

Anthropogenic Coastal Erosion and Shoreline Management in Cyprus

Xenia I. Loizidou and Nicos G. Iacovou

*Executive Engineers, Coastal Unit, Public Works Department, 2048 Lefkosia,
Cyprus Tel +357-2-806620-22 Fax +357-2-498934
e-mail: xenia@logos.cy.net / pwd@cytanet.com.cy*

Abstract

In the recent decades the traditional "mild" uses of many coastal areas have been heavily modified. Economic development and competing demands pose an increasing pressure on this vulnerable and fragile narrow strip, the coastal zone. This pressure results in a series of problems, one of them being coastal erosion.

When it comes to the micro-scale of a small island like Cyprus, where practically the largest part of the island's area can be considered as coastal zone, the problem of coastal erosion becomes vitally serious.

Six years of field measurements, systematic monitoring, collection of historical data, analysis and research proved that recent coastal erosion in Cyprus is almost entirely caused by human activities. River damming, beach mining, construction of coastal structures, sea-front urbanization and others are the major reasons for the morphological disturbances of the coastal zone of the island.

Considering Cyprus as a typical example of a small island country under heavy exploitation of the coastal area during the last decades, this paper presents the methodology applied to recognize and identify the problem of coastal erosion, the results of this work and the measures which have been taken for shoreline management and erosion control. Case studies from selected coastal areas in Cyprus are presented and discussed.