



Client
Government of Ghana



Location
Ada Foah, Ghana



Period
January 2010 – September 2015

Ada Coastal Protection Works: URGENT MEASURES

The coastal town of Ada Foah, located 100km East of Accra, at the point where the Volta river flows into the Atlantic ocean, is experiencing severe coastal erosion of between of 4 – 7m/year. The local population and Ada village are under threat due to the eroding coastline. There has been a loss of land and infrastructure, with the resultant negative impact on agricultural potential and possible infrastructure development. The Government of Ghana has requested PMI in cooperation with International Marine and Dredging Company to design and manage the construction of a coastal defence system.



Scope of Work:

The main work items are the following:

- Investigations
- Design
- Physical Modelling
- Construction
- Management & supervision

Investigations:

Investigations to collect data have been done to validate and use as input for the design. The investigations included a topo- , bathymetric survey, through tide measurements, long term measurements and a study of the



beach materials.

Design:

The design effort consist of the following:

- Wave Modelling
- Hydrodynamic Modelling
- Morphological Modelling



Physical Modelling

The hydrological stability of the design will be tested with a physical model. Two groynes will be constructed and tested with extreme waves and long periods. The design will be optimized during this phase.

Construction:

The complete construction duration was approximately 2 years and included the construction of 17no groynes. Construction activities also included a beach reclamation campaign where suitable material was sourced offshore and using the Congo River (dredging vessel) was deposited onshore via a sinker line.

Management and Supervision

PMI is responsible for the management and supervision of the project during construction.

