



Mekong Watch Fact Sheet

The Don Sahong Dam (on the Mekong Mainstream)

■ Location

Khong District, Champasak Province, southern Laos. Construction is planned for the Hoo Sahong Channel that flows through a broad expanse of wetlands (Siphandon) created by the Mekong river, where it splits into several streams.

■ Project Proponents

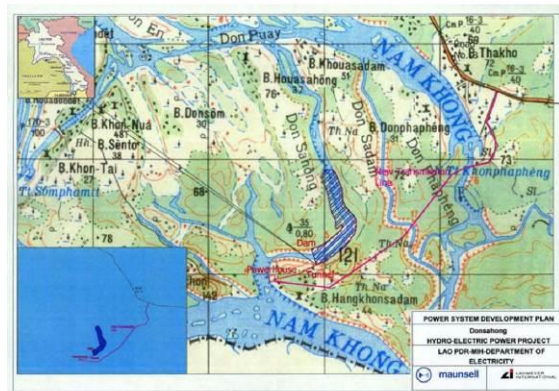
- Don Sahong Power Company: Ground Roses Ltd. holds a 79% share; Silver Acreage Ltd, 20%; and Electricite Du Laos (EDL), 1%.
- The dam will be operated partly by the Mega First Corporation Berhad (MFCB), but MFCB will entrust the technology, procurement and construction to Sinohydro International Corporation of China on a contract period of 50 months for U.S.\$320 million.

■ Project Funding and Sources

The cost of the project was announced as \$300 million, but in November 2013, Lao government officials said it had risen to \$723.1 million. The funding sources have not been determined yet.



Hoo Sahong Channel, planned construction site (dry season)



Hoo Sahong location (source: EIA of DSHD)

■ Project Outline

The Don Sahong Dam will be a 260 MW hydroelectric dam built on a channel of the Mekong mainstream called Hoo Sahong, located in Laos less than two kilometers upstream from the Cambodian border. The company in charge, Don Sahong Power Company, is 79% funded by Ground Roses Ltd., 20% by Silver Acreage Ltd. and 1% by EDL. According to newspaper sources in late 2015, the dam is expected to generate about 2,000 gigawatt-hours annually, commencing commercial operation in 2019 or 2020. The electricity will be sold to EDL to supply demand in southern Laos.

■ Conditions

The Malaysia-based MFCB conducted a survey in March 2006 in connection with an agreement with the Lao government for an 18-month feasibility study on the Don Sahong Dam. The Lao government employed the consulting firms AECOM of Australia and New Zealand and SMEC of

New Zealand to oversee development. Later, the Lao government received an environmental impact assessment from the Australian Power and Water Corporation (APW). The results of these surveys of the dam were withheld from the public for a long time, but in October 2013, the Lao government notified the Mekong River Commission (MRC), of which it is a member country, that construction would start, and released the environmental impact assessment. In addition, the Lao government declared that the dam construction site was on just one of 17 channels of the Mekong River, accounting for a mere 5% of the total volume of the river's flow, so it would not be recognized as a mainstream dam and there would be no need to discuss it with neighboring countries. To the contrary, however, in the strategic environmental assessments of mainstream dams entrusted to the MRC, the Don Sahong had always been treated as a mainstream dam. The Don Sahong Power Company was established in March 2015 to spearhead the project, and the following October, MFCB entrusted the China-based Sinohydro International Corporation with engineering, procurement and construction for the dam under a U.S.\$320 million contract period of 50 months. MRC member countries downstream from the dam, Vietnam and Cambodia, have repeatedly expressed criticism of this dam's construction, but the Lao government has made no move to review its plans.

■ Negative impacts of the dam

Construction of the Don Sahong Dam will have the following irreparably negative impacts on the special natural environment of the Mekong River, the rare plants and animals that depend on it, and the livelihoods of the people supported by the Mekong Basin's fish species, more than 80% of which are thought to be migratory.

Effects on Fisheries

A report issued by the World Fish Center in July 2007 (see Reference 4) pointed out that the fish catches of the Mekong River were significant not only to livelihoods and food security in the region, but the fisheries of the Mekong Basin countries have economic significance estimated at about \$2 billion a year. The fish catch from the Mekong Basin fisheries is estimated to have an economic value of \$2.1 to 3.8 billion a year, and a retail value of \$4.2 to 7.6 billion (see Reference 4). In addition, the group of cascades known as the Khone Falls constitute the only major waterfall in the lower Mekong Basin, and are an important fishing site on the Mekong in this area. An evaluation of the impacts of Mekong mainstream dams on fisheries published by the Interim Mekong Committee Secretariat in 1994 noted that the Khone Falls constituted "an ecologically unique area" that is essentially a microcosm of the entire lower Mekong River," and that "such a site is so rare in nature that every effort should be made to preserve all of Khone Falls from any development" (see Reference 3).

Special Features of Hoo Sahong

Hoo Sahong is the only channel in the Siphandon region with a gentle enough gradient that fish can pass through it year-round. The Don Sahong Dam would block this important migratory route, threatening the livelihoods of people who depend on fisheries in four countries, Thailand, Laos, Cambodia and Vietnam. In their 1996 newsletter, the Mekong River Commission noted that "the blocking of Hoo Sahong could devastate much of the most important Mekong River fisheries in Laos" (see Reference 1).

Effects on Rare Species and Tourism

The dam is to be located just upstream of where Mekong Irrawaddy dolphins are found. Only about 80 of the dolphins remain in the Mekong River, mostly in Cambodia, but five survive in Laos. It is feared that dam construction could cause vibrations and reductions in fish numbers, threatening the existence of the dolphins, which feed on the fish. The dolphins, together with the Khone Falls cascade group, are an important tourist resource in this area (see Reference 5).

Doubtful Effectiveness of Mitigation Measures

Drawing upon research to date on disruption of fish migrations, a World Fish Center report stressed that “despite various attempts, there are so far no examples of effective measures in the region to mitigate the effect of dams on fisheries” (see Reference 4). The construction of “run of river” dams in the Mekong Basin has had devastating environmental and social impacts, as was clearly seen in the case of Thailand’s Pak Mun Dam. (Revised January 2016.)

【References】

- 1) Baird, I.G.. 1996. Khone Falls fishers, Catch and Culture (MRC newsletter). Vol.2 No.2 November 1996.
- 2) International Center for Environmental Management (ICEM). 2010. *Mekong River Commission (MRC) Strategic Environmental Assessment (SEA) for Hydropower on the Mekong Mainstream: Fisheries Baseline Assessment Working Paper*. Vientiane, Lao PDR: MRC.
- 3) Mark.T Hill and Susan A.Hill. 1994. Fisheries Ecology and Hydropower in the Mekong River: An Evaluation of Run-of-the-River Projects. Mekong Secretariat, Bangkok, p.90.
- 4) World Fish Center. 2007. The Don Sahong Dam and Mekong Fisheries, A science brief.
- 5) World Wild Fund. 2007. The Don Sahong Dam and the Irrawaddy Dolphins, WWF Science Brief.