
Strangling the life-source of millions: China dams the Mekong

Nobody knows exactly how many people have been evicted from their homes and land to make way for China's 22,000 large dams. Official Chinese government statistics give a figure of 10 million people, but Dai Qing, the Chinese hydropower critic, estimates that the true figure is somewhere between 40 and 60 million people. Another 280 dams are currently under construction in China, and state policy is to increase the proportion of electricity generated by hydropower plants from 19 per cent to 40 per cent, by 2015.

Until 1995, there were no dams on the mainstream of the Mekong river. The Mekong, which is known as the Lancang Jiang in its upstream section in China, flows south from China through Burma, Laos, Cambodia and Vietnam. With the completion of the 1500 megawatt (MW) Manwan dam, China realised the first step of an eight-dam cascade dreamed up in the 1970s for the Lancang. If completed, the dams would result in the eviction of more than 68,000 people, and flood 6,500 hectares of farmland.

In 1996, work started on the 1350 MW Dachaosan dam and construction of the 4200 MW Xiaowan dam is due to start later this year. The Xiaowan dam will be one of the highest in the world, at 292 metres, and will retain a reservoir 169 kilometres long. The 1500 MW Jinghong dam is also under construction as a Chinese-Thai joint venture, with the first power due to be supplied to Thailand in 2014.

The dams will have a major effect on the downstream Mekong. Fish feeding and spawning conditions will be disrupted, leaving river fisheries devastated along with the communities that depend on them. The dams will stop silt and nutrients which are vital to downstream agriculture. Increased water in the dry season will result in the loss of riverbank vegetable gardens, which hundreds of thousands of downstream communities currently use. The quality of the water will be changed as the free flowing river is converted to a series of vast, sluggish reservoirs.

The dams themselves are threatened by the rate of soil erosion along the Lancang river. The rate of sediment inflow into the reservoir behind the Manwan dam is double the anticipated rate. One of the justifications for building the Xiaowan dam is that the construction site lies upstream of the Manwan dam and will therefore limit the amount of sediment flowing into the Manwan reservoir. However, the Xiaowan reservoir will also fill with silt, and within a few decades the Lancang river will be blocked by a series of massive lumps of concrete and vast volumes of polluted mud.

China has launched a project aimed at limiting the soil erosion in the Lancang River drainage area. Largely focussed on "afforestation", more than 30,000 hectares of plantations have already been established under a US\$24 million project. The target is 630,000 hectares by the year 2020.

The Asian Development Bank has funded another tree planting project, the Simao Forestation and Sustainable Wood Utilization project, which includes the 51,000 ton capacity Simao pulp mill, built on the banks of the Lancang. Many of China's rivers are badly polluted. The Yellow River, for example, is biologically dead for much of the 1,000 kilometres of its middle and lower flow due to agricultural

chemicals runoff and effluent from the paper and petrochemical industries along the river. The same fate could await the Mekong.

Economically, hydropower often does not make sense. China's most recently completed mega-dam, the US\$3 billion, 3,300 MW Ertan Dam on a tributary of the Yangtze River, resulted in massive debts for the dam's developers. In September 1998, Liu Junfeng, the general manager of the Ertan Hydropower Development Corporation, admitted that he could only sell 60 per cent of the electricity generated by the dam, due to a glut of electricity in Sichuan province. A second, more serious problem, is that electricity generated by smaller power plants is cheaper.

China is carrying out the projects to dam the Mekong in almost total secrecy. No independent environmental impact assessments have been published. Consultants working on an Asian Development Bank report complained that they did not have access to data on the proposed dams. When the World Commission on Dams (WCD) regional hearing took place in Hanoi in February 2000, China's decision to build the Xiaowan dam was not even mentioned.

The WCD final report, which was published in November 2000, produced overwhelming evidence that many large dams failed to achieve their intended goals and benefits, and "in too many cases an unacceptable and often unnecessary price has been paid . . . especially in social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment". China's Commission of Large Dams dismissed the WCD's findings, stating "the principles of WCD would stop any dam construction in the future. . . . It is not reasonable to force developing countries to accept all the guidelines proposed by WCD."

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