INSTALL BREAKWATERS

OBJECTIVE

Protect the coast from coastal erosion and ensure safety during the docking and mooring phases of boats in ports.

DESCRIPTION

A breakwater is a coastal structure (usually a rock and rubble mound structure) projecting into the sea that shelters vessels from waves and currents, prevents siltation of a navigation channel, protects a shore area or prevents thermal mixing (e.g. cooling water intakes). A breakwater typically comprises various stone layers and is typically armoured with large armour stone or concrete armour units (an exception is vertical (caisson) breakwaters). A breakwater can be built at the shoreline or offshore (detached or reef breakwater).

EXPECTED RESULTS

Protection of coastal areas and enhance workability and provide thus higher efficiency in loading and unloading vessels.

RESULT INDICATORS

Length of breakwaters [m].

INVOLVED ACTORS

Local communities, government at different levels.

EXPECTED TIMELINE FOR ACTION

- Long term (> 10 years)

BEST PRACTICES

- Flanders

CRITICALITIES

Possible adverse effects on adjacent beaches by causing downdrift erosion.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Grey

SECTOR OF ACTION

- Coastal management

CLIMATE IMPACTS

- Coastal erosion
- Extreme precipitation
- Floods

IMPLEMENTATION SCALE

- Association of municipalities
- Municipality
- Province

SOURCE

https://climate-adapt.eea.europa.eu/metadata/adaptation-options/groynes-breakwaters-and-artificial-reefs