

Optimising fish passage at hydropower sites in the Mekong



Key details

Location

Laos

Duration

Start Jul 2024

End Jun 2029

Budget

AUD 5,700,000

Commissioned organisation

Charles Sturt University

Partners

Charles Sturt University; Department of Livestock and Fisheries Lao PDR; Living Aquatic Resources Research Centre; National University of Laos; Xayaburi Power Company Limited

Project Leader

Dr Lee Baumgartner

ACIAR Research Program Manager

Dr Chris Barlow

Program

[Fisheries](#)

Project code

FIS/2023/133



Overview

This project aims to minimise the potentially harmful impacts of hydropower projects on the productive fisheries, and the people who depend upon them, in the Lower Mekong Basin.

Productive fisheries in the Lower Mekong Basin will be negatively and severely impacted if all planned large-scale mainstem hydropower projects are completed without appropriate consideration for the impacts on fish migration and people who depend upon migratory fish.

The impacts of hydropower projects on the fisheries and communities in the Lower Mekong Basin include significantly reducing fish biomass and negatively affecting food security and livelihoods, with potential economic losses estimated in the billions of dollars. The challenge lies in balancing hydropower development with the preservation of fisheries and

community wellbeing. This includes addressing technical aspects like fish passage, socio-economic aspects such as local fishers' livelihoods, and knowledge transfer to improve policy outcomes and practical application at other hydropower sites.

The project will conduct activities as part of a broader effort to balance hydropower development with the preservation of fisheries and community wellbeing in the region. These activities are crucial for the sustainability of fisheries and the livelihoods of local communities in the Lower Mekong Basin. The project aims to provide data and insights that can be used to inform policy outcomes and practical applications at other hydropower sites.

Activities

- Minimise the potentially harmful impacts of hydropower projects on productive fisheries and the people who depend on them in the Lower Mekong Basin.
- Evaluate the effectiveness of upstream fish passage facilities at hydropower sites.
- Validate monitoring technology and refine methods for a diverse tropical ecosystem.
- Influence the design of future hydropower projects based on evidence and learnings from existing sites.

Outcomes

- Central government investment decision makers companies advocate, through policy and practice, for funding of fish friendly and inclusive hydropower development at other developments in the Mekong cascade.
- Technical staff in relevant government agencies and hydropower companies improve their use of design criteria, which foster fish friendly and inclusive hydropower development.



ACIAR

**Australian
Aid** 