



# Strategic Analysis Paper

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# Chinese Intentions Towards the Mekong River and Mainland South-East Asia

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#### **Key Points**

- The Mekong River is one of the most threatened rivers in the world, largely due to the rapid increase in the number of large operational hydropower dams.
- Most of those dams are located within China and could be used to divert water out of the Mekong for use elsewhere in China.
- It has long been assumed that Chinese dams would lower water levels in the lower Mekong. Recent scientific analysis has proved beyond reasonable doubt that those dams reduce water levels in the Mekong.
- It is possible that Beijing will use the water stored behind its dams to coerce
  or pressure neighbouring countries in South-East Asia, to the detriment of
  US and broader Western interests.

#### Summary

The Asian Development Bank estimated that South-East Asia will require \$3.1 trillion between 2016 and 2030 to develop energy, transportation, water and sanitation systems for sustainable development. Most of that investment is required in lower-income countries, such as Cambodia and Laos. That critical need for major infrastructure investment has created an opportunity for China to engage in "infrastructure diplomacy". Beijing has almost fully exploited all of the hydropower potential in its portion of the Mekong River. It is lending support to downstream countries in South-East Asia to develop their own hydropower facilities. It has been proven that Chinese dams can have a dramatic effect on water levels in the lower Mekong basin. That could give Beijing additional leverage over the region. China is now in a position to build goodwill with the countries of the lower Mekong basin through infrastructure development or use its dams to coerce its near neighbours into accepting



Chinese strategic interests. Both options are likely to be detrimental to the US and the broader Western world.

### **Analysis**

The Mekong River provides water, energy and food to six countries in South-East Asia. About 250 million people live in the lower Mekong basin and 80 per cent of them directly depend on the river for their food or livelihoods. The region has the most productive inland fishery in the world, which is valued at approximately US\$17 billion per year. The river is one of the most threatened in the world, however, largely due to the significant increase in the amount of water impounded behind large dams. Most of those dams are located within China, but there are plans for several more to be built in Laos and Cambodia. Those dams will not only devastate the ecological balance of the region, but potentially grant China additional means to coerce countries within its growing sphere of influence.

China has built <u>11 of the world's largest dams</u> on its portion of the river, with plans to construct several more. Those dams store more than 47 billion cubic metres of water and can generate more than 21,000 megawatts of electricity. Beijing has refused to join any international water sharing treaty, leaving those countries downstream with no option but to rely on Chinese "good will" for the continued flow of water.

China's control over the flow of water in the Mekong is a physical manifestation of the considerable power imbalance between it and the smaller countries of mainland South-East Asia. China refuses to share hydrological data with downstream countries, choosing instead to keep it a state secret. Chinese water managers have <u>reportedly</u> maintained that 'Not one drop of China's water should be shared without China using it first or without making those downstream pay for it.' Relatively little of the water in the lower Mekong originates in China, however, suggesting that even if Beijing were to withhold that water, there would be limited risk of deteriorating water security. During the dry season and times of drought, however, when the lower Mekong basin depends on water from Chinese territory, China's contribution to the total river flow can <u>rise above 40 per cent</u>. It is during those desperate times that Beijing could apply additional pressure to the countries of mainland South-East Asia.

Some diplomats and government officials in the region have described the Mekong River as the next South China Sea. While there are some similarities between the two regions, there is a major difference. The South China Sea is largely a dispute over territorial waters and the right to grant or deny access to sea lanes. The Mekong River dispute is based solely on control over water resources without a territorial element. Water is unlikely to be diverted out of the Mekong River system, but it could be withheld by China to pressure countries to comply with Beijing's wishes.

Record low river levels throughout the lower Mekong countries in 2019 led to Thailand mobilising its military to respond to a drought emergency in the north-east, fishing communities on Cambodia's Tonle Sap Lake reporting an 80-90 per cent reduction in fish catches and a complete loss of access to fresh water in some highly populated parts of the delta in Vietnam. Thailand and Vietnam, which are both major suppliers to regional and global rice markets, recorded major declines in rice production. China claims that the regional



drought is due to a strong El Niño event that reduced rainfall across the region, including parts of south-west China, and maintains that its dams played no role in the lowering of water levels in the river.

