

The Sleeping Dragon Awakes

China's growing role in the business and politics of hydropower development in the Mekong Region

Chinese hydropower developers and financiers have figured prominently in the renewed push for hydro development in the Mekong Region. Carl Middleton introduces these new hydropower proponents, describes the new regional context that has seen warming relations between Chinese and the Mekong Region's political and business elites, and discusses the implications of China's growing role.

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Introduction

China's rapid economic growth and rise as a global power over the past decade has been accompanied by an increased projection of influence into the Mekong Region. Through a combination of economic support, trade partnerships, and strategic diplomacy intended to present China as a friendly neighbour seeking win-win collaboration, the Chinese government has tightened relationships with Mekong governments and nurtured the expansion of Chinese investments in the region – including in hydropower dams.

With demand for electricity increasing (particularly in Thailand and Vietnam), extensive exploitation of hydropower resources remains high on the political agenda of all Mekong governments. The rapidly expanding market for hydropower in the Mekong Region, strong competition in China's domestic hydropower sector, and Chinese government policies encouraging Chinese companies to invest overseas have spurred Chinese hydropower developers to seek investment opportunities in the region. About 65 large hydro dams have been or are being built, or are under survey by over 20 different Chinese companies in Burma, Cambodia, Laos and Vietnam.

Focusing on hydropower, this article identifies the new strategic alliances that are being built between Chinese and the Mekong region's political and business elites, and discusses the implications of China's revived interaction with the region.

China, Southeast Asia, and Asian regionalism

Strengthening economic integration between the Mekong Region and China's two geographically closest provinces of Yunnan and Guangxi is a core ambition of the Chinese government's strategy towards the region. This is manifest in the Chinese government's growing embrace of the Asian Development Bank (ADB) coordinated Greater Mekong Subregion (GMS) programme, demonstrated most recently by its high-profile presence at the Third GMS Summit, held in Vientiane in March 2008. In the lead

up to the Summit, a statement jointly issued by China's National Development and Reform Commission, Ministry of Foreign Affairs and Ministry of Finance proclaimed China's commitment to work with other Mekong countries to deepen GMS cooperation, "so as to speed up infrastructure construction, push forward facilitation and liberalization of trade and investment, and try to realize regional interconnection in the GMS."¹ To these ends, the Chinese delegation to the GMS Summit offered funding for initiatives that advance Chinese economic interests, such as the North-South Economic corridor, supported calls to strengthen institutional frameworks for regional cooperation, and committed to a number of sector-level investments.

Beyond direct economic benefit for China's landlocked southwest, the Chinese government views the GMS programme as a means to advance its regional leadership aspirations through strengthening economic interdependence.² By building close trade relations, China anticipates that its regional trade partners will also benefit from China's economic ascendancy, thus generating a mutual interest in China's continued growth.

The Chinese government has also increasingly engaged with the Association of Southeast Asian Nations (ASEAN), and pushed for the establishment of a China-ASEAN Free Trade Agreement (FTA). Set to come into force in 2010, the agreement will consolidate China's role as a key trade partner with ASEAN nations.³

By increasingly engaging in multilateral initiatives, such as the GMS and through ASEAN, China's government has sought to allay the Mekong countries' fears of Chinese hegemony and promote regional stability bounded by economic and political interdependence. To ease the way, China has relaxed its claims – somewhat – on long standing regional territorial disputes, for example, with Vietnam over the resource-rich Spratly Islands (Nansha) in the South China Sea, although these disputes remain potential flashpoints.

As well as publicly embracing multilateralism, China has proactively sought to build strong bilateral relations through aid, trade, and investment with the region's resource abundant countries of Burma, Cambodia and Laos, which offer significant strategic economic and security interests to China. All three countries have been recipients of major aid packages, infrastructure investments and, to varying extents, military cooperation (mainly to strengthen domestic security forces). They have welcomed China's policy of non-interference in its provision of aid, which is disassociated from human rights and good governance conditionalities. In the eyes of the leaders of these three countries, China provides an attractive alternative source of funding to that offered by the West, under which they need not cede decision-making power, or bend to Western interests or development practices.

