

EE 375

“How a China-Built Dam Destroyed an Ecosystem and Livelihoods”

Thousands have lost their homes and livelihoods since the completion of one of Asia's widest dams, the Lower Sesan 2, in Cambodia's Mekong River Basin. Cause that built as part of China's Belt and Road Initiative (BRI), the dam, which spans well over six kilometers, has cut off vital migration routes for native fish species, and displaced numerous Indigenous and ethnic minority communities.

By cutting off two rivers that were major tributaries to the Mekong, and by creating a huge artificial reservoir, the dam prevents fish from traveling up and down, disrupting their feeding and reproductive cycles. As a result, whole species have died and fishery yields have plummeted. Fish is a major part of Cambodians' diet. Millions of people on the Mekong River system live off catching and selling fish. Today, the decline in fisheries is felt all over the country. Thousands were forced to leave their homes when their fishing grounds and ancestral farming lands were flooded.

About 4,500 to 5,000 people lived in the villages that were submerged by the dam. Many belong to Indigenous communities or ethnic minorities. Their food and income used to come from three sources. First, fish, which was their main source of protein and which they would sell to purchase necessities like nets or household goods. Second, from rice, vegetables, and fruit that they grew in the floodplains along the rivers. And third, forest products such as herbs, nuts, seeds, and tree resin. People were poor but self-sufficient.

Everything the dammed-up rivers provided – food, water, an income from fishing – is gone. If people want to fish, they have to travel because the area they were resettled to is far from any river. The soil where they live now is rocky, dry, and difficult to farm. It requires fertilizer they don't have money for. And because the ground water is unfit for drinking, people have to buy water. Some refused to resettle and now live on forest land to remain close to the water. But they, too, struggle to make a living. Where some families would catch 40 kilos of fish a night before the dam was built, they now don't even catch two kilos. Large, meaty fish that can be sold for a good price have become rare. The fish that people catch today is so small, it's often only good for making Cambodia's traditional fermented fish dish called *prahok*.

The country's geography is not suited for hydroelectric power. The dam had to be so wide because the country lacks large mountains and gorges that could act as reservoirs and ensure the falling water creates sufficient pressure to power hydroelectric turbines. That in itself creates problems. When you dam up this much land, especially heavily vegetated land, all of that dead vegetation emits large amounts of carbon dioxide and methane – for years. Some hydroelectric dams – this one in particular – have carbon footprints that equal that of fossil fuel plants.