river year-round.

the high percentage of boat accidents resulting in loss of lives and cargo that were caused by collisions with rocks. Most of these accidents occurred in the stretch of river between Jinghong and Chiang Saen. The risk of accidents increased during the dry season, forcing a regular and extended lull in shipping.

In fact, experienced boatmen can navigate year-round in the long, slender boats used by Lao traders. These boats, generally around 60-DWT, are designed to slip through the rapids. I traveled on one such boat from Chiang Khong to Luang Prabang in December, when the water level was relatively low. The danger presented by jutting rock formations that rushed past was clear, but so was the skill of the skipper who guided the boat through the swirling current.

Large-scale, commercial navigation demands use of boats that cannot safely navigate the natural river. The initial plan for channel improvement called for three phases of work. The first phase was to clear 11 reefs and



A rock marked by Chinese engineers in the course of their work on the Mekong Navigation Improvement Project Courtesy of SEARIN

10 shoals from a 331-kilometer section of the Mekong between the China-Burma border down to Ban Huay Xai, the Lao town across the river from Chiang Khong. This would allow navigation by 150-DWT vessels for 95 percent of the year. Phase 2 involved further improvements that would permit 300-DWT vessels to operate. Finally, phase 3 would canalize this stretch of river, allowing trains of four 500-DWT barges to be towed. The project methods, according to a report on its feasibility, include exploding and otherwise removing reefs and shoals, building dikes and dredging. The third phase now appears to have been shelved, but uncertainty about Chinese intentions with respect to the first and second phases remains.

What is envisioned, then, is a calm, ______ *Continued on page 6*

Dammed If You Do ...

The plan to blast rapids in the upper Mekong is by no means the most significant intervention on the river. That distinction belongs to the so-called Lancang cascade, a planned series of eight dams in Yunnan province.

According to the MRC, the Mekong has the largest undeveloped hydroelectric potential of any river basin in the world. Some 70 percent of that potential is concentrated in Yunnan province, where the Lancang (Mekong), plunges 800 meters through narrow gorges over a 750-kilometer stretch.



Lancang-Mekong Cascade. Courtesy of International Rivers Network

In Yunnan, that potential can no longer be called undeveloped. Two dams have already been completed on the Mekong mainstream: the 1500-megawatt (MW) Manwan, completed in 1993 and the 1350-MW Dachaoshan, which came on-line in early 2003. The largest of the proposed Mekong dams is the Xiaowan, which at 292 meters, will be the second-largest impoundment dam in China after the Three Gorges, and one of the largest in the world. Xiaowan (it means "Little One," I'm told) is slated for completion in 2012, and is expected to generate 4200 MW, much of it destined for transfer to electricity-hungry Shanghai. Some of the cascade's electricity will be sold to Thailand, which, with its investment in the Jinghong dam, is the first foreign country with a stake in a Chinese hydroelectric project.

The irony is that China is embarking on this dambuilding spree at a time when consensus about the costs of large-scale dams is growing. The World Commission on Dams, established by the World Bank and the World Conservation Union in 1998, concluded in its final report that large dams have consistently failed to deliver the benefits promised by their advocates, while exacting heavy tolls on the environment and affected communities.

In the long term, the Yunnan Mekong cascade could cause an ecological disaster in the lower Mekong basin. Cambodia and Vietnam, which are most dependent on the natural flow of the river for the health of their fisheries and agriculture, are especially vulnerable to changes in seasonal flooding, water temperature, flow and sediment load. A Bangkok-based diplomat with an environmental brief recalls an official in Yunnan assuring him, with evident pride, that water pouring through his dam was free of silt. "That sounds nice," said the diplomat "but it's not good news for downstream farmers."

Chinese experts insist that concerns about the dams are misplaced and, thus far, have been unwilling to consult with downstream countries about the Mekong cascade. They note that only 18 percent of the total waterflow comes from the Lancang and point to a range of benefits they say the dams will bring, such as flood control and increased water supply during the dry season.

Although most agree that the existing dams have not yet had serious deleterious effects on downstream countries, many are worried about what will happen when the Xiaowan dam comes on-line. During the dry season, China's share of the total Mekong flow grows, accounting for nearly 45 percent of the average flow as far south as Cambodia in April. It is also believed that half of the Mekong's annual sediment load originates in the Chinese portion of the river. The effect of decreased sediment loads could include sedimentation of the dams, reduced agricultural yields, erosion of the river bed and increased saltwater intrusion into the Mekong Delta.²

Given China's enormous and growing demand for electricity and its record of environmental neglect, there is little hope that China will reconsider its dam-building plans. As the diplomat remarked, "Chinese officials get promoted for building dams, not for saving fish."