¹ Country Report on China's Participation in Greater Mekong Subregion Cooperation, available at: http://news.xinhuanet.com/english/2008-03/28/content_7871793.htm

² Chang, H. (2006) "China's participation in the Greater Mekong Subregion (GMS): A review and analysis of Chinese news media" Published by the Henry L. Stimson Center, May 2006.

³ Liu, Fu-kuo (2008) "China's embrace leaves US in the cold", Asia Times Online, 16 May 2008.

Strengthening their political relationship with China also offers benefits on the global stage, as China has proved willing to block or dilute international actions that would harm their interests, as well as to counter-balance pressure from the region's more economically powerful countries, Thailand and Vietnam.

In public, at least, China expects little of the host governments in return. Burma, Cambodia and Laos have publicly announced their support for the "One China" policy towards Taiwan, and recognise China's interests, mostly trade related, which China reciprocates, in principle, on an equal footing.

In addition to increased opportunity for trade and investment, China reasons that stimulating economic growth will reduce the risk of state failure and, therefore, potential security threats at its borders in mainland Southeast Asia. China is also especially interested in countering US and Western influence on its doorstep, an interest generally shared by Burma, Cambodia and Laos. China also holds an interest in counter-balancing the influence of other major Asian economic powers, such as Japan and South Korea.

Despite the significant benefits of partnering with China, the governments of Burma, Cambodia and Laos are hesitant to completely depend upon China's guardianship, both for historical and practical reasons. To counter-balance the strong influence that China could exert if it was the sole or dominant aid-provider and investor, Burma, Cambodia and Laos have continued to court other donors and powerful players. Cambodia and Laos continue to receive large volumes of development aid from Western countries, and are also attracting a growing number of regional investors, especially from Thailand and Vietnam, as well as from Japan. Burma, barred from development assistance from the West, has sought closer links with Thailand and India.

China has also sought to strengthen economic and trade ties with Thailand and Vietnam, leading to a growth in the volume of bilateral trade and investment between these countries. At the same time, Thailand and Vietnam remain economic competitors to China for investments and resource-access in Laos, Cambodia and Burma.

Such strengthening of economic and political relationships with Mekong countries are, of course, strategic alliances that facilitate access to resources and open up further opportunities for trade and the establishment of new trade routes in and beyond the region (see Box: Chinese resource investments in the Mekong Region). China, for example, is keen to diversify its routes for oil imports from the Middle East and Africa. Burma provides a potential alternative route through overland access to the Andaman Sea, while in December 2007 Chinese vessels began shipping oil up the Mekong River from Thailand into southwest China.

"Going out": Chinese resource investments in the Mekong Region

Unlike Chinese investments in hydropower, which are capitalising on opportunities presented by the region's current hydro boom, Chinese investments in other natural resources have largely been geared at securing natural resources necessary to sustain

China's economic growth. Some examples of Chinese involvement in these sectors are presented below.

Rubber

China is the world's largest consumer and importer of natural rubber. With China's main rubber growing provinces facing a shortage of available land, numerous Chinese companies have expanded their activities into neighbouring countries. The Chinese government has offered policy incentives and subsidies for Chinese companies investing in rubber plantations in northern Burma and Laos through the Opium Replacement Special Fund.

According to Shan Herald Agency for News (SHAN), around 240,000 hectares (ha) of Wa-controlled territory in Burma's Shan State has been planted with rubber as part of the strategy to replace opium crops, with Nong Chang Company from Yunnan as a major investor. Northern Laos has also witnessed a proliferation of rubber plantations over the last few years, stimulated by Chinese demand and investment. Among the largest investors are Ruifeng, which signed a contract with the Luang Nam Tha provincial military to develop 300,000 ha for rubber plantations, and Yunnan Rubber, which plans to develop about 166,000 ha of rubber plantations in four northern provinces of Laos, namely Luang Nam Tha, Bokeo, Xayabouri and Oudomxai.

Timber and pulp and paper

After announcing a logging ban in 1998, China's imports of timber, pulp and paper increased rapidly, contributing to the expansion of logging and plantations in the Mekong Region. China is Burma's largest market for timber exports and Chinese companies are engaged in widespread logging of forests in Burma, particularly in the northern regions that border Yunnan province. In 2007, recognising the problem, the Chinese government urged its logging companies to act responsibly overseas to avoid tarnishing the country's image.

