

CHINA'S NU RIVER

DAM PROJECTS THREATEN MAGNIFICENT WORLD HERITAGE SITE



The Big Bend of the Nu River. Photo: Wang Yongchen

Known as the Salween River in Burma and Thailand, the Nu River stretches over 3,200 kilometers from its origins on the Tibetan Plateau to its delta at the Andaman Sea in Burma. It is the second longest river in Southeast Asia and is one of only two undammed rivers in China. Yet the Chinese government has plans to build up to 13 dams on one of China's last free-flowing rivers.

In Yunnan Province, the Nu River forms part of the Three Parallel Rivers World Heritage Site, which is known to be one of the ecologically richest temperate regions of the world. The area contains over 6,000 different plant species and is believed to support over 25 percent of the world's and 50 percent of China's animal species, with many being relict or endangered. Forests and wetlands along the length of the river are home to diverse species of flora and fauna, constituting areas of magnificent ecological value. The area is also known for its cultural diversity: almost 300,000 people from thirteen different ethnic groups live within the boundaries of the World Heritage Site.

Yet all of this may soon change. The Yunnan Provincial government has plans to construct a cascade of up to thirteen hydroelectric dams along the Nu River. The entire cascade would

cost tens of billions of dollars and, if completed, would generate more electricity than the mammoth Three Gorges Dam on the Yangtze River. Nine of the thirteen proposed dams are situated in national nature reserves that are located close to the World Heritage Area. The proposed dams have been the subject of an unprecedented outcry by Chinese journalists, environmentalists and everyday citizens who want to protect one of China's last undammed rivers, and its ecological and social heritage. Your help is needed to save this important global treasure.

WORLD HERITAGE UNDER THREAT

The Three Parallel Rivers World Heritage Site is located in Yunnan Province of China, in the mountainous northwest of the province. Three of Asia's great rivers — the Nu (Salween), Lancang (Mekong) and Jinsha (Yangtze) Rivers — flow through the area, giving it its name.

Known as the “Grand Canyon of the East,” the area’s steep mountains and winding rivers that cut deep into the earth create spectacular scenic views. Impressed by the landscape and the remarkable biological diversity of the area, the region was proclaimed a UNESCO World Heritage Site in July 2003. Known as “an epicenter of Chinese endemic species,” it is the largest World Heritage Site in all of China. Yet only two months after receiving the coveted World Heritage designation, the Provincial government announced its intention to build a series of dams in the area.

DAM IMPACTS

The impacts of the dams on the flora and fauna of the area are unknown, but likely to be significant. The dams would disrupt the freshwater fish ecology and threaten one-third of the 75 fish species in the river. Because of the steep terrain and dry hot valley climates, plant and animal species are highly adapted and thrive in small niches. These species are more likely to be affected as a result of changes to the natural ecology of the river ecosystem. Wild rice species, located in lower reaches of the Nu River, may be inundated once the dams have been built.

The construction of several large dams in the vicinity of the World Heritage Site will necessitate the construction of roads and associated infrastructure. This will open access to the World Heritage Site for poachers, loggers and other resource users, thereby threatening the ecological integrity of the area. The construction activities will also promote erosion of hillside areas, causing sedimentation in the rivers.

According to Professor Xie Ninggao, a Director of Peking University’s World Heritage Research Center: “World Heritage Sites are meant to preserve the authenticity and integrity of the natural environment. Dam construction

will turn natural rivers into manmade reservoirs. It will damage the area’s authenticity as well as the ecosystem.”

At its annual meeting in July 2005, the World Heritage Committee expressed its “grave concern on the impacts that the proposed construction of dams could have” on the

Three Parallel Rivers World Heritage Site and downstream communities and stated that any dam construction within the World Heritage property “would provide a case for inclusion of the property in the List of World Heritage in Danger.”

PEOPLE DISPLACED, LIVELIHOODS RUINED

The Nu/Salween River supports millions of people whose livelihoods depend on it for fisheries and agriculture. If all thirteen dams are built, over 50,000 people from several ethnic minority groups will be moved from their ancestral homelands. Project proponents claim that the dams will help bring development and modernity to the impoverished areas along the Nu River. However, the record of resettlement in China is not positive, and many people fear that the promised benefits will not materialize. One ethnic Tibetan who would be affected told the *New York*

Times: “If people are forced to move because of the project, they are going to lose the way of life that makes them special. It’s inevitable that people will lose their traditions if they move away.”

