

Pavarisa Rujichaladol
Dr. Supawan saelim
EE375 applied economics for
Natural resources and environment

How a China-Built Dam Destroyed an Ecosystem and Livelihoods

The Lower Sesan 2 is a dam that was built as a part of China's belt and Road Initiative in Cambodia's Mekong River Basin. It is also known as one of Asia's widest dams. And from the construction of this dam, has had an impact on the environment, economy, and society.

For the economy, this hydroelectric dam was expected to produce electricity at a lower cost. in addition, Cambodia's non-mountainous geography requires the dam to be large to ensure that the falling waters are strong enough to generate energy. However, electricity is still scarce in Cambodia.

For the environment, building this dam cuts off the migration in upstream and downstream directions and damages their feeding and reproductive cycles. As a result, many aquatic animals die, and some are extinct. Moreover, as it is mentioned that this dam is required to be large which means that many plants were exterminated. Those plants that die emit carbon dioxide and methane and especially this dam creates a carbon footprint as much as fossil fuel plants.

For society, the natives were forced to relocate and now live in the forest in order to live near the water to do fishing and even they received the compensation, it couldn't compare to what they lost. And those who opposed were threatened by their government. Moreover, many indigenous villages were flooded. The creation of this dam makes 3 things that are Cambodian's food and income were destroyed. First is fish, since many fish species died makes the number of fisheries, which is the main occupation for people who live near the Mekong River, decrease, also fish is the main ingredient for Cambodian food. Second, rice, vegetable, and fruit, villagers grew the plant along the riverside and now they couldn't grow well because how the nutrients were locked in the dam, and people there are too poor to buy the fertilizer. Third, forest product, forest harvesting used to be one of the main sources of income when dams were built, part of the forest was submerged, this section of the income is nonexistent.

In conclusion, building this dam for the purpose of generating hydropower was not worth the trade-off due to the unfavorable terrain and mortal life.