Partnering with Cambodian companies, Chinese companies have also been granted concessions to large swathes of forest and land for pulp and paper plantations in Cambodia. For example, in 2004, in Mondulkiri province, Cambodia's Pheapimex partnered with China's Wuzhishan to establish a 199,999 ha pine concession – almost 20 times the legal limit – with 10,000 ha approved immediately for trial and commercial planting. In 2000, Pheapimex was awarded a 300,000 ha concession for eucalyptus plantations in Pursat and Kompong Chnanag provinces. The contract for the concession was signed following an agreement with the China Farm Cooperation Group to invest in the project, which was financed with a US\$70 million loan from China Exim Bank, although local protests halted the project. Since 2004, Pheapimex has partnered with Wuzhishan in an attempt to push forward the project.

Mining, oil and gas

Chinese investors are playing a significant role in the exploration and development of mining and gas and oil operations in Mekong countries. In April 2008, the *Vientiane Times* reported that there are 37 Chinese companies managing 57 mining projects in

Laos. The Chinese government has also provided technical and financial assistance in improving and expanding geological mapping of mineral deposits in Laos.

One major Chinese-backed mining development in the works is a proposed bauxite mine and alumina refinery in the Bolaven Plateau, southern Laos. According to the project's developers, it is one of the world's largest undeveloped bauxite deposits. The project is a joint venture between Australia's Ord River Resources and a subsidiary of China Nonferrous Metals Mining Group (CNMC), a large Chinese state-owned enterprise. CNMC is also involved in developing the Tagaun Taung nickel deposit in Burma, which has been touted as "one of the greatest collaborative efforts in the history of Sino-Burmese mining."

Oil and natural gas deposits in Burma have also attracted Chinese developers and financiers. According to a briefing published by EarthRights in September 2007, "China currently has at least 17 onshore and offshore oil and gas projects in Burma, with investment from at least seven companies, including the three major Chinese oil and gas companies Sinopec, China National Petroleum Corporation (CNPC), and China National Offshore Oil Corporation (CNOOC)." CNPC and Sinopec also plan to build an oil and gas pipeline, stretching 2,380 km from Burma's Arakan coast to southwest China.

Chinese companies are also competing with other foreign investors for the potentially rich oil and gas deposits off the coast of Cambodia, with CNOOC and China Petrotech Holdings among the companies that have been granted exploration rights. Like in Laos, Chinese mining companies have become increasingly involved in Cambodia, following the discovery of several important deposits, including bauxite, copper, gold, iron ore and nickel.

The business of powering the Mekong Region

As economies in the Mekong Region continue to expand, demand for electricity is growing, although the extent and means of meeting this growth is hotly contested (see Forum, this issue). Thailand's government estimates that electricity demand in the country will approximately double by 2021. In Vietnam, the government predicts that demand will quadruple by 2015. Burma, Cambodia and Laos have more modest demand growth predictions, though all governments have committed to developing electricity infrastructure to support economic growth and hydropower development features centrally in these plans.

Thailand, which has already developed much of its hydropower potential and faces stiff opposition to further projects at home, plans to import at least 14,000 megawatts (MW) of electricity from Burma, Laos and China's Yunnan province over the next 15 years. Vietnam plans to develop almost all of its viable domestic hydropower potential over the next 20 years, and to import hydroelectricity from Cambodia, China and Laos. Responding to this demand, the governments of Burma, Cambodia and Laos are keen to develop their hydropower potential for electricity export and domestic consumption.

Asia's economic revival after the 1997 financial crisis has ushered a new generation of hydropower developers into the Mekong Region, mainly from China, Thailand, Vietnam and Malaysia. In a complex interplay of political support, development aid and entrepreneurial initiative, these new proponents are capitalising on the opportunities presented by a renewed push for hydropower development. Often backed by export credit agencies and commercial financiers from their own countries, the new developers are able to move quickly, and have picked up many projects that were abandoned by Western corporations in the late 1990s.