According to officials, affected villagers will be moved to far away towns or relocated to higher ground. “These fields will be flooded, and then we’ve got to move up in the hills. What can we plant up there?” asked Mr. Hu, a teacher.

If people are moved to higher ground, the land will not be as fertile as along the river valleys, making it difficult for people to survive. Many will be forced to practice shifting



Photo: Wang Yongchen

More than 50,000 people will be displaced if all 13 dams are built on the Nu River.

cultivation, thereby increasing pressure on the protected area. The demands for fuelwood and non-timber forest products will put a strain on the area's limited resources. In addition, the increasing competition for scarce resources could lead to conflicts between oustees and host communities. This may result in inter-ethnic rivalries.

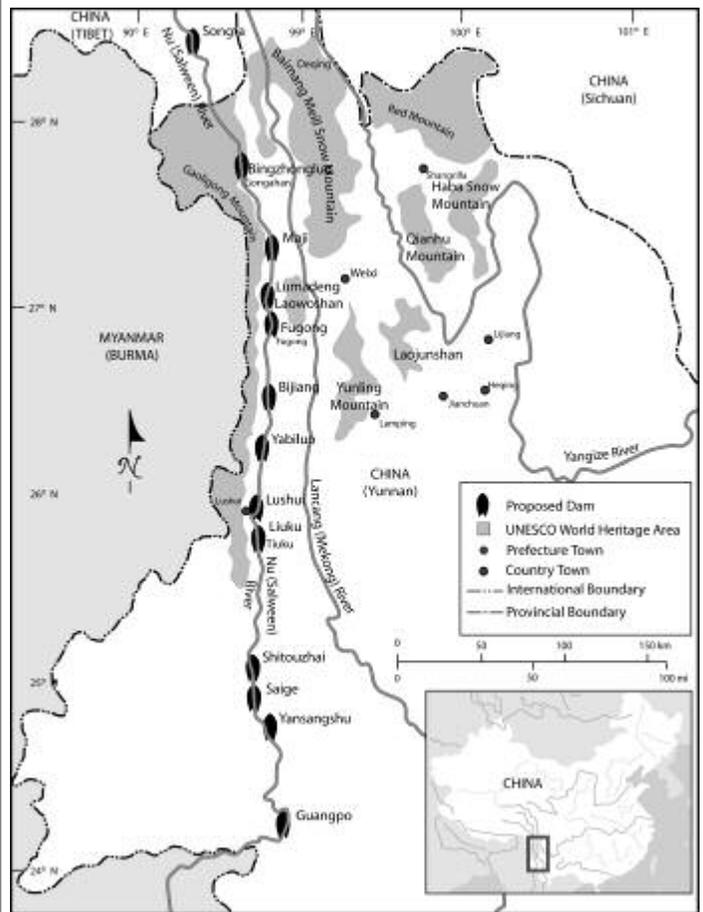
Millions of people live downstream of the proposed dams in neighboring Burma and Thailand. Downstream residents depend on nutrients carried down by the river to sustain vegetable gardens in the dry season and fertilize large areas of farmland. Fisheries are a major source of protein and income. The planned dam projects risk drastic impacts to all of these resources.

DAM PLANS FOR THE NU/SALWEEN RIVER

To meet its growing demand for electricity, China intends to triple its hydropower capacity by 2020 through harnessing much of the hydropower potential of the western provinces from great rivers such as the Nu, Lancang (Mekong) and Jinsha (Yangtze). Known as the Western Region Development Strategy, the purpose is to "develop" electricity in the western provinces and "transfer" it to the eastern provinces.

In 2003, the Yunnan Provincial government announced plans for thirteen hydropower projects for both the upper and lower reaches of the Nu River. In addition, Burma and Thailand have plans to build up to twelve dams on the Salween River further downstream. These projects have also been steeped in controversy. If all the projects are built, there might be as many as 25 dams on the river, changing it from one of the last major free-flowing rivers in the world to one that is heavily dammed.

