Effects of land reclamations on the coastal topography of the island – Thinadhoo

G.DH. Atoll Education Centre

The aim of the project is to find out the effect of land reclamation on the coastal topography of Thinadhoo. G.Dh. Thinadhoo has undergone topographical modifications due to land reclamation and coastal infrastructure for dwelling need of growing population. The land reclamation activities have resulted in the modification of the entire coastline, while the vegetation is sparse and almost extinct in the newly reclaimed areas. Land reclamation activities leads to drainage issues and flooding during heavy rainfall. The newly reclaimed areas do not have a coastal vegetation belt, increasing the risk of erosion and increased impacts from ocean induced flooding events. Environmental issues associated with land reclamation are being experienced by its inhabitants including ground water contamination, degradation of coastal areas, depletion of vegetation and coastal erosion. Our survey involves random sampling method to confirm the knowledge of people about the land reclamation and its effects to the coastal areas of the island. Qualitative and quantitative analysis and sampling techniques were also carried in different areas, mostly outskirts of the island. From our findings it was proved that there are several effects on costal topography of the island due to land reclamation.

Aim:

To find out the effect of land reclamation on the coastal topography of Thinadhoo.

Objectives

- Changes in topography of Thinadhoo due to land reclamation.
- Effects of land reclamation on beach side, marine environment and coastal vegetation of the island.

Land Reclamation: Thinadhoo

- Land reclamation started in 1990's
- Approximately 71 hectares or 61% of present island is reclaimed
- Maahutta also has been joined to form the present Thinadhoo

Recommendations

- Establishing proper drainage system
- Constructing revetment structure
- Construction of a vegetated ridge
- Environment Impact Assessment (EIA) should be done before each land reclamation project.
- Conducting awareness programs for students and community