It has long been assumed that Chinese dams would reduce water supplies in downstream countries, but until recently there was relatively little hard evidence. A recent scientific study, which utilises physical river gauge evidence from the Mekong River Commission and remote sensing processes, proves beyond all reasonable doubt that Chinese dams do significantly reduce water flow in downstream countries. It found that about 125 metres of river height is missing at a tidal gauge at Chiang Saen, near the Burmese and Lao borders, compared to the 28-year record. River height was considerably lowered after 2012, when several Chinese dams and reservoirs became operational. The study also contradicts the official line given by Beijing in 2019. At that time, while the lower Mekong countries were suffering from one of the most severe droughts in recent history, Beijing claimed that it too was experiencing reduced rainfall. It is a fictional narrative that China continues to push, including in a recent article published in the Global Times. The data, however, indicates that the upper Mekong basin experienced above average levels of rainfall and snowmelt throughout the year. The significant decline in river water levels in the lower portion of the basin was mostly caused by China impounding water in its dams, not a change in the region's climate. The study found that 'The amount of rainfall and snowmelt in China was enough to keep water levels in much of the Lower Mekong above average between April 2019 and March 2020 if China's dams were not restricting that water.' There is now ample evidence that Beijing could use water as a coercive instrument in mainland South-East Asia.

The dams in China's portion of the Mekong are rarely used for electricity production and there are other technologies, such as natural gas, solar and wind, that are rapidly becoming more economically attractive and efficient than hydropower. That suggests that water storage is the true rationale for the numerous dams constructed on the Mekong in China. That water could be impounded for use at a later date or in a different region of China. Alternatively, by denying the free flow of water downstream, it could also be used as an "unconventional asset" to pressure South-East Asian countries to comply with Chinese edicts. There is no evidence that China is currently transferring the water from the Mekong to other regions of the country (as the infrastructure required to do that would be impossible to keep secret) or using it to pressure foreign governments. As the Stimson Centre has explained, however, 'it's possibly just a matter of time before China begins to transfer water out of the Mekong and deliver [it] away from Southeast Asia to its eastern urban zones.' As Chinese dams are now impounding much more water than ever before, it is also possible that they could be used for coercive purposes.

Chinese dams also cause considerable damage and uncertainty downstream when large quantities of water is released unexpectedly. The completion of the Dachaoshan and Nuozhadu dams in 2002 and 2012-14 are linked to unexpected flood events downstream, which caused rapid rises in river levels and millions of dollars of economic loss. Strangely, an <a href="marticle">article</a> in the *Global Times* concludes with an appeal for co-operation and strengthened co-ordination in the operation of dams on the Mekong. Stronger co-ordination between foreign



dam operators has been a desire of the region for years, it is only China that has refused to share water data or even give advanced notice of large releases of water.

Countries in the lower reaches of the river have also built dams within their portion of the Mekong basin, with the majority becoming operational within the last five years. Over the <u>last 30 years</u>, Laos has built 64 hydropower dams on tributaries of the Mekong and Cambodia has built three. Another 438 dams are planned for the region, mainly in Laos and Cambodia. Beijing has plans to finance more dams in those countries, including on the mainstream of the river, which is part of its strategy to trap them in a web of debt. International organisations warn that Laos in particular is at <u>high risk of debt distress</u>, mainly as a result of heavy borrowing from China. Its share of public debt is forecast to reach 70 per cent of GDP, which is high for a low-income country with relatively underdeveloped industry. Similarly, some estimates suggest that about 40 per cent of Cambodian national debt is owed to China.

Laos accounts for <u>25 per cent</u> of the Mekong's drainage basin, the largest share of any riparian. It has long sought to become the "battery of Asia" by exporting two-thirds of the energy that it plans to generate from hydropower. The Laotian Government has plans to build a <u>series of nine dams</u> on the mainstream of the river, but they have been delayed due to their economic and technical complexity. Beijing has signed agreements with Laos to build four of those dams. In 2012, construction began on the Xayaburi dam after finance was secured from a Thai company. The dam became operational in 2019 and almost all of the hydroelectricity it produces is sold to Thailand. China welcomed the development of the dam, believing that it could <u>weaken the special relationship between Laos and Vietnam</u> and draw Vientiane closer to Beijing.