² International Rivers Network, "China's Upper Mekong Dams Endanger Millions Downstream," Briefing Paper 3, Oct. 2002.



Cover of the calendar distributed by Chinese authorities to boat operators, noting days when blasting would be carried out. The calendar reads in Thai. "Upper Mekong Navigation Improvement: To bring happiness to the people of both banks of neighboring countries." The message is also printed in Burmese, Chinese and Lao. Courtesy of SEARIN

smooth-flowing watercourse where the seasonal fluctuations in water level will be evened out by dams on the Mekong mainstream in Yunnan. Large cargo ships will ply the river undisturbed by reefs and rocks that once inhibited trade. Chinese reports often describe the Mekong as the "Danube of the East,"³ but one imagines something like a modest version of the channelized, placid Yangtze River, navigable by ocean-going vessels as far inland as Wuhan. The major difference, of course, is that the Mekong, unlike the Yangtze, is an international river. China needs the cooperation of the downstream countries to realize this vision.

The blasting project is entirely financed by China. In November, 2001, China committed US\$5 million to the navigation-improvement project. Some 150 Chinese engineers are engaged in the work.

Downstream countries signed on to the Chinese plan for their own reasons. Burma's agreement was a given. As a pariah state, faced with opprobrium and economic sanctions from the West, Rangoon's relationship with China is paramount. In fact, the blasting of the rapids seems to have offered the Burmese Army an excuse to assert, for the first time, direct control of Shan State's Mekong banks.⁴ The government of Laos seems to have had some reservations, but the country is so small and poor that it can ill afford to thwart its giant neighbor. The Thai cabinet, always anxious to expand trade with a rising China, approved the project on January 30, 2002. Blasting began two months later.

Chinese authorities distributed calendars to boat operators in December, 2002, that marked the days blasting would be carried out. From December 15 to April 15 the river was to be open for traffic only one day in four. Blasting continued until May, when the early onset of the rainy season forced a delay. The plan was carried out as far as Khon Pi Luang before Thailand suspended participation.

Trade Barriers or Breeding Grounds?

There appears to have been no serious debate about possible adverse consequences of the blasting on the environment and local communities before the project began. This despite the fact the China did prepare an envi-

³ If the purpose of the Danube analogy is to link the Mekong's future with the Danube's role as an international shipping artery, proponents of expanded Mekong River trade may wish to rethink it. Disputes between Hungary and Slovakia over dams and environmental problems have been so severe that they have been brought before the International Court of Justice. ⁴ See Lahu National Development Organization, *Aftershocks Along Burma's Mekong: Reef-Blasting and Military-Style Development in Eastern Shan State*, August 2003.

ronmental impact assessment, or EIA. The assessment was conducted over a period of five months, from April to September, 2001. Taking all of two days in April for a "detailed survey and hydrological data collection," the Chinese experts concluded that the project would have negligible negative impacts on the river's ecology and local communities.⁵

At the behest of the Lao government, the Mekong River Commission was asked to evaluate the Chinese EIA.⁶ The MRC's Environment Program, in turn, enlisted academics in Australia and New Zealand to review aspects of the EIA. A series of reports resulted that described serious problems in the Chinese assessment. R.M. McDowall of New Zealand's National Institute of Water and Atmospheric Research, who looked at the impact on fisheries, complained that "the virtual total absence of either investigation of biological values in the river, or the lack of any quantitative data on these values in the river, leaves a reader trying to evaluate the EIA without anything of substance to evaluate."⁷

Two researchers from Australia's Monash University, looking particularly at the social impact assessment, con-

cluded, "The summary assessment of the EIA is that it is substantively inadequate and in many places fundamentally flawed. ... Much of the analysis ... appears to be based on little more than speculation, subjective judgments, or unsubstantiated research."8 Yet another researcher, Brian Finlayson of the University of Melbourne, who studied hydrology and water quality, noted that a minimum of a year is needed for an adequate EIA, given the lack of data about the river.9 He also observed that the study is focused almost entirely on the "construction" phase, rather than on longterm effects of the project. Finlayson further argued that although the EIA doesn't address possible impacts of phases two and three, there will likely be pressure to pursue those stages after the first phase is completed. It was with the assurances of this faulty EIA that the lower riparian countries approved the Chinese plan.

