#### **IWRM BRIEF**

Cambodia 🗾



#### Joint Actions, Joint Solutions

# **Mekong Delta Water Issues**

Collaboration between Cambodia and Viet Nam



The Mekong Delta extends from central Cambodia to Viet Nam, where the Mekong River empties into the sea. As the "rice bowl" of both countries, the delta is essential for their food security and income. But upstream hydropower development and delta's flood control infrastructures affect fisheries, the floodplains, sediment movement, and water quality. Impacts of climate change, including severe floods and droughts and saltwater intrusion, also threaten the delta's natural resources.

To better manage the shared resources in the Mekong Delta, Cambodia and Viet Nam work together to develop joint planning and harmonised mechanisms for the management of water resources through a bilateral project supported by the Mekong River Commission (MRC).

After consultations with government officials and local stakeholders and field surveys, the two countries have identified six main issues to address in cooperation.

#### **Priority Transboundary Water Management Issues**

Details of the six main issues are recorded in the joint technical paper, *Transboundary Water Resources Management Issues in the Mekong Delta of Cambodia and Viet Nam*, published in September 2017.



**Flood and drought strategic planning:** A lack of transboundary planning for sustainable development of delta resources has left the two countries to manage annual floods and droughts individually. This was mainly due to differing national interests and a single sector approach. A strategic transboundary water resources management plan could improve the understanding of hydrological requirements in the area and ensure the coordinated operation of upstream reservoirs and harmonised development of irrigation infrastructure, which are essential to transboundary flood and drought control.

## MEKONG DELTA PROJECT AT A GLANCE

The Mekong Delta 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.

COUNTRIES Cambodia and Viet Nam BUDGET US\$354,000 DURATION May 2014–2018



**Infrastructure development and investment:** The absence of joint planning and collaboration between border provinces has resulted in inappropriate infrastructure development in the Mekong Delta. Uncoordinated development of flood control and irrigation systems, such as dykes and embankments, could cause floods and drought in other areas of the floodplain and may result in water pollution and shortages, and less agricultural production. A coordinated infrastructure development planning is necessary to reduce such adverse impacts.



**Coordination and communication mechanisms:** Cambodia and Viet Nam lack efficient coordination and communication mechanisms to address transboundary water resources management issues, which results in overlapping actions, misunderstandings about the current status of water use at the border, and conflicts between related sectors. They need to develop harmonised data and information management systems to collect, process, analyse and share hydro-meteorological data and other relevant information to monitor transboundary water use.

Human and institutional capacity for transboundary cooperation: Limited capacity in water resources management on both sides of the border contributes to inaccurate impact assessment and weak application of the agreed procedural rules on the Mekong's water use. This can hinder the efforts to mitigate adverse impacts of water infrastructure development. Institutional and technical capacity needs to be developed for effective cooperation.



Environmental, social and economic impacts of development and climate

**change:** A lack of understanding in the cumulative and immediate effects of upstream hydropower development and climate change would leave people living in the delta vulnerable to impacts such as, an increase in salinity intrusion, decrease in sedimentation and nutrients, infrequent fish migration, and change of flow regime. Information gaps on the flow regime, hydrological modelling, and other tools for impact assessment need to be filled immediately to minimise socioeconomic and environmental impacts of water infrastructure development and global warming.



**Implementation of bilateral navigation agreement:** The Mekong Delta's inland waterways play a key role for transportation of goods and services within and between the two countries. Both countries signed a bilateral agreement for inland navigation, but it has not been well implemented due to multiple reasons, including channel and flow conditions caused by floods and hydro-development, and operational and administrative shortcomings such as lack of policy exercise, safety standards, and immigration procedures. They should tackle these problems to reap the benefits of the agreement.

### **Bilateral Actions**

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

- **1.** Develop cross-border coordination mechanisms to improve data and information exchange and joint management of shared water resources
- 2. Design 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 for water cooperation at the bilateral provincial level. Their long-term efforts would improve flood and drought management, advance disaster preparedness, and increase navigation and trade.

#### **Mekong River Commission**

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