In the weeks following the inauguration of Xayaburi, water levels downstream declined to 1.5 metres in some places, the lowest level in a century. Thailand is likely to be adversely affected by any significant decline in water levels in the Mekong. By investing in the development of Laotian hydropower, however, it sought to internationalise its hydropower production and reduce its dependence on Burmese natural gas imports. As there is a strong anti-dam social movement in Thailand that prevents it from developing its own hydropower projects, and Laos has considerable hydropower potential, it saw Laos as a logical choice for investment. Thailand will need to continue to carefully judge the trade-offs between energy diversification and water security.

Chinese influence in Cambodia has grown significantly over the last 30 years, while the relationship with the United States has become increasingly precarious. As chair of the Association of Southeast Asian Nations in 2012, Cambodia failed to issue a joint communiqué for the first time in the organisation's history, due to a draft version containing strong criticism of Chinese activity in the South China Sea. Cambodia blocked the release of the 2016 communiqué for the same reason. In 2017, the Taiwanese flag was banned from being flown anywhere in Cambodia and the country was one of the first to release an official statement during the Hong Kong crisis in 2019, expressing unbreakable support for the "One China Policy". China is the largest source of foreign investment and bilateral aid in Cambodia, in recent years it has donated almost four times as much as the US. Hydropower development on the Mekong River, however, is one area where there could be growing dissatisfaction



between the two "iron-clad friends". Cambodia had plans to dam the Mekong, with Chinese assistance, at Stung Treng and Sambor. There are indications, however, that it is losing interest in those projects. In March 2020, it announced that it would postpone the construction of both dams until after 2030. It is unlikely that the decision will adversely affect the close Sino-Cambodian relationship, or even significantly reduce Cambodia's financial dependence on Beijing.

In 2015, China established the Lancang-Mekong Cooperation Framework (LMC) to compete with the Mekong River Commission, an international organisation set up in 1995 to cooperatively manage the lower portion of the Mekong River. Beijing uses the LMC to push its own development agenda in the region, which extends far beyond the development of hydropower on the Mekong. The framework focusses on much wider issues than water security and is part of Xi Jinping's neighbour-centric foreign policy, which aims to foster a "community of common destiny" in South-East Asia. It uses the LMC to help realise its economic and political goals in the region and create a near neighbourhood that is more accommodating of Chinese strategic interests.

The United States is generally opposed to the construction of hydropower projects on the Mekong River, despite a <u>US company unsuccessfully bidding to build the Xayaburi dam</u> in 2007. In 2011, the US Congress passed the <u>Mekong River Protection Act</u>, instructing the

United States Executive Directors of the World Bank and the Asian Development Bank to oppose the provision of any loan or financial or technical assistance for the construction of hydroelectric dams or electricity transmission systems in the Mekong River Basin unless the Secretary [of the Treasury] submits a related report providing certain assurances.

That opposition is mainly designed to support Vietnam, which, as the lower riparian in the Mekong basin, will be most affected by the development of hydropower projects. Hanoi has become an important partner for Washington in mainland South-East Asia and is an integral part of the Trump administration's Free and Open Indo-Pacific strategy that aims to maintain a regional counterweight to Beijing.

The US also launched the Lower Mekong Initiative (LMI) in 2009 to counter rising Chinese influence in mainland South-East Asia. While the initiative has the technical and financial support of the European Union, New Zealand, South Korea, Japan and Australia, it has never matched the more strident approach adopted by Beijing. It also encourages the development of a more diversified and climate-friendly regional power sector that is less reliant on hydropower development. It is pushing for closer hydrometeorological data sharing across the region to improve drought and flood forecasting, but it is not particularly well financed and has not been successful in countering China's muscular infrastructure development. The US is likely to find it increasingly difficult to compete with Beijing in the region, simply due to the enormous pressure that Laos and Cambodia are under due to the geographical proximity of China and Vietnam's inability to counter Chinese development projects.



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