The criticisms of the Chinese EIA in these assessments point to a larger problem with man-made interventions on the river, which is that the Mekong is simply not well understood. The chaos of the 1960s and 1970s may have preserved the Mekong from Tennessee Valley Authoritystyle development, proposed by the U.S. as a bulwark against advancing communism, but it also ensured that current scientific knowledge of the river's ecology is shallow. Much baseline data is lacking and studies of the relationship between the Mekong basin's resources and its people are still in fragmented stages. As one environmentalist with many years' experience in the Mekong region observes, "Research into the fisheries-related local ecological knowledge of local communities began only a decade ago."¹⁰

Damage to fisheries is perhaps the most salient argument against the navigation project. There are an estimated 1,200 species of fish in the Mekong River. It is difficult to overstate the importance of fisheries to the



A portion of Khon Pi Luang, seen from the Thai bank. If China has its way some of the rocks will be blasted so that Chinese boats can reach the port at Chiang Khong.

¹⁰ Dave Hubble, "Development' in the Mekong Region," 2002; available at <u>http://www.hurights.or.jp/asia-pacific/no_30/02.htm</u>.

⁵ Joint Experts Group on EIA of China, Laos, Myanmar, and Thailand, *Executive Summary of Environmental Impact Assessment and the Navigation Channel Improvement Project of the Lancang-Mekong River from China-Myanmar Boundary Marker 243 to Ban Houei Sai of Laos*, September 2001.

⁶ "Impacts of Mekong Rapids Blasting Not Studied," Watershed, Vol. 8, no. 2, November 2003-February 2003.

⁷ R.M. McDowall, Evaluation of: Report on Environmental Impact Assessment: the Navigation Channel Improvement Project of the Lancang-Mekong River from China-Myanmar Boundary Marker 243 to Ban Houei Sai of Laos, September 2001: The fisheries Impacts Reviewed, January 2002.

⁸ Chris Cocklin and Monique Hain, Evaluation of the EIA for the Proposed Upper Mekong Navigation Improvement Project, December 2001.

⁹ Brian Finlayson, Report to the Mekong River Commission on the "Report on Environmental Impact Assessment: the Navigation Channel Improvement Project of the Lancang-Mekong River from China-Myanmar Boundary Marker 243 to Ban Houei Sai of Laos, September 2001, February 2002.

livelihood and well-being of people in the lower Mekong countries, especially the poorest GMS countries, Laos and Cambodia. Some 90 percent of the protein consumed by rural Laos comes from wild fish. Some experts estimate that the livelihood of 80 percent of Cambodia's population is connected in some way to fisheries, either by catching, transporting or processing fish. Nearly 2 million tons of fish are harvested from the Mekong each year, of which only 15 percent are cultured fish.

Fishing is a way of life in mainland Southeast Asia. I once met a Thai on a train who told me, as we watched men fishing in a scummy trackside bog, "Thais will fish anywhere. Give them a puddle and some string and they'll fish. I'm that



This man is fishing near Khon Pi Luang. The boatman who took me upstream bought a fish from him. They conducted the transaction on a midstream sandbar.

way, too." I will always remember the first time I stepped inside Vientiane airport's domestic terminal, which looks not to have been remodeled or repainted since the French left in 1954. The large baggage-claim area was empty of people except for an old, white-haired man mending a fishing net, fanned out like a web from the bars of a window.

The rocks and rapids of the Mekong, which appear as obstacles to the Chinese engineer, look quite different to downstream fisherfolk. The rocks, reefs and shoals are important habitat and breeding grounds for many of the more than 200 species of fish that live in this stretch of the Mekong. According to the South East Asia River Network (SEARIN), a non-governmental organization concerned with river-environment issues based in Chiang Mai, the various rocks, reefs, shoals, pools, whirlpools and sandbars in the river from Chiang Saen to Chiang Khong constitute a unique set of sub-ecosystems. SEARIN maintains that, "The removal of Mekong rapids and shoals means an unprecedented destruction of the development history of the Mekong River."¹¹

Aside from loss of wildlife habitat and the consequent decline in biodiversity, SEARIN has identified a number of other adverse effects that it says are caused by the navigation-improvement project. These include decreasing yields of *kai*, a river weed consumed by fish and people alike that is also a source of income for villagers who collect it from shallow areas near the river bank during the cool season. SEARIN maintains that blasting has altered the direction and velocity of the river's flow, which has

caused hardship for some villagers who lost their homes due to riverbank erosion. Changes to the river's channel have created new deposits of sediment, such as the large sand beaches at Sop Ruak, where Burma, Laos and Thailand meet. Some riverbank gardens that villagers cultivate during the dry season have also been lost or damaged as a result of the project, depriving many families of a significant source of income. The large cargo ships now plying the river also present a hazard to local people, as the wakes of the vessels have sometimes capsized small, local boats. Pollution from cargo boats is another concern.¹²

