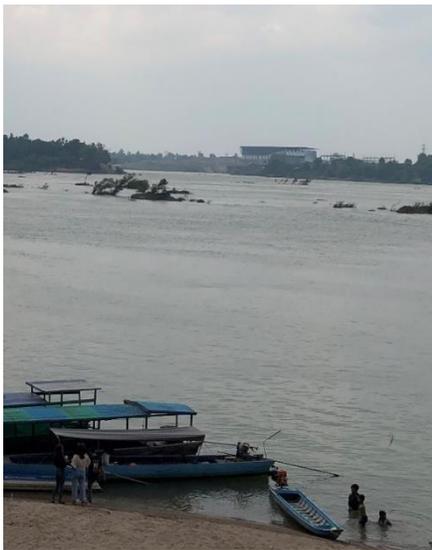


# Finding New Pathways - Monitoring Fish Migration, A Mekong River Lifeline

## Why is monitoring fish migration important?

Laos aims to become Southeast Asia's battery hub by 2030, exporting hydropower electricity to neighbouring countries. However, the construction of dams on the Mekong River and its tributaries threatens the vital fishery of the region. Over 70 million people in the Lower Mekong River Basin (LMB) rely on fish and rice as a primary food source. Fish provides 81% of the population's protein intake in Cambodia and 48% in Laos. In Cambodia and the Mekong Delta in Vietnam alone, nearly 7 million people make their living through fisheries and aquaculture. The Mekong River hosts more than 1,100 species, including the world's largest freshwater fish. The [Mekong River Commission](#) (MRC) estimates the economic value of capture fisheries in the LMB to be approximately USD 11 billion per year. As the population of the LMB is expected to exceed 100 million by 2025, the reliance on fisheries is set to increase.

To mitigate the adverse impacts from hydropower on fish migration in the Mekong Region, fishways have been planned and built. Fish passages are designed to aid fish in migrating and passing barriers such as dams to reach their spawning and feeding grounds. **Monitoring passage effectiveness can provide early insights into dam impacts on migration, allowing timely adjustments to dam and passage operations.**



**Figure 2: View on the Don Sahong Hydropowerplant from Cambodia**

The MRC introduced the [Joint Environmental Monitoring \(JEM\)](#) programme to test the fish passage monitoring methodology at the Don Sahong Hydropower dam just

above the southern border of Cambodia and Lao. The **Don Sahong dam**, located at the famous Khone Falls, the longest waterfalls in Southeast Asia, where the Mekong River drops by approximately 16 m over just a few kilometres, uses for fish passages **modified natural fishways** near the power station. While smaller channels are passable only during the rainy season, the Don Sahong main channel was passable whole year round prior to the dam construction. However, since construction, the Don Sahong Hydropower Company has attempted to mitigate the impacts on fish and fish migration by

## Testing the methodology at a Mekong River dam

modifying adjacent channels to enable fish migration throughout the year.

