



PROJECT AT A GLANCE

Title

Dam Safety Technical and Institutional Assistance in Lao PDR (DSTIA)

Budget

(04/2022-03/2026)
CHF 5,367,000

Partners

Implementing partner Helvetas Swiss Intercooperation (HSI), Government Partner Department of Energy Industry Safety Management of MEM

Contact

HELVETAS Swiss Intercooperation
Tel: (856-21) 263 189;
(856-21) 263 190
Email: laos@helvetas.org
Web: www.helvetas-laos.



Following the Swiss support to the Nationwide Emergency Dam Safety Inspection, the Lao Government requested a longer-term Swiss support in strengthening the national dam safety regulatory and institutional frameworks. By increasing government’s law enforcement and technical capacities to international standards, the project will ensure better protection for downstream communities, estimated in 1.5 million people, and contribute to safe energy production and the sustainability of infrastructure.

PROJECT LOCATIONS

Nationwide



BACKGROUND

Hydropower dams are a priority of the Government for the economic development of Lao PDR, ensuring local provision of electricity as well as increasing national income from power export. They also represent a risk to the population in case of faulty design or construction, lack of maintenance, surveillance and failure to implement environmental and social safeguards.

The Government of Lao PDR (GoL) recognizes that while building more hydropower dams will generate income for the country, it also increases social and environmental risks. Hence, ensuring the safety of energy production infrastructure is vital for people living around and downstream of dams as well as for securing an income for the State and providing a means of production for the local economy.

The Lao PDR’s 9th National Socio-Economic Development Plan (NSED) 2021-2025 confirms the relevance of hydropower for the country’s socio-economic development; more than 100

dams are planned by 2030. This reflects the interest of neighboring countries for power supply. The 9th NSED also stresses the importance of enhancing effective early warning system, disaster prevention and preparedness. The Dam Safety Technical and Institutional Assistance in Lao PDR (DSTIA) Project is a response to the Government of Laos priorities and demand.

The project will help inform the decisions with respect to legal framework, the setting of safety standards, and strengthen the capacity of the Lao authorities to ensure that safety measures are fully considered in dam construction, operation and maintenance.

Based on the Swiss unique expertise and experience in this field, SDC will ensure that the law and by laws as well as operation and maintenance of dams are in conformity with international practices in coordination with other development partners.

OVERALL GOAL

The overall goal of the project is to increase the safety of dams by strengthening the capacity of Laos to protect people, property and the environment from harmful effects of poor design, operation or failure in the maintenance of hydropower dams.

STRATEGY

As a result, a Systemic Approach is proposed as the project's core element. Concretely, the project will gradually strengthen the capacity of key Lao actors with a focus on MEM and its new Department in particular, National University of Laos, Lao Association on Dams and EDL-GEN and improve the institutional and legal frameworks to enable those actors to better fulfil their functions or take on new ones.

One key element of the strategy is that the safety of Dam infrastructure is a clear responsibility of Dam owners and dam operators, who have to bear the costs of safety measures and maintenance and are to be held responsible in case of a disaster.

The Government sets the safety standards through the law, the bylaws and in the concession agreements, while the development cooperation strengthens the capacity of the State to live up to its mandate and supports the training of actors so that all are enabled to comply with the requirements decided by the Lao authorities. It must be clear for the dam owners and operators that they are accountable to the Government.

Contacts will be maintained with ASEAN and MRC for knowledge sharing, as a scaling up strategy for a wider impact and dissemination.

APPROACH

The intervention strategy of DSTIA is based on considerations in terms of the theory of change, lessons learnt from the Humanitarian Aid phase and studies, International advisers' recommendations and above all, the important stakeholder consultations.

The newly established Department of Energy Industry Safety Management currently lacks the necessary technical capabilities to effectively monitor and review the enforcement of dam safety requirements by dam owners. Technical assistance to the new Department will thus concentrate on actively supporting department in technical aspects with the view of strengthening its technical capacity in a sustainable way.

There is hardly any University level education in dam engineering and safety in the country nor on the job training opportunities. This leads to a shortage of qualified local engineers and other professionals both in government and private sector, to insufficient local understanding of dam safety challenges and last but not least to a weak enforcement of dam safety requirements.

A comprehensive capacity development at all levels is thus necessary and is an expected result of this programme, contributing to its sustainability on the long run.

EXPECTATIONS

Foster inclusive and resilient societies through sustainable and safe renewable energy production by strengthening the capacity of Laos to protect people, property and the environment from harmful effects of poor operation or failure of dams and reservoirs.

This overall impact is expected to be achieved through three outcome pillars, technical support, institutional assistance and knowledge and learning for dam safety, human resources, and a better balance of power between MEM and dam owners to implement the new legal framework.



Front Photo: Nam Khan 2 dam. Photo © Patricia Droz

Back Photo: Inspection team reviewing safety procedures at Nam Ngiep Power Plant. Photo © Vichit Sayavongkhamdy