

Nowadays, there is a high increase in demand for electricity, especially to support economic activities. Hydropower is one of the largest sources of renewable energy and is widely used in many countries due to its low cost. The Lower Sesan Dam was built in Cambodia under the decision between China Huaneng Group officials and the Cambodian prime minister. The Dam was expected to be one of Asia's widest dam and develop economic activities. On the other hand, the operation caused a serious problem for people who live along the river, the freshwater ecosystem, and also to the environment.

First, The existence of the Lower Sesan Dam caused a severe impact on a freshwater ecosystem like Mekong River Basin. The migration of thousands of fish was disrupted by cutting the two main tributaries, which create a negative impact on the reproductive cycles of native fish species.

The dam not only affected the ecosystem but also affect the people who lived in the village that sink under the water due to the operation of the dam. This led to the resettlement of people. Villagers suffered in finding food and income due to the inappropriate condition of the new settlement, for example, the increase in the cost of traveling because they migrated to the area that is far from the water. People lack to find income and food as they need to bear more costs to access the resources that were easier to approach before the construction of the Lower Seasan 2 dam. The fish is so small and the amount of fish that people can catch has extremely decreased that even though some people that insist to live near the river need to give up because they were too struggle to make a living.

Moreover, Cambodia's geography lacks large mountains and gorges that can be used as reservoirs to generate enough pressure that is required to power a hydroelectric turbine. Because of this, building the dam would require a large amount of land which will create problems. For example, the emission of large amounts of carbon dioxide and methane from damming up the vegetated land.

In conclusion, the lower Sesan 2 dam can build a good image for Cambodia by owning one of Asia's widest dam and give an alternative way to generate electricity at a lower cost. However, the geography and conditions prevent the Country from maximizing the benefits that the country could gain from building the reservoir. Even worse, it created massive problems for the ecosystem and well-being of the people living in indigenous communities or ethnic minorities.