



Mekong River Commission

# **Mekong Adaptation Strategy and Action Plan**

# Executive summary

## A strategy in a changing climate

In the currently changing climate, there is a need to address water management at national, regional and international level in a coordinated way. The Mekong Adaptation Strategy and Action Plan (MASAP) sets out the strategic priorities and actions at basin level through which the Mekong River Commission (MRC) can contribute to addressing climate change risks and strengthen basin-wide resilience. The MASAP identifies critical climate change adaptation aspects that need transboundary cooperation and enhances the capacity of Member Countries in implementing their own national strategies. In terms of climate-resilience for the Lower Mekong Basin (LMB), the MASAP contributes to ensuring that people, communities, businesses, and other organizations be able to cope with current climate variability as well as adapt to future climate change, preserving development gains, and minimizing damages.

The MASAP is part of, among others, the MRC Integrated Water Resources Management-based Basin Development Strategy (BDS) 2016-2020, the MRC Strategic Plan 2016-2020, and the MRC Climate Change and Adaptation Initiative (CCAI) Framework Document 2009-2025. The MASAP will contribute to ensuring sustainable development of the Mekong River Basin in line with the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin. The MASAP provides initial direction for basin-wide climate change adaptation that is subject to regularly review and updating by MRC.

## A comprehensive process

The formulation of the MASAP followed a roadmap comprising four stages: Preparation (2012-2013) including various studies to understand the state of the art knowledge of climate change and adaptation in the region, Formulation (2014-2015) providing the knowledge base for the MASAP and the strategic priorities and actions, and Finalisation and Approval (2016-2017) seeking inputs and agreement from Member Countries. Next to the Member Countries, stakeholders were involved during the whole MASAP development process through the engagement of various national expert teams, a series of national and regional consultations, working sessions, stakeholder forums and communication campaigns.

The Formulation stage included an appraisal of the legal, policy and institutional aspects at national and regional level in the LMB. From this it was concluded that at the regional level, both MRC and the Association of South East Asian Nations (ASEAN) provide solid legal support for regional climate change adaptation actions. At the national level, legislation in general supports adaptation but because of the rapid policy developments over the past decade issues may arise while implementing the MASAP. Furthermore, the Paris Agreement 2015, the Sustainable Development Goals (SDG) and the Sendai Framework provide strong policy support for adaptation at the regional and national level,

while ASEAN, the Greater Mekong Sub-region (GMS) and the newly established Lancang-Mekong Cooperation (LMC) support this at the regional level. In all MRC Member Countries, national policies and strategies on climate change are developed although not all sector policies and/or legal and institutional settings are yet fully tuned to the new policy developments. Finally, on the topic of climate change adaptation, the coordination between the relevant ministries as well as between the national and provincial levels, and the national and regional level could be improved as well as the role of the private sector.

As part of the formulation stage the climate change impacts on water and water related sectors have been assessed. Following international standards and recommendations, a range of plausible future climatic patterns simulated by a General Circulation Model (GCM) as well as a range of plausible future emissions scenarios established by the Intergovernmental Panel on Climate Change (IPCC) have been considered when simulating the impacts of climate change in the LMB. The range of impacts across the LMB have been simulated on hydrology, flood and drought behaviour, hydropower production, food production (crop yield, fisheries and aquaculture), ecosystem and biodiversity as well as livelihoods.

## **An uncertain future**

The hydrology of the Mekong River is currently changing, principally attributed to upstream flow modifications by the construction of dams in the Upper Mekong Basin. Also there have been very significant changes in vegetation cover, forests, biodiversity and ecosystems across the Lower Mekong Basin. In capture fisheries, the composition of the catch is changing. These changes cannot be attributed to climate change.

In the future, the basin-wide temperature will rise. Variations in hydrology following changes in precipitation are predicted, but these changes could all either include an increase or decrease given the spectrum of plausible future climate change scenarios that have been considered. The range of possible changes in hydrology is enormous and many people and communities are vulnerable to potentially wide-ranging impacts as are ecosystems. Close consideration of the changes and their impacts are therefore essential.

## **Strategic guidance**

MRC's strategic priorities and actions in climate change and adaptation should be flexible and scalable, supporting sustainable development pathways. Next to this they should support improvement of governance and strengthen the institutions as well as provide for comprehensive information collection and dissemination and for capacity building. The strategic priorities include identifying opportunities for further development.

## **Seven basin-wide strategic priorities**

Seven strategic priorities are identified as a coherent basin-wide adaptation strategy for MRC to contribute to the adaptation efforts of LMB countries and minimization of negative impacts of current and future climate change in the basin. Under each strategic priority,

several prioritised actions are set out as implementation steps contributing to realising the strategy.

In identifying strategic priorities and their associated actions the goals, objectives and principles of the 1995 Mekong Agreement, the core functions of the MRC, the adaptation options identified and recommended from the CCAI basin-wide assessment of climate change impacts and vulnerability in the LMB, the results of a regional policy review and the relevant actions from the BDS 2016-2020 were taken into account.

The seven strategic priorities for basin-wide adaptation to climate change are:

1. Mainstream climate change into regional and national policies, programmes and plans;
2. Enhance regional and international cooperation and partnership on adaptation;
3. Enable implementation of transboundary and gender sensitive adaptation options;
4. Support access to adaptation finance;
5. Enhance monitoring, data collection and sharing;
6. Strengthen capacity on development of climate change adaptation strategies and plans; and
7. Improve outreach of MRC products on climate change and adaptation.

## **Strategic basin adaptation to climate change: focus on support**

The strategic priorities and underlying actions focus on supporting MRC Member Countries (MCs) in developing and implementing an adaptation strategy in an integrated way, accounting for the imperative cooperation in the LMB. To this end, actions include, among others, promotion of the use of the CCAI climate change scenarios as agreed by MCs, promotion of improved coordination between and within MCs, promotion of implementation of transboundary adaptation projects, and promotion and support to application of the MRC approach toward development of adaptation strategies at national level.

Furthermore, the strategic priorities aim for enhancing regional and international cooperation and partnership on adaptation through, among others, strengthening cooperation with ASEAN and LMC, with International Financial Institutions and other donors, and international climate change communities.

## **Implementation of the MASAP: an action plan**

An action plan has been developed for the implementation of the MASAP, including the actions, a timeframe for each action, and identification of the relevant stakeholders and their roles and responsibilities. The implementation of the MASAP will be monitored and regularly evaluated and reported. The Monitoring, Evaluation and Reporting (M&E) of the MASAP will be integrated into the M&E of MRC Strategic Plan. As a dynamic strategy, the MASAP will need to be updated every five years following the MRC strategic planning cycle.