The single-most evident problem associated with navigation is the unusual and rapid fluctuation in water levels. I heard from people in many villages and towns along the river that water levels had been rising and falling in an unusual way since the project began. The erratic water levels appear to be a function of China withholding and releasing water so that work on the navigation project, such as blasting and building dikes and embankments, can proceed. According to SEARIN Director Chainarong Srethachua, fluctuation has been evident as far downstream as Nakhon Phanom.

The unusual water-level fluctuation may have a serious impact on fisheries. Many species of Mekong fish are migratory and move and spawn according to seasonal changes in the river's water level. The rapid fluctuation of water level, therefore, may alter migratory and spawning patterns. Not only are fish losing their habitat and spawning grounds, but the changing water flow may

¹¹ Southeast Asia River Network, *Mekong Rapids Under Fire*, Chiang Mai: SEARIN, December 2003.

¹² SEARIN monitors problems through regular consultations with villagers who live by the river. In the absence of scientific studies of the impact of dams and blasting on the Mekong's ecology, such surveys and anecdotal information may be the best indicator of what it happening to the river and the communities that depend on it.

be disturbing their patterns of migration and reproduction. Of particular concern is the fate of the rare Mekong giant catfish, the largest scale-less, freshwater fish in the world. Listed as critically endangered, the giant catfish is traditionally harvested in Chiang Khong and other localities in this stretch of the Mekong. The giant catfish catch has been declining rapidly for the past several years, prompting fears that the fish could become extinct.

Somkiat Khuanchiangsa of the Chiang Khong Conservation Group, a local organization that works to collect information on the environment and educate about environmental issues, agreed that water fluctuation is a problem. "It used to be that the water rose when it rained. Now it rises and falls on its own, without rain. It rises and falls like ocean tides," said Somkiat. "The villagers used to know where the fish would be and when. Now the water level is up, then it's down; the villagers' knowledge of the river is outdated."

"It's harder to catch fish these days," Somkiat added. SEARIN estimates that the fish catch from the affected section of the river is down by half compared to three years ago, causing many fishermen to seek other work.

At Somkiat's suggestion, I spent a day in Wiang Kaen, a riverside community south of Chiang Khong where many people live by fishing. From the landing at Wiang Kaen's river bank I scanned the river. I could see several boats moving about the river. Fishermen from both banks,



Lao fisherman with his catch, across from Wiang Kaen INSTITUTE OF CURRENT WORLD AFFAIRS

Somkiat Khuanchiangsa, Chiang Khong Conservation Group. "Our program is small and local, but the blasting problem is a big, international issue. The Thai government must do its duty and negotiate with China on two issues; dams and blasting the rapids."



alone or in pairs, cast nets that flashed in the sunlight before sinking into brown water. I borrowed binoculars from one of the border guards who monitor the comings and goings from Laos and spied activity on the Lao bank; women washing clothes and bathing, boys swimming, men mending nets and painting boats.

In exchange for a promise to purchase several bottles of Beer Lao, a boatman and two motherly women gave me a ride to the Lao bank. Beer in hand, we meandered back to the Thai side, visiting one fisherman after another. Although all had some fish in their baskets, to a man they complained that there are fewer fish than once there were. They blamed Chinese dams and the blasting project.

Beyond environmental concerns about the navigation project, some Thais are worried about the impact of greater trade with China on the economy, especially agriculture. The imminent flood of cheap Chinese goods into northern Thailand makes many uneasy. A Sino-Thai free-trade agreement covering fruits and vegetables took effect in October, 2003, just as the port at Chiang Saen opened. At Chiang Saen's riverside one sees boxes of Chinese apples and pears stacked and ready for sale. Chinese garlic, much cheaper than the local variety, is already driving some growers out of business.

Currently, Thailand enjoys a trade surplus with China. The volume of trade with China was \$12.6 billion in 2003. Chinese imports via Chiang Saen port accounted for less than half of one percent of the total Chinese imports reaching Thailand. Nevertheless, the volume of trade is growing, increasing nearly 150 percent year on year in 2002. Some 3,000 Chinese vessels are expected at Chiang Saen port this year, up from 1,000 in 2003. An informed source reported that according to a port official in Jinghong, 70 percent of the traffic from the port is Chinese exports. Ninety percent of the cargo boats plying the river between China and Thailand are Chinese.

