Joint Environmental Monitoring (JEM) Programme Pilots Project - Factsheet

Piloting the Joint Environmental Monitoring (JEM) Programme on Two Mekong Mainstream Dams: The Don Sahong Hydropower Project and the Xayaburi Hydropower Project

KEY FACTS

- Hydropower can support economic growth in the Lower Mekong Basin (LMB)
- Poorly managed hydropower development threatens ecosystems and livelihoods. For example:
  - Changing flows of water in the river can affect river habitats and change where fertile sediment is deposited
  - Fish migration and habitats can be affected, leading to smaller catches and food insecurity

JEM Overview

The JEM Programme will seek to understand conditions on the river over time, so we will know how hydropower development is affecting the environment and people. Information about water flows, changes to the amount of sediment moving through the river, and how the shape of the river channel is changing, will be collected. The JEM Programme will also measure water quality as well as the amount of living creatures in the river, including fish.

The JEM Programme builds on existing monitoring, both collecting new information (e.g. new water quality details), and collecting some information in new places (e.g. directly above and below hydropower dam sites). The collected information will be shared among the Mekong countries so that we can understand how hydropower related changes are affecting the environment and people locally and regionally, both above and below dam sites.

JEM training on Fish Larval Drift Monitoring

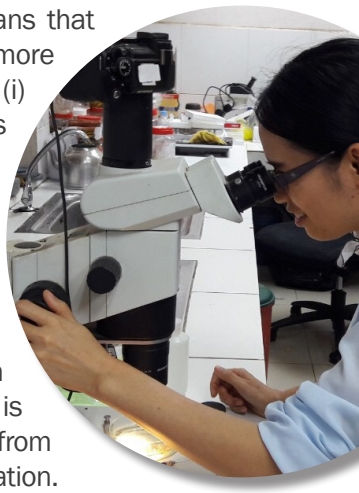
By increasing our understanding about hydropower impacts on the river, fisheries resources and other wildlife, as well as on people, wwe can maximise hydropower benefits and better manage negative effects, including across provincial and national boundaries.

Piloting the JEM Programme

The Mekong River Commission (MRC) is testing, or 'piloting' the JEM Programme at the Xayaburi and Don Sahong hydropower dams in Lao PDR. These are the first two operational dams on the LMB mainstream, so it is critical that MRC monitors their impacts.

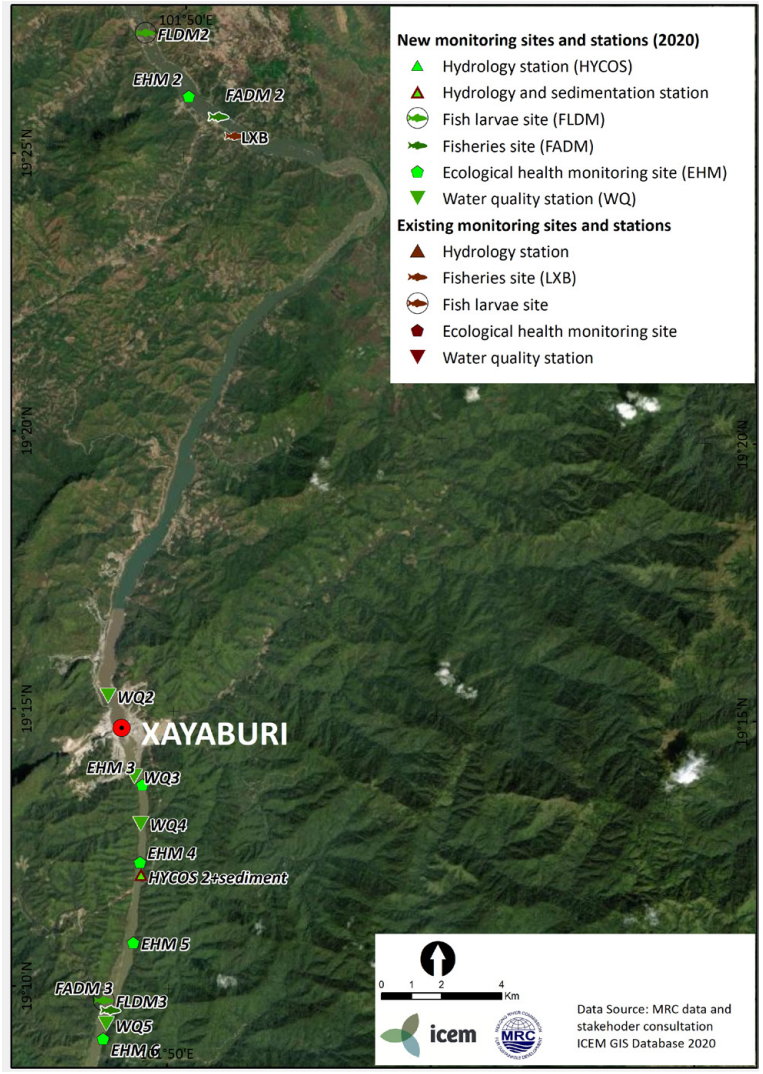
A major objective is to ensure that national monitoring teams use the same methods to collect data and report on river flows, changes in water chemistry, as well as on fisheries and river health. This will ensure that information collected in the four LMB countries (Cambodia, Lao PDR, Thailand and Viet Nam) can be easily analysed and compared.

