Mekong Watch
3F Aoki Building 1-12-11 Taito
Taito-ku, Tokyo 110-0016 Japan
E-mail: info@mekongwatch.org
Website: http://www.mekongwatch.org


Lower Sesan 2 under construction
(Photo taken on 27th July 2015)

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Briefing Paper

Negative Impacts of the Lower Sesan 2 Dam on Cambodia

The Lower Sesan 2 Dam (LS2), currently under construction, is expected to bring not only enormous negative impacts on the Sesan and Srepok Rivers in northeastern Cambodia, but also a disaster to the entire nation of the Royal Kingdom of Cambodia and Lower Mekong. To prevent this, we urge the Government of Cambodia to immediately order the project developer to halt the construction, disclose all relevant information, and carry out a more comprehensive Environmental Impact Assessment (EIA), while ensuring participation of all stakeholders, especially the affected local communities, and seriously reconsider the project.

Major negative impacts to emerge:

1. LS2 will block fish migration between the mainstream Mekong River and the Sesan/Srepok Rivers. At least 78,000 villagers living upstream of LS2 will lose access to migratory fish (Baird, 2009). Reduction of these villagers' protein intake will become a serious matter. LS2's negative impacts will also be felt in the Tonle Sap Lake as well as the entire Lower Mekong Basin. According to Mekong River Commission (MRC), fishery population in the Tonle Sap Lake amounts to more than 1.2 million.

2. Claimed economic benefits are questionable as electricity generation can fall significantly in the dry season. A simple comparison between the anticipated revenues from LS2's electricity generation and the loss of fish production suggests that the latter can be much larger. While LS2 is expected to raise the revenue of about 29.58 million USD each year (IR, 2014), the total value of fish production only along the Sesan River ranges from 1 to 25 million USD (Baran et al., 2013: 16).

3. The water quality along the Sesan and Srepok Rivers will be degraded as LS2's reservoir will hold a large amount of water and release it when generating electricity. The water quality degradation will cause health problems to the local communities who depend on the river water.

4. LS2 could reduce the basin's sediment load by 6.0 to 8.0%. Not enough nutrients will be delivered downstream, affecting the ecosystem of the Mekong River, including the Tonle Sap Lake (IR, 2014). The fertile water and productive soil to be used for agriculture will also be lost.

5. A number of local communities living along the Sesan and Srepok Rivers have lodged strong oppositions to LS2. Their voices should seriously be heard. Otherwise, dissatisfactions and distrusts towards policy makers among these villagers may emerge.

Background of the Project:

LS2 is being under construction on the Sesan River in Sesan District, Stung Treng Province. It is located 1.5 km downstream from the Sesan River's confluence with the Srepok River. The project was approved by Cambodia's Council of Ministers in November 2012. The construction commenced in February 2014.

LS2 is proposed to generate electricity, with installed capacity of 400 MW. The planned dam height is 40 m from the river bed and the length is 8 km. The dam will flood 33,500 ha of land. These information is

based on the 2008 EIA (Key Consultants Cambodia, 2008). However, more detailed and updated design information on the project has not been disclosed to the public, which makes the verification of anticipated environmental and social impacts extremely difficult.

The developer of the LS2 project is the Hydro Power Lower Sesan 2 Company. It is a joint venture among Cambodia's Royal Group (a 39% shareholder), China's Hydrolancang International Energy, a subsidiary of Huaneng Group (51%), and EVN International Joint Stock Company, a subsidiary of the Electricity of Vietnam (EVN) (10%).

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