Thailand's northernmost Chiang Rai province is gearing up to become a major player in trade with China.



Chinese produce for sale in Chiang Saen. Apples and pears are considered exotic fruits in Thailand.

Chiang Saen is planning a second port that would accommodate vessels of up to 500 tons. Thailand has also agreed to establish an industrial estate for Chinese enterprises in Chiang Rai. Yunnan governor Xu Rongkai visited Chiang Rai and Chiang Saen in December 2003 with a 60-member delegation. While the newspapers reported Xu's offers of Chinese investment, a business man in Chiang Rai told me that Xu was unhappy with slow progress in establishing an industrial estate for Chinese firms and had threatened to withdraw money that Yunnan had pledged to the project. Apparently, the delay in selecting a site for the industrial estate stemmed from conflicts between Thai politician-businessmen, each angling to situate the estate close to their own land.

Chiang Khong also has a new port, though it is smaller than the one at Chiang Saen. Located below the Khon Pi Luang Rapids, it now serves mostly Lao cargo boats and cross-river trade. A woman who owns a stall above Chiang Khong port where she sells drinks, T-shirts and weavings, despairs about business. "Chiang Khong isn't really Golden Triangle material," she lamented, referring to the tourist trap at Sop Ruak about 50 kilometers to the north. "The port won't help me much. Money from the port won't flow to people here. It will go to people in Chiang Rai and to the Chinese."

Other businesspeople and shopkeepers in Chiang Khong welcome the navigation project. "I'll be honest with you, Matt. I support the blasting," said one Chiang Khong resident who owns an import-export business. "I hope it doesn't damage the river too much, but more trade is good for my business."

Some, like SEARIN Director Chainaraong, worry that the dams and the navigation-improvement scheme represent a danger to downstream countries. China, they fear, will control the river. Meanwhile, China is undercutting potential objections with a variety of inducements to



Looking upstream at the new port in Chiang Saen. The port opened in October 2003, but most Chinese boats still unload on the river bank to avoid paying fees. Certain exports, such as used cars, must be loaded at the port.

lower riparian countries. In 2002, for example, China wrote off a \$200 million Cambodian debt and offered millions of dollars in aid to the Hun Sen government. China is rumored to have granted contracts to build 300-ton vessels to a Thai firm. These kinds of incentives make it less likely that downstream governments will oppose Chinese plans.

It Will Survive?

For a time, prospects for a solution to the blasting conflict looked bright. Last summer, at a conference called "The Mekong Region Comes of Age," MRC chief executive officer Joern Kristensen announced that China had agreed not to



Chinese cargo boats from Yunnan in Chiang Saen. These boats are about 150-DWT. The Chiang Saen Port is visible in the background.

pursue the navigation project beyond the first phase. That night, a chanteuse in a shimmering dress entertained the conference diners. The singer's finale, after a variety of uninspired torch songs, was a sort of medley, alternating Gloria Gaynor's 1979 anthem of female empowerment, "I Will Survive," with pounding *luk thoong*, or northeastern-Thai country music. A spotlight followed the singer through the darkened hall as she worked her way from table to table. Her spirited delivery and the contrast of music styles made for a powerful performance, and, as I reflected on China's apparent concessions, I thought that perhaps, yes, the Mekong region had achieved a certain maturity.

But that appraisal, I see now, was an effect of the moment. In fact, many critics of the navigation project are skeptical that China will stick to its pledge. To my knowledge, no Chinese official has gone on record with the pledge to stop blasting after phase one of the project. We have only the MRC's assurance that such a pledge was made. There are concerns that additional blasting and other construction projects could be carried out under the rubric of "maintenance." Confusion also surrounds the meaning of the three phases of the project. According to various reports, phase one was designed to allow passage of vessels of 150-DWT, but SEARIN's Chainarong says larger vessels are already in service. In May, Chainarong told me, a 300-ton Chinese ship had □docked at Chiang Saen. "It took up the whole port," he said. There is also concern that continuing river accidents and fatalities will lead to pressure to expand the blasting project. In November, 2003, for example, a Chinese vessel sank after striking rocks at Ta Long rapid in the Burmese section of the Mekong, drowning one sailor.