Piloting the JEM Programme means that before applying JEM methods more widely, the MRC can check that (i) monitoring and reporting methods are robust, (ii) that they are not too costly, and (iii) they are suitabile for the range of conditions that exist across the LMB countries.



The JEM Programme Pilots began in November 2019 and will finish in December 2021. The MRC is executing this project with support from the German Development Cooperation.

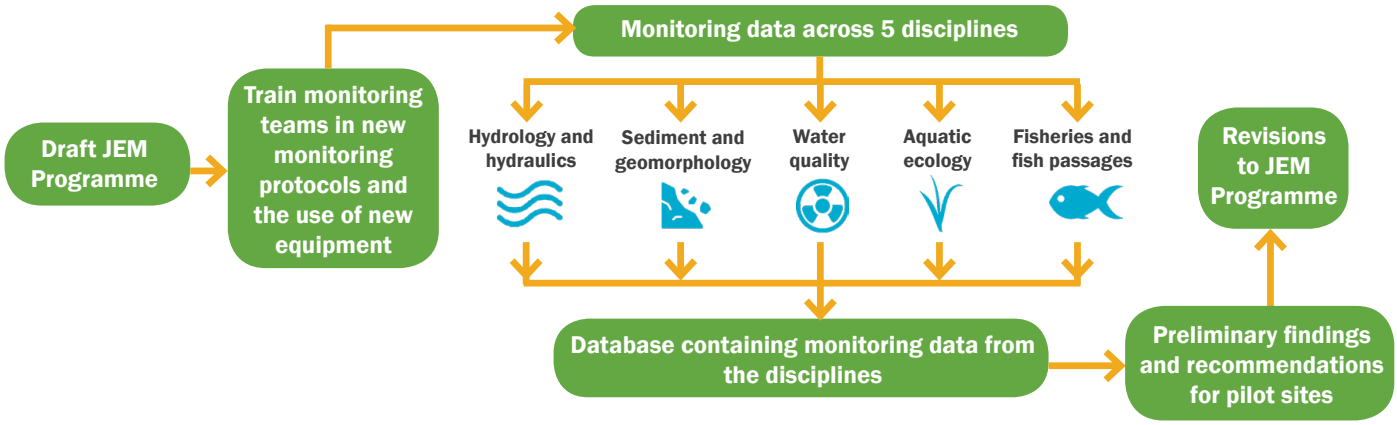
Monitoring sites and stations around Xayaburi dam



What does the JEM Programme mean for the Lower Mekong Basin?

- The JEM Programme will help to compare hydropower related changes against preexisting environmental conditions. This will help minimise harmful impacts.
- In this way the JEM Programme will support proper management of hydropower development and make sure that river health, biodiversity, and community livelihoods including fisheries are a key factor in river-related decision making
- By piloting the JEM Programme we can strengthen and adjust it before wider implementation across the Mekong basin.

The JEM Programme methodology



More information is available in the JEM Pilots Project Inception Report availabe on the MRC website: http://www.mrcmekong.org/assets/Publications/JEM-InceptionRep.pdf, and in the JEM promotional video available on YouTube: *https://www.youtube.com/watch?v=r4xfvn8jIEA*

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