

Hydropower as the Engine for the China-Indochina Peninsula Economic Corridor: A Hydro-Political Analysis of the BRI's Economic Corridors

Phillip Guerreiro

Published: 9 May 2025

Introduction

The combination of transboundary resources such as the Mekong River, regional development plans, and an influence narrative may create the necessary conditions for a Chinese Communist Party (CCP) led hydro-connective in Southeast Asia. Water resources have been a cornerstone of historical state formation, with water focused infrastructure acting as a jump starter to institutional and bureaucratic development. In China, this has been identified as a civilizational characteristic, with the development for [control of the Yellow River](#) being a core feature of [state legitimacy](#).

While water has played a historical role in state-building, it now plays a role in region-building. Through the Belt and Road Initiative (BRI) in the China-Indochina Peninsula Economic Corridor (CICPEC), China is proving that hydro-infrastructure can be the cornerstone of a region-building endeavor with a wide range of geopolitical implications in the region. In the case of this article, the examination of the CICPEC allows for the study of Chinese investments in the Southeast Asia peninsula and Mekong River basin, specifically: Laos, Myanmar, Cambodia, Thailand, and Vietnam.

Water, Dams, and the State

Within China, the utilization of hydrological infrastructure to implement state control and authority has been apparent throughout multiple dynasties. Development of water shows that the implantation of infrastructure to *tame* water was central to Imperial legitimacy in early China. During the Song dynasty, ethnic Han infrastructure expansion into the Sichuan frontier [created a dependence](#) on the larger Song China commercial world. Even in the early stages of the People's Republic of China, Mao had a desire to tame Chinese waterways and prove the CCP's '[mastery over nature](#).'

These brief cases highlight Wittfogel's '[Hydraulic Society](#)'. In short, he determined that the transition to large-scale irrigation farming, or hydraulic agriculture, resulted in a systemic empowerment of the state by creating a dependency between the farmers and the state's expertise to manage the irrigation system. This dependency evolved into a comprehensive state with a far-reaching central authority.

Thus, the control of water and hydraulic infrastructures can enable powerful leadership to wield control over a population by becoming a tool '[in which the state actualizes power over its own territory](#).' Dams are emblematic of this control. [Large dams combine](#) the ecology of the river, the flow of capital and labor, the political baggage of construction, economic connectivity, and technological expertise. This significance is revealed when using a

[technopolitical analysis](#) where technologies have capabilities that fundamentally steer the politics, economics, environment, and society around them. Dams are built on political motivations, and the successful operation of the dams is key to fulfilling political objectives. This technology in a region therefore may have the ability to transfer people (labor/tourism), transfer power, urbanize rural regions, and manage or 'tame' nature. Thus, the ability of an infrastructure becomes the physical vehicle for establishing a regional identity.

BRI and Region-Building

The BRI is a global infrastructure development initiative that aims to integrate global markets with infrastructure pathways. Projects range from airports, harbors, and railways to industrial parks, special economic zones, electrical grids, and hydropower facilities. Within CICPEC the Mekong River is a critical resource for the downstream states, central to the livelihoods, economic security, and food-source for millions of people in Southeast Asia. The first major salvo in the development of dams in the basin was seen in China's portion. There has been an effort to expand the hydropower capacity along the basin in China. While these projects can help alleviate energy demands in China, these dams are [negatively](#) impacting the downstream flows of the Mekong. The dam [induced fluctuations](#) present challenges to downstream agricultural and ecological stability.

Following regional criticism, there was a refocus on exporting China's dam-building expertise to the rest of the Mekong basin. Politically, China was able to alter the landscape by [appealing](#) to the 'economy-first' mentality of the downstream states and enticed them to mirror China's development projects. As result, from May 2016 to September 2019, China has conducted '[over 30 water-related capacity building](#), cultural exchange, and technical training programs'. China also invested [at least \\$11 billion](#) in Laotian hydropower projects. This includes the Nam Ou dam cascade (comprised of 7 separate dams), which plays a direct role in the BRI and [powers other BRI projects](#) such as the China-Laos Railway.

Shifting geopolitical landscapes is no easy feat. Regions are [socially constructed](#) and reshaped. Central to reshaping CICPEC is the utilization of narratives. China's utilization of narratives in its pitch to downstream states for increased dam development has been centered around 'win-win', which it consistently uses for its BRI proposals. The BRI's 'win-win' narrative is unique, because China restricts itself to an economic/developmental space and wants to use '[this narrow area of economics to create a Sinosphere](#).' Top Chinese leadership such as [Li Zhaoxing](#), [Wen Jiabao](#), and [Xi Jinping](#) have perpetuated the 'win-win' narrative.

The 'win-win' narrative plays a significant role in establishing a regional identity. Rather than cementing a region through a speech-act over time, the use of 'win-win' necessitates direct physical results. To perpetuate voluntary actors, Chinese dams in the Mekong basin must physically perform as advertised and create the connective function.

These dams thus showcase an outward presence of Chinese economic might. With a strong pull of economic gravity, China is becoming an economic center within CICPEC, and with the influx of connective infrastructure and future access by Chinese corporations, the concerns of dependency are mounting. In Laos, Chinese constructed dams are expected to power

Chinese constructed railways and Chinese constructed relocation villages. This in turn may provide an ample amount of development for Chinese firms to establish a foothold in Laos and see an increase of Chinese industrial parks that embed themselves squarely in the regional supply chain.

