

Coastal Protection Egypt-Netherlands Cooperation

Concept Note

Session 15 October 2025, 9.30-13.00 Iceland Ballroom

Introduction:

The Nile Delta in Egypt is one of the most vulnerable deltas in the world to climate change. This region accounts for more than 50% of Egypt's economic activity through agriculture, industry, and fisheries. Therefore, any loss of prime agricultural land due to coastal erosion and flooding will have a direct adverse impact on the livelihoods of millions of people.

Egypt prioritizes the protection of livelihoods in the delta by increasing the resilience of the northern coastline against the impacts from climate change and associated sea level rise, erosion and saline intrusion by developing an Integrated Coastal Zone Management (ICZM) Plan and implementing adaptive approaches and Nature Based Solutions.

The Shore Protection Authority (SPA) as part of the Ministry of Water Resources and Irrigation (MoWRI) is responsible for protecting Egyptian's coasts from erosion and flooding. The SPA has the mandate to carry out the necessary coastal interventions. Coastal protection in Egypt is currently predominantly implemented through hard structures such as breakwaters and seawalls. A variety of hard coastal protection measures have been experimented in Egypt, and the skills in designing and constructing hard coastal engineering works are highly developed. Nevertheless, coastal erosion is still occurring at many places along the Mediterranean shoreline.

It is anticipated that sand nourishments will be an adequate strategy to complement the existing coastal engineering works for stabilizing the coast. Coastal protection using soft, nature-based methods is relatively new in Egypt. This holds in particular for large-scale nourishments with sand extracted from the nearby continental shelf.

Past geological surveys have identified large zones on the nearby continental shelf where the characteristics of the surface sediments seem to be appropriate for sand nourishment of the coast. With support by the Netherlands, an additional survey has been carried out recently to investigate the presence of mineable sand of suitable quality in order to make well inform decisions on the long-term feasibility of coastal sand-nourishment solutions. The results from this survey will be presented during this session.

Sand extraction from the offshore seafloor can interfere with interests and uses for which several other authorities have responsibility. Parts of the inner continental shelf have been designated exclusively for maritime purposes, oil and gas exploration and extraction activities.

Transferring knowledge and know-how to the Egyptian authorities on soft coastal protection measures to become familiar with offshore sand extraction and nourishment techniques should be enhanced. Egypt has requested the Netherlands to provide support, based on the experiences with the protection of its North Sea coastline.

Session Objective:

During this session, experts will exchange views on the challenges, good practices and way forward to ensure sustainable protection of Egypt's coastline:

- To review and compare coastal protection strategies in the Netherlands and in Egypt;
- To advise Egypt on effective and sustainable coastal protection strategies.

Room set-up:

Normal lecture room seating arrangement, capacity 100 participants. Beamer and screen, microphones.

Session flow:

Time	Presentation	Organization	Remarks
9.30	• Introduction by the Moderators • Opening remarks by HE the Minister of MWRI • Opening remarking by HE the Ambassador of the Netherlands	• Eng. Salwa Abdelfatah (SPA) and Folkert de Jager (NL Embassy)	
9.45	Challenges in Coastal Protection: • Coastal Challenges in Egypt • Coastal Challenges in the Netherlands	• Eng. Ghattas SPA chairman & CORI • Rien van Zetten (Rijkswaterstaat)	
10.30	Good Practices in Coastal Protection and experiences with Nature Based Solutions: • ECCADP project • Examples from the Netherlands and around the world • Kitchener Drain project	• Dr. Mohamed Ahmed (Exec. Dir.) • Milou Wachtmeester (Boskalis) • Dr. Ali Saber SPA	
11.15	Coffee Break		
11.30	Way forward for Egypt's North Coast • The ICZM Plan • Results from the Sand Survey • Feasibility for Nature Based Solutions and Sand Nourishments • Financing of Nature Based Solutions	• Dr. Yousri ECCADP project & Eng Mona Khairy SPA • Roel Nagtegaal (Van Oord) • Eng. Mohamed Ghattas, SPA chairman • Eng. Walid Hakiki Planning Sector	
12.30	Moderated Discussion		
13.00	Closure		