

Power Play

Underdeveloped Laos believes hydropower is its ticket to economic advancement but taming the Mekong River involves more than engineering

By Jennifer Khoo



The mighty Mekong river runs through the heart of Laos. For one of the poorest countries in Southeast Asia, landlocked and encircled by great economic powers, the river is key to its development.

Despite an average annual growth rate of about 8 percent, Laos has yet to fully tap the river as a resource that could help shape a vibrant economic future. The river shapes much about this country. It helps form the country's borders with Myanmar, Thailand and Cambodia. The Mekong is also the sole source of a meager income for many in a country where agriculture accounts for more than 20 percent of gross domestic product and employs around 80 percent of the population.

The economy has long been buoyed by exports of natural resources and by foreign direct investment in the mining of copper and gold, in logging and in construction projects. Now, direct access to the largest share of the waters of the Mekong among the countries the river flows through has led the Laotian government to pick hydropower as its preferred driver of economic growth.

Nam Ngum Reservoir in Laos

Photos: Thinkstock

Galvanized by the skyrocketing growth of its fellow ASEAN members, Laos has been vocal about its hydropower ambitions, and about becoming the “battery of Southeast Asia.” Over the past decade, private investors and developers of the hydropower industry have flowed into the country to cooperate with the government, which has commissioned the construction of several dams along the Mekong.



Dam strategy

Hydropower is currently the main source of electricity in Laos. The government hopes selling some of this sustainably generated electricity to neighbors Vietnam and Thailand will improve the economic position of the country.

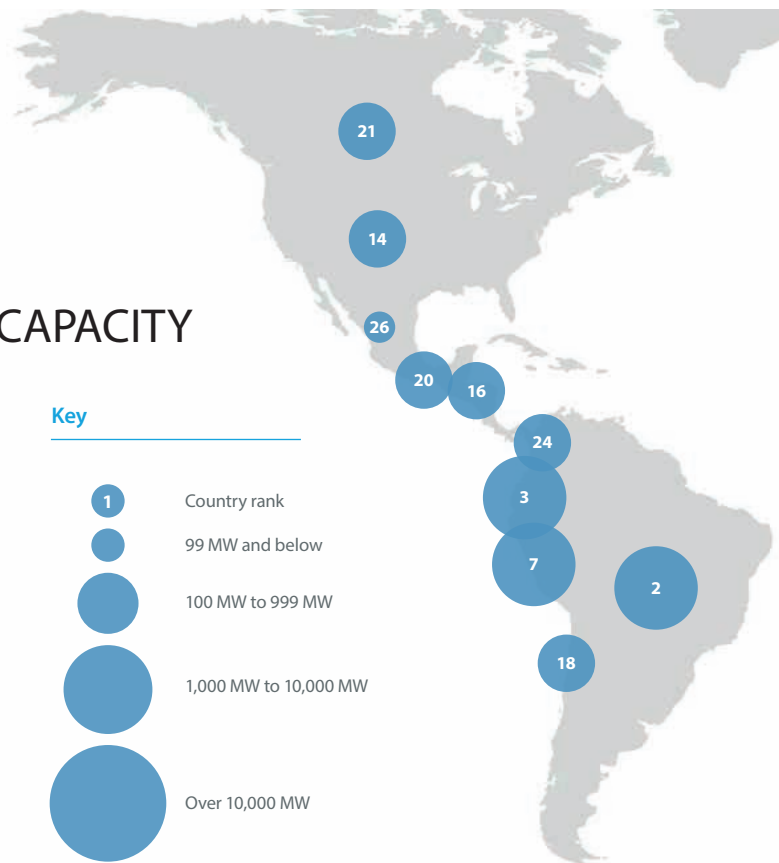
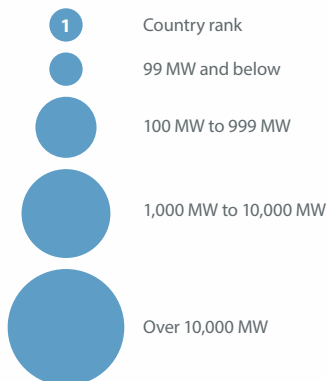
Harnessing the Mekong and other rivers in Laos creates potential for immense electricity generation – up to 18,000 megawatts, reports say. To put that into perspective, the country already operates about 20 hydropower plants with a combined capacity of 3,000 megawatts.