Due to immense public pressure, in 2004 Chinese Premier Wen Jiabao announced the suspension of all projects on the Nu River pending further scientific study. However, the Huadian Corporation and the Yunnan Provincial government are determined to go ahead with the projects, and have announced plans to develop a scaled-back version of the plan, starting with the construction of four projects. The Central government has reportedly approved the



Map of the World Heritage Area and the thirteen proposed dams.

Areas such as this would be affected by the damming of the Nu River



revised plan, but refuses to release the project's environmental impact assessment, calling it a "state secret."

Eyewitness accounts and news reports state that resettlement and geological surveys for the first four projects—Maji, Yabiluo, Liuku and Saige — are already underway. Drilling and road building is taking place in and adjacent to the World Heritage Site, already impacting the ecological integrity of the area.

A BETTER WAY FOR CHINA

China uses energy very inefficiently. Energy consumption per unit of GDP in China is 3.8 times the world average and 11 times that of Japan. Industrial processes use 20 to 100% more energy in China than in the major industrialized countries, and residential heating in China uses 50 to 100% more energy. China could avoid expensive investments in new power plants through investing in energy efficiency measures. China's National Development and Reform Commission estimates that China could reduce its energy use by 100,000 MW by 2020 through demand side management policies and efficiency measures. This is around five times more than the proposed installed capacity of the thirteen Nu River dams.



Wind mills such as these could be used to produce electricity to satisfy China's growing energy needs.

China also has ample potential for renewable energy generation using biomass, geothermal, solar and wind power. The China Sustainable Energy Program estimates that China could generate 3 GW of power from sugar cane, rice husks and other organic matter by 2010 and 10-15 GW by 2020. Urban organic waste, which amounts to millions of tons per year and releases methane emissions from landfills, is used to produce electricity in several European countries. China could follow their example. In Yunnan, an abundance of geothermal energy also has excellent potential for both heating and electricity production. It is estimated that geothermal energy could produce up to 6,744 MW of electricity in China. China could also harvest energy from the wind. A report commissioned by Greenpeace estimated that China has the potential to produce 400,000 MW of clean, renewable wind power.

The potential to tap these sources demonstrates that China has many alternative options. Continuing to obstruct China's rivers with mega-hydropower dams, especially when so much is at stake and so little to be gained, may not be the wisest choice.

CAMPAIGN TO PROTECT THE NU RIVER

Efforts to protect the Nu/Salween River by concerned individuals and organizations in China, Burma, Thailand and internationally have had some success. In late 2003

and early 2004, thanks to a concerted campaign by Chinese NGOs and journalists, hundreds of news articles were published in China about the dam plans. In December 2003 the Chinese Ambassador in Bangkok was petitioned by more than 80 environmental, human rights and ethnic groups from Burma and Thailand to demand that they be included in the decision-making process.

These groups also petitioned the Thai and Burmese governments to halt destructive dam projects along the lower reaches of the Salween. Because of this pressure, Premier Wen Jiabao suspended all hydropower projects on the Nu River in February 2004. However, many powerful interests are pushing for the projects to be built, and we need your help to protect this international treasure.

WHAT YOU CAN DO

- Write a letter to the Chinese Ambassador in your country expressing your concern about the Yunnan government's plans to dam the Nu River. Ask the Ambassador to relay the message to China's Premier Wen Jiabao that the Nu River should be protected for future generations. Alternatively, go to www.irn.org/action to send an email to the Chinese Ambassador to the United States.
- Write a letter to the Ambassadors of Burma and Thailand asking them to halt dam projects on the Salween River. Ask the Ambassadors to relay the message to their governments that the Salween should be protected for future generations.

FOR MORE INFORMATION, VISIT THE FOLLOWING WEBSITES:

International Rivers Network:

<http://www.irn.org/programs/nujiang/>

UNEP World Conservation Monitoring Centre:

http://www.unep-wcmc.org/sites/wh/Three_Parallel.html

Our Attachment to Nu River:

<http://www.nujiang.ngo.cn/>

Southeast Asia Rivers Network:

http://www.searin.org/salween_en.htm

International Rivers Network protects rivers and defends the rights of communities that depend upon them. IRN opposes destructive dams and the development model they advance, and encourages better ways of meeting peoples needs for water, energy, and protection from damaging floods.