China's hydropower developers move overseas

Major Chinese state-owned enterprises (SOE), such as Sinohydro Corporation and China Southern Power Grid Company (CSG), have figured prominently among the new wave of hydropower developers, often backed by Chinese government-guided "Policy Banks," especially the China Export-Import Bank (China Exim Bank).⁴

Sinohydro Corporation is China's largest hydropower construction company. It has been involved in the construction of approximately 80 per cent of China's large- and medium-scale dams, including the Three Gorges dam on the Yangtze River, and the Manwan, Dachaoshan and Xiaowan dams on the Mekong (Lancang) River in Yunnan province. According to the construction industry magazine *Engineering News Record*, Sinohydro was the world's 68th largest construction contractor in 2006. Within China, Sinohydro Corporation has an extremely weak environmental and safety record; in 2004, 2005 and 2006 it was reprimanded by the Chinese government due to construction and environmental accidents.

With projects in over 50 countries, Sinohydro has the largest number of overseas dam projects of any Chinese company. In the Mekong Region, Sinohydro's subsidiaries are studying or developing a number of controversial projects, including the Hutgyi dam on the Salween River in Burma, the Pak Lay dam on the Mekong mainstream, the Nam Ou cascade in Laos, and the Kamchay dam in Cambodia.

China Southern Power Grid Co., Ltd. (CSG) was established in December 2002, when it separated from the State Grid Corporation of China, the country's largest transmission operator. CSG's core business is managing China's southern power grid network that serves five southern provinces. CSG was ranked the world's 237th largest company in the 2007 global Fortune 500 list. CSG is owned by the provincial Government of Guangdong (38.4 per cent), China Life Insurance (32 per cent), the State Grid Corporation (26.4 per cent), and Hainan provincial government (3.2 per cent). However, this state-dominated ownership structure may soon change, with CSG announcing in April 2008 that it had initiated a domestic Initial Public Offering process.

⁴ International Rivers. 2008. *The New Great Walls: A Guide to China's Overseas Dam Industry*
<http://www.internationalrivers.org/files/New%20Great%20Walls%20low%20res.pdf>

CSG has been appointed by China's State Council to be executor of the GMS power cooperation programme on behalf of the Chinese government. In this role, at regional GMS energy meetings, such as the Regional Power Trade Coordination Committee, a delegation from the company represents the Chinese government.

To bolster its core business profits, CSG has sought to invest in a number of power projects in the Mekong Region, including hydropower dams. High-risk projects the company is currently studying include the Sambor dam on the Mekong mainstream, Stung Cheay Areng dam in Cambodia, Nam Tha 1 dam in Laos, and dams on the Salween River in Burma. CSG is also involved in the construction of generation and transmission facilities in Vietnam.

There are many other Chinese companies developing hydropower projects in the Mekong Region, including: China International Water and Electric Cooperation; China National Machinery & Equipment Import & Export Corporation; China Electrical Equipment Corporation; Datang International Power Generating Company; and China National Heavy Machinery Corporation.

China's hydropower financiers

The Chinese financial institution most heavily involved in funding China's overseas dams is the China Export-Import Bank (China Exim Bank), one of China's two official export credit agencies (ECA). China Exim Bank was founded in 1994 and is supervised by China's State Council. Like many ECAs, China Exim Bank promotes national interests through financing the overseas operations of Chinese businesses, championing Chinese exports, and offering concessional loans that strengthen economic and political cooperation between China and partner countries. With loan approvals of US\$36 billion, China Exim Bank became the world's largest ECA in 2007, and has even outgrown the World Bank.

In the Mekong Region, China Exim has financed, amongst others, the Nam Mang 3 dam in Laos, which has been blamed for opening the area up to illegal logging as well as its poor resettlement process and high environmental cost, the Yeywa dam in Burma, which has been criticised for displacing local residents and submerging religious sites, and the Kamchay dam in Cambodia (see Box: The Kamchay dam). China Exim Bank adopted an environmental policy in November 2004, which was publicly released in April 2007, and more detailed environmental guidelines in August 2007. There remains, however, little evidence of the guidelines' rigorous implementation on the ground to date.

A number of other state-owned banks are known to be involved in financing dam building overseas. These include the Bank of China, which in 2007 announced a US\$140 million loan for the Nam Ngum 5 hydropower project in Laos, and has also backed dam building in Ecuador and Nepal. Chinese private investment companies are also active in the Mekong Region, including Hanergy (formerly the Farsighted Investment Group) and the Goldwater Investment Group, both with interests in dams on Burma's Salween River.

