

GOOD PRACTICE CASE STUDY

PROJECT

Enhancing Climate Adaptation in the North Coast and Nile Delta, Egypt

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LOCATION

Kafr El-Sheikh, Port Said, Damietta, Beheira, Dakahlia

BENEFICIARIES

The coastal protection measures will directly benefit approximately 768,164 people and indirectly benefit 16.9 million people in urban and rural communities.

CHALLENGE

The expected sea-level rise from unabated climate change will directly impact the infrastructure of Egypt's low-lying coastal lands. These impacts threaten Egypt's population and development prospective. The Nile Delta of Egypt's northern coast is the country's primary agricultural land. The saline intrusion resulting from storm surges and sea-level rise will weaken Egypt's entire economy. These effects are already being felt, as economic losses from extreme weather events have increased consistently over the past 10 years. Effects have included major floods with devastating impacts on infrastructure and livelihoods in both rural and urban regions. Without efforts to adapt, Egypt's potential and timely achievement of the SDGs is greatly compromised.

APPROACH

The "Enhancing Climate Change Adaptation in the North Coast of Egypt" project aims to protect the densely populated low-lying lands in the Nile Delta, the home of 25% of the Egyptian population, which have been identified as highly vulnerable to climate change in-



Video - Using the power of nature to fight climate change in Egypt © Green Climate Fund

duced sea-level rise. The project is implemented by the Ministry of Water Resources and Irrigation with a total budget of USD 31.4 million from the Green Climate Fund (GCF) through the United Nations Development Programme (UNDP) as Accredited Agency, over seven years in addition to co-financing from the Government of Egypt. The project is coordinated by the Ministry of Environment.

The project will provide flood protection in the low-lying lands through the construction of low-cost dikes which buffer against sea surges during coastal weather events. The dyke system used has been extensively tested through previous Global Environmental Facility (GEF) projects and makes use of a reed fence placed on the top of the dike in order to collect windblown sand and enhance the dyke into a natural dune.

INTEGRATED IMPACT: ADAPTATION, BIODIVERSITY, MITIGATION

In addition to providing the flood mitigation benefits, the project also supports the development of an Integrated Coastal Zone Management Plan (ICZM) for Egypt's North Coast. The plan is developed and coordinated with the Ministry of the Environment, and led by an ICZM National Focal Point. This integration ensures that the plan is directly aligned with the national development plan for coastal zones and is further supported through the establishment of a systematic observation system. This system will enhance the infrastructural flood mitigation through oceanographic parameters monitoring, to evaluate different scenarios from climate change alongside various shore protection efforts to reduce coastal erosion and provide stability.