According to Pianporn Deetes, also of SEARIN, the only hope for the Khon Pi Luang Rapids is to convince INSTITUTE OF CURRENT WORLD AFFAIRS

the Thai government to permanently halt the project. Those in Burma or Laos who may be opposed to Chinese interventions on the Mekong have little freedom to express their views. Only Thailand can do something about it, she concedes, and it's an uphill battle. Pianporn expects no help from the Mekong River Commission, which maintains that blasting of rapids does not represent a transboundary problem but local problems that must be addressed by local and national governments. Thailand's Thaksin administration is unwilling to address the issue publicly. "Thaksin doesn't want to stop the project," said Chainarong. "He wants to do business."

A new EIA commissioned by Thailand has just been completed and is now under review by a committee of specialists appointed by the Office of Environmental Planning and Promotion. Somkiat said of the Thai EIA, "They took ten months for the study. That's still too short a period of time. It should be at least a year. Nowhere in the world would they study environmental impacts for such a short period of time and then decide to do something like blast the rapids." I saw a copy of the EIA at the SEARIN office in Chiang Mai. It's as thick as a big-city phone book, crammed with figures, charts and graphs. SEARIN's Chainarong said, "It's bad. In fact it is quite similar to the Chinese EIA. It has almost nothing to say about social impacts." After the expert committee has commented on the EIA, it will be forwarded to the Cabinet.

Further destruction of Mekong rapids may be only a matter of time. The Director-General of Thailand's Marine Department, Wanchai Sarnthoontat, said recently that the navigation-improvement project would continue to be implemented once the border with Laos was demarcated and the new EIA process completed. Border delimitation could be some time in coming, but if



Courtesy of SEARIN

Wanchai's statement is accurate, it begs the question. Why bother with another environmental assessment if the project is a foregone conclusion?

This points to a problem with current EIA practices in the region. Instead of examining alternatives to proposed projects as well as ecological and social impacts, most EIAs view the project under consideration as a given. At best, they might focus on measures to mitigate negative consequences of projects that will certainly be implemented.

In the case of the navigation project, there are alternatives to blasting. Critics of the blasting say that the boats used on the river should be adapted to the natural environment, rather than the other way around. As Somkiat explains, "Nobody is saying you can't use the river for commercial transport. You can, but during the dry season boats shouldn't be larger than 50 tons and in the rainy no larger than 200 tons. If they really want 500-ton vessels operating 95 percent of the year, they'll have to blast away constantly, as maintenance. They aim to make the river like a canal to support 500-ton vessels. So, we have conflict now." Better navigation training and tools could also help.

Opponents of the blasting scheme point to the road links being developed between Yunnan and Chiang Rai through Burma and Laos, and a proposed bridge over the Mekong near Chiang Khong, as alternatives to river-shipping. "When the roads are finished and they've built the bridge, the blasting will be like a monument," Somkiat told me. "With decent roads, it will have been a waste."

The notion of alternatives to river transport isn't likely to sway the Chinese, said one Thai-based diplomat: "They'll use the roads, the river, they'll use it all. They'd like a smooth route all the way to Vietnam." As he put it, "What China wants, China gets."

Institute Fellows are chosen on the basis of character, previous experience and promise. They

are young professionals funded to spend a minimum of two years carrying out selfdesigned programs of study and writing outside the United States. The Fellows are required to report their findings and experiences from the field once a month. They can write on any subject, as formally or informally as they wish. The result is a unique form of reporting, analysis and periodic assessment of international events and issues.

Author: Wheeler, Matthew Z. Title: ICWA Letters - South Asia ISSN: 1083-4257 Imprint: Institute of Current World Affairs, Hanover, NH Material Type: Serial Language: English Frequency: Monthly Other Regions: East Asia; The Americas; Europe/Russia; Mideast/North Africa; Sub-Saharan Africa

ICWA Letters (ISSN 1083-4257) are published by the Institute of Current World Affairs Inc., a 501(c)(3) exempt operating foundation incorporated in New York State with offices located at 4 West Wheelock Street, Hanover, NH 03755. The letters are provided free of charge to members of ICWA and are available to libraries and professional researchers by subscription.

Phone: (603) 643-5548 E-Mail: ICWA@valley.net Fax: (603) 643-9599 Web Site: www.icwa.org

Executive Director: Peter Bird Martin Program Assistant: Brent Jacobson Publications: Ellen Kozak

© 2004 Institute of Current World Affairs, The Crane-Rogers Foundation. The information contained in this publication may not be reproduced without the writer's permission.