Laos: The aspiring battery of Southeast Asia

Landlocked Laos lies at the heart of the Mekong Region, sharing its borders with all the region's countries. In its bid to become the "battery of Southeast Asia" and to meet the perceived growing demand for electricity in neighbouring countries, particularly Thailand and Vietnam, the Government of Laos has made hydropower a central tenet of its economic development strategy.

During 2007-2008, the Government of Laos signed memoranda of understanding (MoU) with Thailand and Vietnam, committing to export 7,000 MW and 5,000 MW of electricity respectively. In addition to the six large hydro projects in operation and another seven now under construction, a further 50 are in various stages of planning. Competing with other project developers including from Thailand, Vietnam, Russia, Malaysia, Japan and South Korea, Chinese companies have managed to carve themselves a large slice of Laos' hydropower sector pie.

Laos' first Chinese-backed hydropower project, commissioned in 2004, was the 40 MW Nam Mang 3 dam. The US\$63 million project was financed largely by the China Exim Bank and constructed by China International Water and Electric Corporation as a turnkey project for Electricite du Laos (EdL). A small-scale dam with large-scale impacts, the project flooded an estimated 1,000 ha of Phou Khao Khouay National Protected Area and affected some 15,000 people, of which 2,700 had to be resettled from the reservoir area. In 2002, the project was marked with controversy when it became the scene of the first ever hydropower-related villager-led protest involving ethnic Hmong men infuriated that they might be evicted from their lands without having received information about where they would be relocated. Villagers were eventually resettled to a new site, but an NGO fact-finding mission in 2006 found that relocated villagers still faced land and water shortages.

Chinese companies are presently involved in three hydropower projects under construction in Laos, the Xeset 2, the Nam Lik 1-2 and Nam Ngum 5 dams, and have secured MoUs to conduct feasibility studies on at least ten more major hydropower projects. Sinohydro Corporation has spearheaded this push, signing five contracts, including for a 1,100 MW cascade on the Nam Ou River that could potentially impact up to 50,000 people and inundate part of Phou Dendin National Biodiversity Conservation Area, and the controversial Pak Lay dam proposed for the Mekong River mainstream in Xayaboury province. While the largest projects are planned for power exports to Thailand, the majority are proposed to generate electricity for the domestic market.

Cambodia: Big plans for hydropower

Cambodia stands on the threshold of committing to an extensive domestic hydropower programme, backed mainly by Chinese project developers and financiers. In Cambodia, the cost of electricity is among the most expensive in the world and electricity infrastructure remains rudimentary, a result of the earlier decades of fighting and political turmoil. Cambodia's political elites have expressed strong support for large-scale hydropower projects, citing the need to secure access to cheap electricity to supply Cambodia's expanding economy.

Until recently Cambodia has struggled to attract investment for major hydropower development. Over the past several years, however, as China's political and economic ties with Cambodia have strengthened, the Chinese government has offered high-level political support for Cambodia's hydropower development plans.

To date, deals have been finalised on four major hydroelectric projects, all of which will be built by Chinese companies. Construction of the 193 MW Kamchay dam, located in Bokor National Park, Kampot province, by Sinohydro Corporation commenced in late 2007 (see Box: The Kamchay dam). The 120 MW Stung Atai project, approved in February 2007, will be developed by the China Yunnan Corporation for International Techno-Economic Cooperation. In June 2008, the Cambodian Cabinet approved plans for the construction of the 246 MW Stung Tatay dam and the 338 MW Stung Russey Chrum Krom dam by China National Heavy Machinery Corp and Michelle Corporation respectively.

Despite the latter three projects threatening the Central Cardamom Protected Forest, no national level public consultations were held and there is almost no information in the public domain. Civil society groups in Cambodia have expressed concern over the loss of Cambodia's natural heritage and questioned the approval process of these projects, which has been conducted behind closed doors and without the meaningful participation of local communities and other concerned stakeholders.⁵

Reportedly, a further nine hydropower projects are planned to be built in Cambodia by 2019, with a total capacity of 1,942 MW. These include the Stung Cheay Areng dam, under study by China Southern Power Grid Company (CSG), which would flood nine villages with a combined population of 1,500 mainly indigenous people and inundate the habitat of 31 endangered fauna species in the adjacent Central Cardamom Protected Forest.

