







# INTEGRATED COASTAL MANAGEMENT PROGRAMME

Strengthening the Mekong Delta coastline

#### The challenge

The Mekong Delta is home to 17 million people and is Viet Nam's most important agricultural region. Producing 55 per cent of the country's rice, the Mekong Delta feeds more than 245 million people worldwide. Thanks to this region, Viet Nam, a country which once suffered from shortages of rice, is now the world's second largest exporter. The Delta is also the country's third largest industrial region after the metropolitan areas of Ho Chi Minh City and Hanoi.<sup>1</sup>

But the Mekong Delta is facing existential threats. Climate change is leading to rising sea levels, and according to official studies, 39 per cent of the Mekong Delta could be underwater by the year 2100. Some areas of the coast are already eroding at rates of 30 metres a year<sup>2</sup>. The mangrove forests along the coast, which protect the hinterland from floods and storms, are in dramatic decline. In early 2016, the Mekong Delta suffered the most severe drought in 90 years, which together with rising sea levels led to a heavy intrusion of saltwater into rice growing areas.

These changes threaten the future of the Mekong Delta and its ability to provide the essential ecosystem services on which the communities of the Delta and millions of people around the world depend.

## The programme

The Integrated Coastal Management Programme (ICMP) tackles these interlinked challenges by strengthening the coastal zone of the Mekong Delta. The aim is to support the Vietnamese authorities in preparing the coastal area for a changing environment and to lay the foundations for sustainable growth.



## Our approach

# Initiating a comprehensive response to climate resilience

ICMP supports Vietnamese authorities towards developing an innovative, coordinated and comprehensive response to climate change in the Mekong Delta. This includes more coordination among the key actors, which will be facilitated by a new pilot regulation on regional coordination in the Mekong Delta. Climate-responsive planning and budgeting measures are aimed at ensuring that climate-related plans and policies are also properly budgeted and can thus be implemented.

- 1 Sources: World Bank, Vietrade, own calculation, General Statistics office
- 2 Sources: MONRE, own calculation



## Protecting people and land from extreme weather events

The programme contributes to better protection of 720 kilometres of coastline of the Mekong Delta against extreme weather events like storms and floods. This is expected to make more than 3.5 million people safer with regard to the impacts of climate change. The key instrument to achieve this is an Integrated Coastal Protection Plan for four Mekong Delta provinces, including recommendations for concrete coastal protection investments in four coastal provinces. The idea: Using the ecosystem to protect the coast where possible, but building hard infrastructure such as dykes or concrete wave breakers where necessary.

#### Supporting farmers in adapting to climate change

ICMP supports farmers in applying new techniques that will enable them to better cope with climate change, earn a higher income and protect the environment. We do this, for example, by reducing the need for water and pesticides in rice production by up to 30 per cent, while raising farmer incomes by 40 per cent. We also enable smallholder farmers to gain better access to markets and value chains, for instance by strengthening cooperatives and agricultural business clusters. Since agriculture depends on water, the management of more than 14,000 kilometres of canals is being improved with the support of ICMP, roughly the distance from Germany to Australia. This is bringing 767,000 hectares of agricultural land under more sustainable use and benefits around 1.2 million people who live in rural households in the area.

NAME	Integrated Coastal Management Programme (ICMP)
EXECUTING AGENCY	Ministry of Agriculture and Rural Development of Viet Nam (MARD)
DONORS	German Federal Ministry for Economic Cooperation and Development (BMZ) Australian Department of Foreign Affairs and Trade (DFAT) – Australian Aid
IMPLEMENTING AGENCY	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
OFFICES	Hanoi, Ho Chi Minh City, Soc Trang, Bac Lieu, Ca Mau, Kien Giang, An Giang

### **Impacts**

- More than 7 million people in the Mekong Delta are better protected against the effects of climate change as a result of the contribution by ICMP.
- ICMP contributes to better protecting 720 kilometres of the Mekong Delta's coastline against extreme weather events like storms and floods. This is expected to make more than 3.5 million people in coastal districts safer against the impacts of climate change.
- The programme developed feasibility studies, which serve to directly prepare for investments of EUR 110 million, which are currently being prepared, especially with regard to coastal protection.
- ICMP supported the development of a pilot regulation on regional coordination in the Mekong Delta, which was approved by the Prime Minister. The regulation is expected to increase the effectiveness and efficiency of climate policies and investment in 13 Mekong Delta provinces.
- ICMP supported the development of a coastal forest policy. The policy includes the planting of 46,000 hectares of new coastal forest by 2020 which will provide ecosystem services worth approximately USD 102 million annually, as well as carbon sequestration of around 13.2 million tons of CO<sub>2</sub> equivalent, which is equivalent to around 2.7 million cars driven for one year.
- The programme has successfully introduced T-shaped breakwater fences to Viet Nam, which in some sites stop erosion rates of up to 30 metres per year and in other sites have restored up to 180 metres of land that had been lost to the sea. This new land consists of mud flats where mangroves and other plants can grow.
- ICMP implemented 25 livelihood models for 10,800 households, benefitting around 43,000 people. The livelihood models reduced environmental pressures and increased household incomes by 20-80 per cent.