

# Towards a Climate-Resilient Water Sector in Thailand: Advancing Climate-Sensitive Integrated Water Resources Management and Ecosystem-based Adaptation



## Thai-German Climate Programme - Water (TGCP-Water)



## Background

In 2017, the Global Climate Risk Index ranked Thailand as the 10<sup>th</sup> country most affected by climate change. A growing population, expanding urban centres, economic growth, and risks posed by climate change are expected to make sustainable water management more difficult in the coming years. “The risk of floods and droughts, the risk of undermining the resilience of freshwater systems, the risk of unbalanced use and allocation (demand and supply) of water as well as water quality issues impact Thailand’s water security situation.” (OECD, MDR-TH 2018).

In response, Thailand is undertaking considerable efforts to enhance climate resilience in its national and sub-national water resources management. Thailand’s Nationally Determined Contribution (NDC) under the Paris Agreement prioritises the promotion of Integrated Water Resources Management (IWRM) as a key adaptation effort to achieve water security, reduce flood and drought risks, and manage extreme weather events.

## Project and Policy Context

TGCP-Water is part of the Thai-German Climate Programme (TGCP), which is financed by the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) for the period of January 2018 - December 2021. Working across five sectors – climate policy, agriculture, energy, waste, and water, TGCP supports Thailand’s transition towards a low-carbon and climate-resilient future.

TGCP-Water is guided by Thailand’s Water Resources Act (2018), the 20-year National Water Resources Management Master Plan (2018–2037) and water sector related climate change policies and strategies, namely Thailand’s National Adaptation Plan (NAP) and the Thai NDC under the Paris Agreement.

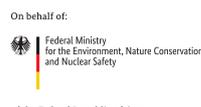
TGCP-Water emphasises the need to align efforts in climate-sensitive IWRM and Ecosystem-based Adaptation (EbA) to other global agendas, namely the Sendai Framework on Disaster Risk Reduction (SDFRR) and the 2030 Agenda on Sustainable Development (Goals 6, 11, 13, and 15).

## Our Objectives

Support the improvement of the national framework conditions for climate-sensitive IWRM and advocate for ecosystem and nature-based solutions in preventing and reducing the impacts of climate and water related disasters at national and river basin scale.

Enhance our partners’ capacities to monitor and evaluate adaptation measures in water resources management.

Identify and recommend options to integrate and elevate climate finance in the Thai water sector.



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## Our Work



### National Policy Development

To integrate adaptation to climate change, incl. ecosystem-based solutions, into national water resources management strategies and plans, and develop other policy support measures for adaptation e.g. in the agriculture and human settlement sector.



### Sub-national Implementation

To support a climate-sensitive IWRM and ecosystem-based solutions for adaptation to climate change at river basin scale.



### Monitoring and Evaluation (M&E)

To set up a monitoring and reporting system on the effectiveness and efficiency of adaptation actions in the water sector as part of the national Monitoring, Reporting and Verification (MRV)/M&E.



### Financing

To develop and demonstrate the public and private financing of adaptation measures as models for climate finance in the water sector.



### International Cooperation

To synergise and share good practices with other national and international initiatives on adaptation in water resources management.

## Our Approaches

Promote a climate-sensitive IWRM approach for Thailand to reach its national adaptation targets.

Advise on advancing climate resilience in the water resources management at national and river basin scale covering management, planning and implementation, and mechanisms for adaptation financing and monitoring.

Support institutional and planning processes to strengthen the River Basin Committees (RBCs) and to develop risk-informed River Basin Master Plans (RBMPs) that are based on multi-stakeholder dialogues and in line with the concept of climate-sensitive IWRM.

Value multi-stakeholder dialogues, joint selection and prioritisation processes as well as awareness-raising activities as key success factors for a systematic climate-sensitive water management approach at river basin scale.

Demonstrate the benefits of “green” ecosystem and nature-based solutions as cost-effective and flexible option for climate change adaptation, and their ability to complement “grey” infrastructures measures.

Tailor related guidelines and curricula for governmental and non-governmental stakeholders in the water sector to enhance nationwide outreach and scaling.

## Our Partners

Lead partner is the Office of the National Water Resources (ONWR), together with other key partners, namely Department of Water Resources (DWR), Department of Public Works & Town and Country Planning (DPT), and Royal Irrigation Department (RID).

Further to this, TGCP-Water also works with the National Economic and Social Development Council (NESDC), Hydro Informatics Institute (HII), Geo-Informatics and Space Technology Development Agency (GISTDA), Royal Forest Department (RFD), Department of National Parks, Wildlife and Plant Conservation (DNP), Department of Disaster Prevention and Mitigation (DDPM), and the Budget Bureau. At the sub-national level, the Project also coordinates with local and provincial administrative and multi-stakeholder mechanisms, such as the RBCs, and engages with water users, private sector, and academia.

## Contact

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