CSG is also studying the Sambor dam that would be located on the Mekong River in Kratie province. This project would result in the blocking of commercially important fish migrations, the destruction of deep pool fish habitats, and interruption of hydrological, sediment and nutrient cycles. The potential impacts on fisheries could have serious consequences for the food security of riparian communities, as well as commercial fishing activities, from the Tonle Sap Lake to Pakse in southern Laos and possibly beyond.

In contrast to the intense competition between hydropower developers in Laos, Chinese companies appear to have almost cornered the hydropower market in Cambodia. Aside from Chinese companies, the only other hydropower developer known to be undertaking a feasibility study in Cambodia is a subsidiary of Electricity of Vietnam, PCC1, for the Lower Sesan 2 dam, which would be located at the confluence of the Sesan and Srepok rivers in Stung Treng province.

⁵ International Rivers and the Rivers Coalition of Cambodia. 2008. *Cambodia's Hydropower Development and China's Involvement*. <http://www.internationalrivers.org/en/southeast-asia/cambodia>

Box: The Kamchay dam

In April 2005, the Cambodian government awarded Sinohydro Corporation a contract to develop the Kamchay hydropower scheme. High-level Cambodian and Chinese government officials pushed forward the Kamchay dam in closed-door negotiations that largely left other stakeholders, including local authorities and the public, out of the process.

Financing for the Kamchay dam was secured in April 2006 from China Exim Bank. The project had previously been considered by the Canadian International Development Agency (CIDA) a decade earlier. CIDA reportedly concluded the project was economically feasible, but discreetly withdrew its support following heavy pressure from a coalition of Cambodian and international NGOs concerned about the project's poor social and environmental standards.

The 110 metre high dam, now under construction, is located in Bokor National Park, Kampot province, southwest Cambodia, and will flood 2,000 ha of protected forest. According to a 2002 survey, this forest is the habitat of 31 mammals and 10 endangered species, including Asian elephants, leopard cats and tigers. This area is also an important source of non-timber forest products for local residents, many of whom depend on the income earned through selling forest products. It is not known if Sinohydro Corporation will provide compensation or support the development of alternative livelihoods.

There are also concerns that poor river water quality could devastate the local tourism industry, pollute irrigation water that feeds durian and rice fields, and contaminate Kampot Town's water supply, extracted just downstream of the planned dam site. Shortly after construction commenced, the *Cambodia Daily* reported that water contamination from construction activities and untreated sewage discharges from the workers camp into the Kamchay River had caused tourism to plummet from 60,000 people in February to 7,700 in March at the popular Touk Chuu rapids immediately downstream.

Sinohydro Corporation will build, own and operate the Kamchay dam for 44 years, before transferring the project to the Cambodian government in 2050. Opposition politicians have questioned the length of the contract, which are typically 25-30 years. They have also questioned a July 2006 vote by Cambodia's National Assembly to guarantee Sinohydro financial compensation if the project faces difficulties or underperforms. Leaders of the ruling Cambodian People's Party (CPP) justified the guarantee by claiming that it was necessary to secure Sinohydro's investment. One abstaining opposition lawmaker, H.E. Keo Remy, pointed out that the Sinohydro contract had not been revealed to the lawmakers by the time of the vote.

Sources:

Cambodia Daily "Kampot Tourism Takes Hit Amid Construction" 24 March 2008

International Rivers and the Rivers Coalition of Cambodia. 2008. *Cambodia's Hydropower Development and China's Involvement*. <http://www.internationalrivers.org/en/southeast-asia/cambodia>

Burma's hydropower plans and China's support

Burma's considerable natural resource wealth, including massive hydropower potential, abundant timber and extensive oil, gas, and mineral deposits, has attracted the keen interest of its neighbours China, India and Thailand, each of which has sought to build closer relations with Burma's military regime. Yet, current natural resource exploitation in Burma has been closely linked to human rights abuses, environmental destruction and corruption.

As a permanent member of the United Nations Security Council and a rapidly rising global economic superpower, China is a valuable ally to Burma's junta, and close political ties have been established.⁶ To consolidate this relationship, China has invested heavily in physical infrastructure to connect its southwestern provinces to Burma, facilitating the growing volume of trade and investment from China into Burma, as well as the export of Burma's natural resources. These include major road improvements that facilitate China's access to Burma's Andaman Sea and Bay of Bengal deep-water ports, and a gas pipeline that will carry natural gas from Burma's Shwe field to China's Yunnan province.

