



Joint Actions, Joint Solutions

Sesan and Srepok Water Issues

Collaboration between
Cambodia and Viet Nam

IWRM BRIEF



SESAN- SREPOK PROJECT AT A GLANCE

The Sesan Srepok River Basins Water Resources Management Project is one of the MRC's five bilateral initiatives to address issues in transboundary water resources planning and management through cooperation. Funded by the World Bank, it promotes coordinated actions that follow the principles of Integrated Water Resources Management (IWRM), a universal concept aiming to balance the needs for social and economic development, as well as environmental protection along riverine communities. The project will equip both countries with the capacity and the tools to continue their joint activities beyond its lifespan.

Cambodia and Viet Nam share the Sesan and Srepok rivers, which are major tributaries in the Lower Mekong River Basin. In the last 20 years, the two basins have experienced rapid development from hydropower, mining, agricultural irrigation and deforestation. This has caused flash floods, droughts, loss of fish catch, alteration of river flows, pollution, loss of biodiversity, and other problems that affect local communities in both countries.

To better manage the shared resources in the Sesan-Srepok basins while minimising impacts of development, Cambodia and Viet Nam are strengthening cooperation and dialogue through a bilateral project supported by the Mekong River Commission (MRC).

After conducting various field surveys, and consulting with government officials and local stakeholders, Cambodia and Viet Nam have identified six priority issues for transboundary collaboration and cooperation.

Priority Transboundary Water Management Issues

The six identified issues are described in the joint technical paper, *Transboundary Water Resources Management Issues in the Sesan and Srepok River Basins of Cambodia and Viet Nam*, published in September 2017.



1

Monitoring and assessment of river flow: Neither country has conducted an assessment of water resources and scenarios of upper river development to better understand the potential effects of hydropower operations for the entire Sesan-Srepok basins. Long-term water resources data (e.g. water levels, discharge, rainfall, water quality) of the whole basins are generally inconsistent and unreliable. Both countries need to strengthen water resources monitoring and assessment processes to support decision-making and long-term sustainable development of the basins.

COUNTRIES

Cambodia and Viet Nam

BUDGET

US\$354,000

DURATION

May 2014–2018



2 Flood forecasting and warning mechanisms: Both countries issue flood forecasting and early warning within their territories, and they exchange information on flood and hydropower dam operations at the governmental level. However, this information hardly reaches the concerned local authorities and communities for cross-border flood forecasting and warning. This has led to unexpected flooding and damage in downstream areas, and lower-than-normal water levels upstream that can affect the production of energy in the following dry season. Both countries need an effective flood forecasting system and data exchange mechanism for early warning, and timely dissemination to the communities.



3 Communication and information sharing mechanisms: Cambodia and Viet Nam have attempted to develop cross-border early warning systems that provide notification of water releases from hydropower dams, but so far they've proven ineffective in providing timely and relevant information to the affected communities. With the development of the cascade of hydropower plants on the Sesan-Srepok rivers, they need to set-up an effective flood forecasting system and a sufficient data exchange mechanism to enable warning, and the timely dissemination of respective information locally.



4 Mitigation measures to address impacts of hydro-development: Previous hydropower projects, intensive agriculture, and other activities in the Sesan-Srepok basins were implemented without adequately considering the social and environmental transboundary impacts such as reduction in fisheries productivity, access to safe and clean water, and riverbank erosion. Without proper basin-wide assessments, it is impossible to introduce mitigation measures to prevent negative impacts. Both countries need to create the tools to identify effective measures to minimise these impacts.



5 Institutional capacity for transboundary coordination: Cambodia and Viet Nam lack professional hydrologists, environmentalists, modellers, irrigation engineers, and water resources planners. They also have insufficient managerial and technical knowledge, and limited experience in negotiating transboundary water resources. Both countries need to build their staff's capacities in data collection and analysis, modelling, forecasting, impact assessment, and disaster risk management.



6 Stakeholder engagement and awareness on water management: The development of upper dams has demonstrated limited engagement of communities, NGOs, civil society organisations and academia, which left downstream residents unaware of likely effects such as flash flooding, pollution and degradation of water quality. It is important to raise awareness and ensure constructive involvement of upstream and downstream stakeholders in the decision-making process (planning and management).

Bilateral Actions

Cambodia and Viet Nam have agreed to take several steps to deal with their priority transboundary issues through the bilateral project:

1. Establish cross-border coordination mechanisms to improve data sharing and joint management of shared water resources
2. Develop a joint action plan to implement the coordination mechanisms

Once the project is completed, it is expected that the two countries can continue transboundary dialogue and execute planned actions together. Their long-term efforts will help increase transboundary water cooperation at the bilateral provincial level and better prepare local populations for further developments.



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