INSTALLATION OF SEAWALLS

OBJECTIVE

Protect the inland area against wave action and prevent coastal erosion.

DESCRIPTION

Seawalls are usually massive structures designed to resist storm surges. The height of a seawall will at least cover the difference between the beach level and the mainland, though commonly seawalls are built higher to protect the land against wave overtopping. Seawalls are also used to stabilize eroding cliffs and protect coastal roads and settlements. The crest of the wall often extends into a stone covered part that may be used for a road, promenade or parking area. A seawall creates a distinct separation between the beach and the mainland. Seawalls are often found in the case of narrow or steep beaches, where a typical breakwater is either too large or too costly.

EXPECTED RESULTS

Decreased coastal flooding and erosion.

RESULT INDICATORS

Area of protected coast [m^2]

INVOLVED ACTORS

National and local government, local communities.

EXPECTED TIMELINE FOR ACTION

- Long term (> 10 years)

BEST PRACTICES

- Belgium
- UK
- Germany

CRITICALITIES

High costs for realisation. It can also have negative impacts on the tourism sector as the landscape can be negatively affected by seawalls.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Grey

SECTOR OF ACTION

- Coastal management
- Urban settlement

CLIMATE IMPACTS

- Coastal erosion
- Extreme precipitation
- Floods

IMPLEMENTATION SCALE

- Association of municipalities
- Municipality
- Province

SOURCE

https://climate-adapt.eea.europa.eu/metadata/adaptation-options/seawalls-and-jetties