Burma has plans for extensive hydropower development to generate electricity for domestic use and for export to Thailand and China for revenue generation. Research by EarthRights International in 2007 revealed at least 14 Chinese companies involved in approximately 40 hydropower projects in Burma.⁷ Major hydropower dams with strong Chinese backing include the Hutgyi and Tasang dams on the Salween River, the Shweli River cascade, the Yeywa dam, and seven dams on the Ayeyarwady (Irrawaddy), N'Mai Hka and Mali Hka rivers (see Dams in the Irrawaddy River Basin, this issue).

Vietnam: Hooked up to China's grid

Rapid economic growth in Vietnam has resulted in a massive increase in the demand for power, which the state-owned utility, Electricity of Vietnam (EVN), has struggled to meet. Whilst senior government officials have recognised the urgent need to improve energy efficiency, in the short term they have called upon EVN to meet demand through expansion of generation capacity, including the exploitation of Vietnam's hydropower potential. Vietnam plans to develop up to 17,000 MW of new hydropower by 2025, which represents approximately one quarter of the estimated required expansion in generation capacity.

In order to finance the new generation capacity, EVN estimates it will have to invest US\$45 billion over the next ten years alone. This has placed great financial pressure on EVN, necessitating a radical change in Vietnam's electricity industry that until now has been dominated by the monopolistic EVN. In order to match the rate of investment required, since 2004 EVN has undergone a process of partial privatisation (known in Vietnam as "equitization") that ultimately will involve selling shares in up to 50 of its

⁶ e.g. see "Our friends in the north", *The Economist*, 7 February 2008

⁷ EarthRights International (2007) *China in Burma: The increasing investment of Chinese multinational corporations in Burma's hydropower, oil&gas, and mining sectors*, published September 2007.

power plants and other subsidiary enterprises, whilst maintaining a state monopoly over the transmission network.

China and Vietnam re-established diplomatic relations in 1991, which had previously deteriorated in the 1970s and cumulated in the brief but fierce 1979 Third Indochina War. Due to the shortage of electricity in Vietnam and a shortage of coal in China, one of the most important trade sectors to have since emerged between the countries has been in energy. Vietnam exports increasingly large quantities of coal to China's southwest and eastern provinces – over 20 million tonnes in 2006 and growing at 80 per cent annually. This trade is especially important to China during the dry season when coal-fired power plants substitute hydropower plants as reservoirs run low. In exchange, since 2004, China has exported growing quantities of electricity to Vietnam from Yunnan and Guangxi provinces via five high voltage transmission lines.⁸ Energy trade accounts for approximately 20 per cent of bilateral trade between China and Vietnam, and energy exports to China account for about 50 per cent of Vietnam's total exports to China.

This reciprocal relationship is becoming increasingly locked in. In November 2006, Vietnam National Coal Corporation (Vinacoal) signed a long-term coal supply contract with China Guodian Corporation (CGC) for a large thermal power plant under construction in China's Guangxi province. In return, CGC will provide its technical experience to help develop the coal resources, which are located in Vietnam's Red River Delta, and also committed to export electricity to northern Vietnam.

Chinese companies are also investing directly in Vietnam's generation capacity. In 2006, China Southern Power Grid Company (CSG) partnered with EVN to develop the US\$28 million 21.4 MW Lao Cai hydropower station. Yet, EVN's equitization process has proceeded slowly, in part due to EVN's reluctance to forego its dominant position as an electricity generator. Therefore, it has been more common for Chinese companies to secure construction contracts. For example, the thermal power plant in the northern port city of Hai Phong is partly financed by the China Exim Bank and is under construction by CSG.

Thailand: Strategic investment and joint ventures

In contrast to Burma, Cambodia and Laos, and to a lesser extent Vietnam, the stronger political power yielded by Thailand has necessitated a more even-handed partnership strategy on the part of China. Thailand and China established diplomatic ties in 1975, forged initially around regional security issues, and that have strengthened to become amongst the closest in Southeast Asia. China is currently Thailand's third largest export market, behind the US and Japan.