One of these, Nam Theun 2 (NT2), is a large plant that began operating in 2010. It is widely expected to

generate US\$2 billion in revenue over a 20-year period. The people of Laos have already begun to feel the benefits of revenue from NT2, which has been spent on improving living conditions, healthcare, education and accessibility in poor, remote areas. Revenue has also been spent on the protection and conservation of natural areas of the countryside.

NEW HYDROPOWER CAPACITY ADDED IN 2016

Key



The Laotian government has commissioned 40 to 50 more hydropower plants which are due to begin operating by 2025.

Economic overflow

Revenue is necessary for economic growth and the mushrooming hydropower plants are securing generous inflows for the government. The problem is that the hydropower projects are inadequately regulated and most developers show little commitment to responsible environmental or social practices.

Often, more than one project is undertaken on the same river, or in the vicinity of mines or irrigation schemes that vie for the same water, resulting in pollution and harm to ecosystems.

The boom in hydropower has failed to create much employment for Laotians, who often lack job skills and basic education – especially those in the countryside, where about 70 percent of the population lives.

Many people lack access to adequate basics such as

NEW INSTALLED CAPACITY BY COUNTRY*

Rank	Country	Capacity added (MW)
1	China	11,740
2	Brazil	6,365
3	Ecuador	1,987
4	Ethiopia	1,502
5	South Africa	1,332
6	Vietnam	1,095
7	Peru	1,040
8	Switzerland	1,022
9	Laos	650
10	Malaysia	622
11	India	481
12	Angola	400
13	Portugal	391
14	United States	379
15	Turkey	363
16	Costa Rica	323
17	Norway	254
18	Chile	239
19	Russia	171
20	Guatemala	163
21	Canada	122
22	Zambia	120
23	Nepal	115
24	Colombia	106
25	Albania	81
26	Mexico	64
27	Pakistan	56
28	Indonesia	47
29	Afghanistan	42
30	Belarus	40
31	Kazakhstan	22
32	Liberia	22
33	DR Congo	14
34	Cameroon	10
35	France	8
36	United Kingdom	7
37	Sri Lanka	5
38	Sierra Leone	5
39	Italy	4
40	Rwanda	4
41	Zimbabwe	4
42	Azerbaijan	2

*including pumped storage

Source: IHA 2017 Hydropower Status Report



Environment, so putting the management of natural resources under a single authority for the first time.

Several development institutions, including the World Bank and the Asian Development Bank, are helping the government improve its ability to manage natural resources sustainably. This will include the expansion and preservation of forest cover, the adoption of safer and better practices in mining, and the mitigation of harm done by the hydropower industry.

The bigger picture

Exploiting its natural resources is easy for Laos as long as its natural resources are available. But genuinely sustainable progress will be made only when the government takes a more holistic approach to economic growth.

Laos has an accumulated fiscal deficit equivalent to 3.5 percent of GDP in the past five years, shrinking foreign currency reserves and growing public-sector debt. Sluggish recovery of the global economy in general – and the Chinese economy in particular – has driven down the prices of minerals Laos exports.

education, healthcare, clean water and plumbing. Infrastructure in the country is also severely underdeveloped. The road network is basic – though improving – and the landline telecommunication system is limited. These shortcomings are hardly conducive to extensive business operations.

The government has taken steps towards improving its management of water resources. In 2011 it established the Ministry of Natural Resources and

As well as managing its finances and bringing stability to the financial sector, the government needs to invest in the health and education of its people, and create opportunities outside the resources sector for the 900,000 young workers due to join the labor force in the next decade.

Attention in greater detail to the macroeconomy will pave the way toward stronger, more sustainable and more inclusive growth.