Hydro-Connective

The combination of transboundary resources (the Mekong), regional development plans, and an influence narrative can create the necessary conditions for the creation of a hydro-connective. For this article, I define a *hydro-connective* as the utilization of hydraulic infrastructure in establishing a regional development through the cascading effects of the infrastructure. In the Mekong basin, China's cascading dam development may have begun to create a hydro-connective. The dams have been well received by [the ruling elites](#) of the downstream states.

What began as the investment of dams to quell disputes, has evolved into the construction of a cross-region energy system, the construction of denser urban areas, increased cross-border training, the establishment of border-towns, the powering of other [integrative infrastructure](#), [regional institutions](#), and potentially the creation of industrial parks. The dams built in the Mekong basin reflect the greater effort of regional economic and infrastructural integration that is analogous to Wittfogel's Hydraulic Society. While the irrigation system was historically central to state formation in China, in this case, hydropower is the central system facilitating region-building that is dependent on the CCP and its BRI.

[Phillip Guerreiro](#) is an Assistant Professor of Military and Security Studies in the [Air Command and Staff College](#). The views expressed in this article represent the personal views of the author and are not necessarily the views of the Department of Defense, the Department of the Air Force, Air University.

Reference List

- Ball, P. (2017). *The Water Kingdom: A Secret History of China*. University of Chicago Press.
- Basist, A., & Williams, C. (2020). Monitoring the quantity of water flowing through the Mekong Basin through natural (unimpeded) conditions. Sustainable Infrastructure Partnership. <https://mekonguspartnership.org/2020/04/10/monitoring-the-quantity-of-water-flowing-through-the-upper-mekong-basin-under-natural-unimpeded-conditions/>
- Biba, S. (2012). China's continuous dam-building on the Mekong River. *Journal of Contemporary Asia*, 42(4), 603–628. <https://doi.org/10.1080/00472336.2012.712257>
- Brown, K. (2020). Chinese storytelling in the Xi Jinping era. *The Hague Journal of Diplomacy*, 16(2), 323–333. <https://doi.org/10.1163/1871191X-BJA10054>
- Glahn, R. von. (1988). *The Country of Streams and Grottoes: Expansion, Settlement, and the Civilizing of the Sichuan Frontier in Song Times*. Harvard University Press.

Guangyong, S. (2020, January 10). Stringing together the dazzling pearls on the Belt and Road. *Yi Dai Yi Lu*. http://ydyi.china.com.cn/2020-01/10/content_75598128.htm?f=pad&a=true

Hecht, G. (Ed.). (2011). *Entangled Geographies: Empire and Technopolitics in the Global Cold War*. MIT Press.

Lancang-Mekong Cooperation. (n.d.). <http://www.lmcchina.org/eng/>

Mekong River Commission. (n.d.). The effects of Chinese dams on water flows in the lower Mekong Basin. Mekong River Commission. <https://web.archive.org/web/20240211210904/www.mrcmekong.org/news-and-events/news/the-effects-of-chinese-dams-on-water-flows-in-the-lower-mekong-basin/>

Menga, F., & Swyngedouw, E. (2018). States of water. In F. Menga & E. Swyngedouw (Eds.), *Water, Technology, and the Nation-State* (pp. 1-20). Routledge.

MERFI (2025). Dataset on the Dams of the Greater Mekong. Bangkok, Mekong Region Futures Institute. <https://www.merfi.org/mekong-region-dams-database>

Ministry of Foreign Affairs of the People's Republic of China. (2004). Equality, mutual trust and win-win cooperation: Li Zhaoxing talks about Premier Wen Jiabao's visit to Laos. <https://www.mfa.gov.cn/ce/ceke/eng/zxyw/t172768.htm>

Ministry of Foreign Affairs of the People's Republic of China. (2021). Xi Jinping and General Secretary of the LPRP Central Committee and Lao President Thongloun Sisoulith jointly attend the opening ceremony of the China-Laos Railway. https://www.fmprc.gov.cn/mfa_eng/topics_665678/kjgzbdyyq/202112/t20211205_10462536.html

Neumann, I. B. (1994). A region-building approach to Northern Europe. *Review of International Studies*, 20(1), 53-74. <https://doi.org/10.1017/S0260210500117784>
Power China (中国电建). (2018).

PowerChina. (2018). *Construct a beautiful tomorrow with power and love: Laos sustainability report* (pp. 14-15). <https://www.powerchina.cn/attach/0/80534e1639394910af822ddcf d51670a.pdf>

Shapiro, J. (2011). *Mao's War Against Nature: Politics and the Environment in Revolutionary China*. Cambridge University Press.

Sneddon, C. (2015). *Concrete Revolution: Large Dams, Cold War Geopolitics, and the US Bureau of Reclamation*. University of Chicago Press.

Thongnoi, J. (2024, May 8). China-Laos railway brings higher mobility, employment as profit concerns linger. *China Global South Project*. <https://chinaglobalsouth.com/analysis/china-laos-railway-brings-higher-mobility-employment-as-profit-concerns-linger/>

Wittfogel, K. (1976). *Oriental Despotism: A Comparative Study of Total Power*. Yale University Press.

Zhang, L., & Zhang, H. (2021). Water diplomacy and China's bid for soft power in the Mekong. *China Review*, 21(4), 39-75. <https://hdl.handle.net/10356/160280>