On the surface at least, Chinese companies have a limited direct role in Thailand's domestic electricity sector, which is dominated by the Electricity Generating Authority of Thailand (EGAT) and its subsidiaries. Whilst China and Thailand signed an MoU in 1998

⁸ Bo., K. 2008. Sino-Vietnamese Energy Cooperation: Promises and Pitfalls, www.chinastakes.com/story.aspx?id=186

for China to export 3,000 MW of power by 2017 from Yunnan province, negotiations are at present suspended.

As many of Thailand's Independent Power Producers are traded on stock markets, however, it is likely that Chinese investors are shareholders. For example, it is known that OneEnergy Limited, which is a joint venture between Japan's Mitsubishi Corporation and Hong Kong-based China Light and Power, is a 22 per cent shareholder of the Electricity Generating Company Public Limited (EGCO). EGCO holds interests in 16 power stations that are either operational or under construction in Thailand and the region, including a 25 per cent stake in the Nam Theun 2 hydropower project in Laos. Given the close ties between Thai and Chinese businesses, it is also probable that numerous sub-contracts, for example for power station construction, are won by Chinese companies or joint ventures.

As Thailand's economy and demand for electricity has grown, and public resistance to new large domestic power plants strengthened, Thailand has increasingly looked towards importing power from its neighbouring countries. It is within this context that Chinese developers are studying hydropower projects in Laos and Burma for power export to Thailand.

In the case of Burma, Thai companies have sought strategic partnerships and joint-ventures with Chinese companies to develop controversial hydropower schemes on the Salween River. At the Hutgyi dam EGAT has partnered with Sinohydro Corporation, while Thailand's MDX company has partnered with China's Gezhouba Water and Power Group Co. Ltd to develop the Tasang dam. In addition to bringing technical expertise and financing, Chinese companies arguably reduce the political risk for Thai companies working in Burma due to China's close relationship with the government.

Building alliances, building dams

China's growing interaction with the Mekong Region through aid, trade, investment and diplomacy is a key driver in redefining the region and its relationship with the world. For major Chinese industries such as hydropower, this growing relationship has opened up new project development and investment opportunities that have been embarked upon in a spirit of political cooperation and economic gain – and often these incentives coexist.

As a result, Chinese developers are involved in many hydropower projects throughout the Mekong Region. With the backing of the respective Mekong Region governments, these include a number of high-risk hydropower projects, including on the mainstream of the Mekong and Salween rivers that, if developed, could devastate riverine ecosystems with serious consequences for those communities dependent upon them. Setting worrisome precedent, the limited number of hydropower projects constructed to date by Chinese developers in Burma, Laos and Cambodia, have drawn criticism for their impact on local communities and the environment, as well as the overarching poor development process, including an overall lack of public accountability.

In China, in response to a growing awareness about the environmental costs of economic development amongst the population, the government has recently taken a number of steps towards strengthening environmental protection domestically.⁹ These have included legislation, such as the Environmental Impact Assessment Law, passed in 2003 and which includes provisions for public participation, and the Green Credit Policy, which promotes the Equator Principles for Chinese financial institutions lending to environmentally-risky domestic projects.

Whilst China does not have laws that specifically address the impacts of dams Chinese companies build overseas, in response to international concern about Chinese overseas projects, in October 2006 the State Council issued nine “Principles Governing the Activities of Foreign Investment Firms”. There is little evidence to date, however, that these strengthened domestic standards are being practised in China’s overseas dam projects (or in reality even in China itself), let alone the application of more rigorous international standards such as those recommended by the World Commission on Dams.

China’s politicians and its hydropower industry have rapidly built close relationships with the Mekong Region’s political and business elites. Yet whether the wider population are equally endeared to their northern neighbour’s controversial infrastructure investments is a more open-ended question. As the environmental and social cost of large hydropower development become apparent, China’s association with such high-impact projects will certainly threaten the “benign neighbour” reputation that the Chinese government is trying so hard to build. A better way forward would be for China’s political and business leadership to recognise the importance of healthy river systems to the Mekong Region’s people, and proactively work to sustain these natural support systems for the common good.

⁹ Sun Wukong “Green whirlwind sweeps China” *Asia Times Online*, 5 March 2008.
www.atimes.com/atimes/china/JC05Ad01.html