Cambodia · Lao PDR · Thailand · Viet Nam For sustainable development



Climate Change and Adaptation Initiative





Preparing for change

The Lower Mekong Basin is home to about 60 million people, many of them poor and living in rural communities, with livelihoods strongly dependent on the Mekong river and its resources. Agriculture and fisheries are the main sources of food and income, livelihoods which face an uncertain future.

Rising temperatures and unpredictable rainfall are bringing drought to some areas and flooding to others. Globally, the last decade was the warmest on record. Studies forecast average annual rainfall to increase 200mm and temperatures to rise by almost 0.8°C in the Lower Mekong Basin by 2030.

Extreme weather events such as typhoons are increasing in frequency and severity, destroying homes, infrastructure, livestock and crops. Related flooding causes heavy financial losses and many deaths each year across the Lower Mekong Basin.

Sea level rise is increasing saltwater intrusion to fragile ecosystems and farmland in the Mekong Delta, a main food production area of the region. The world's oceans are rising by an average of 3mm per year, threatening to inundate about a third of the Mekong Delta this century, damaging agriculture productivity and potentially displacing millions of people.



Uniting the region in efforts to adapt to climate change

MRC's Climate Change and Adaptation Initiative (CCAI) is a long-term programme aiming to understand and reduce the impacts of climate change on the people and ecosystems of the Lower Mekong Basin, by assisting the governments of Cambodia, Lao PDR, Thailand and Viet Nam in planning for adaptation.

CCAI focuses on building capacity in the Mekong countries to assess climate change impacts and vulnerabilities, and find ways based on these assessments and MRC research to protect the communities and biodiversity of the Mekong region in the face of changing climate and ecosystems.

Comprehensive adaptation planning can better prepare people, countries and the region as a whole for the challenges ahead, ensuring food security and alleviating poverty. CCAI will support pilot adaptation actions (see overleaf), since how one coastal village in the Mekong Delta protects itself against sea level rise can help many other communities facing the same problems.

The Iniative will also strengthen capacity for planning and implementation, foster cooperation and provide information so that climate change adaptation is integrated in development policies throughout the basin.

Piloting adaptation planning and implementation

Climate change is bringing less predictable conditions, more extreme weather and greater variation between seasons than ever before. The people who are likely to be hardest hit are also those with the least resources and ability to cope.

A central theme of the CCAI is to combine local wisdom with planning and piloting actions that address specific local impacts and vulnerabilities. These demonstration projects will offer adaptation tools and methods that work in one location and can be replicated in other communities facing similar impacts.

CCAI has initially supported one demonstration project in each of the Lower Mekong countries, in communities that are highly vulnerable to various climate change impacts. The projects in Cambodia, Lao PDR and Thailand face more

frequent and severe droughts and floods; while the Viet Nam project in the Mekong Delta has experienced increased flooding and salinity caused by sea level rise.

Initial work at the four projects varied according to the problems raised by these impacts, and included vulnerability assessments, awareness raising, capacity building and some initial implementation, such as irrigation extension, alternative livelihood activities and use of flood tolerant rice.

In 2011-2015, CCAI will intensify adaptation planning and implementation in the four countries, conduct basin-wide pilots, strengthen adaptation policy and link with other adaptation projects underway in the basin, to enable regional cooperation and knowledge transfer.

Building capacity to manage and adapt to climate change impacts

While local actions are the front end of climate change adaptation that address individual livelihood concerns, responsibility for planning and managing actions widely and sustainably rests with decision makers and institutions.

CCAI will provide comprehensive capacity building through training and exchanges at different levels of management and governance, and community level, strengthening understanding of how vulnerabilities can be identified and tackled.

An important aspect of this is developing capacity within institutions to replicate successful adaptation actions in other locations, so that the process is continually expanded and refined to address impacts at national and basin-wide level. This will be supported by expanding expertise on applying tools for adaptation planning and assessment.

Actions to increase technical abilities at different planning stages will be combined with continual awareness raising on the need for adaptation, helping to reduce the uncertainties that still surround the issue of climate change.



Integrating climate change with development policies



Adaptation planning in essence means designing actions that address known issues which are likely to worsen, and also respond to foreseen impacts that are yet to be felt.

Climate science is important in this because it helps identify likely scenarios, how populations and the ecosystems they depend on will be affected, and what the impacts will be on human development. CCAI aims to assist the MRC Member Countries in integrating climate change aspects with development planning at all levels, by helping the Mekong governments use the findings of studies and pilots to design policy frameworks that guide adaptation in practice. It is likely that the people of the Lower Mekong Basin will need to adapt to climate change continually, and a key element of adaptation strategies will be to monitor successes, progress and emerging trends, and use

the results to promote awareness in governments and communities across the region. ■



A long-term strategy for regional cooperation, exchange and learning



CCAI will facilitate formulation of a Regional Mekong Adaptation Strategy and Action Plan among the four Member Countries.

A Mekong Panel on Climate Change (MPCC) will also be established to reinforce scientific knowledge and assist better informed decisionmaking in the region.

To ensure the sustainability of adaptation actions and strategies, CCAI will facilitate partnerships that offer constant support for the four member countries.

A wide network of partners is envisaged, enabling mutual knowledge exchange and regional cooperation in decades to come.



For more information on the **Climate Change and Adaptation Initiative**, visit www.**mrcmekong**.org

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