# How fragmentation in decision and policy-making among competent authorities can jeopardise ICZM approaches - CY

## 1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space
- SUSTAINABLE USE OF RESOURCES: Sound use of resources and promotion of less resource intensive processes/products
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

# 2. Key Approaches

- · Knowledge-based
- · Ecosystems based approach
- Technical

## 3. Experiences that can be exchanged

Moving away from piecemeal solutions to a planned approach with coastal erosion as part of land use planning processes. Inter-disciplinary approaches and cohesion in decision and policy-making is a decisive factor for the success of ICZM implementation.

#### 4. Overview of the case

During the land reform of 1996, land uses have been changed in an agricultural eroding coastal area: from agriculture to tourism. This created implications regarding the management of coastal erosion in the area, since erosion was not an issue during the decision process for the changing of land uses. Until then, the decision was to avoid hard coastal structures and implement a "set-back line" or "retreat management" approach. However the change in land uses caused a significant rise in the value of the coastal land. Eventually immediate coastal protection from erosion became a necessity.

## 5. Context and Objectives

#### a) Context

The Alaminos area is located in Larnaka District. It is one of the coastal areas with the highest erosion rates in Cyprus: in some areas the erosion rate exceeds 1 m/year, for the last 20 years. The land uses of this coastal area have been traditionally agricultural. In 1996, there was a reform of land uses Reforms to land uses in rural areas occur every 4-5 years in Cyprus, according to the "Policy Statement for rural areas" prepared by the Town Planning and Housing Department. Most of the coastal agricultural areas in Alaminos and in all the adjustment coasts, have been transformed into tourist zones, by a radical increase to the building co-efficients and a radical change towards development in the coastal zone. This reform, coupled by the very important fact that this area was one of the few coastal areas in Cyprus which was still "undeveloped", i.e. not developed for tourism, drew the attention of developers and real estate agents. Since 1996, the entire coastal area is under massive tourism development. This eventually led to an increased pressure both by the locals and the developers to the Government, to find an immediate solution to the erosion problem and improvement of the beach quality.

## 6. Implementation of the ICZM Approach (i.e. management, tools, resources)

#### a) Management

The Town Planning and Housing Department, has the authority for the zoning of land uses on the island. Every 4-5 years the Policy Statement for land uses in rural areas is published, which reforms the land uses in the rural areas of Cyprus. The "Policy Statement" is discussed in Committees with the participation of stakeholders, i.e. local authorities, NGOs etc. The District Officer (Ministry of Interior) is responsible for licensing coastal works which are obliged to have an EIS (Environmental Impact Study). EISs are licensed by the Environmental Committee which is composed by representatives of 7 relevant governmental departments.

#### b) ICZM tools

This case is a typical example of how fragmentation in decision and policy-making among competent authorities can jeopardise ICZM approaches. From 1992 to 1995 a study "Coastal Zone Management for Cyprus" was carried out in Cyprus by Delft Hydraulics together with the Coastal Unit of Public Works Department. It was the first time that the coastal areas of Cyprus were treated within an integrated approach. The coastal area of Alaminos was at that time one of the coastal areas with no tourist development. So it was not considered by the Study as a priority area in order to formulate specific proposals in the form of a Master Plan for coastal protection and improvement works. The General Guidelines and Policy options as defined during the Study have been applied as a general strategy for coastline protection of this area. The strategy had a clear environmental friendly character. It included environmentally sound principles for shoreline management and erosion control. Special priority was given to "soft" techniques and non-engineering measures, such as retreat management and the "do nothing" option, to the aesthetic impacts of the structures etc. For the area of Alaminos, the suggestion, which was accepted by the government, was to manage erosion by implementing set-back line or retreat management and avoid the construction of hard coastal work. Obviously, this decision was not in line with the decision to change land uses, and the decision to change the land uses did not take into consideration the high erosion rates of this coastal area. Under these conditions, emergency measures had to be taken for combating coastal erosion. Soft approaches as set-back lines could not any longer be the solution.

The implication occurred mainly due to the fragmentation among the competent decision-making authorities concerning coastal areas management and development policies: while the Town Planning and Housing Department is responsible for defining land uses, 7 governmental departments are involved in the process of erosion management. The governmental authorities who are entitled to license coastal structures were very reluctant to proceed with licensing hard coastal structures. Developers, who paid a lot to buy the land and build tourist villas, were in immediate need to protect the eroding coastal area. It took 10 years for the authorities to decide on what kind of protection they would implement for this area. The decision taken recently based on a coastal engineering study by the National Technical University of Athens, is that the protection of the area would be based on the construction of offshore breakwaters. However, from 1996 until 2006, hard coastal structures have been constructed anyway in the area, some legal and some illegal.

#### 7. Cost and resources

The study "Coastal Zone Management for Cyprus" (1992-1995) was co-funded by the MEDSPA EU programme and the Republic of Cyprus. It referred to the entire coastline of Cyprus, with a total cost of about €1 million. The study "Coastal Erosion Management for Dolos- Kiti area" (Alaminos is part of the Dolos-Kiti coast) was undertaken by the National Technical University of Athens in 1999 with a cost of about €200,000.

## 8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

The Strategy formed a very important tool for coastal defence. It was the first time in Cyprus that there was a proposal in the form of a Strategy and Master Plans for erosion control. However, the change in land uses, which was not predicted in the Strategy for coastline protection, made the Strategy out-of-date for this specific area, in less than one year. New studies have been procured for erosion management in the area which were completed in 2005 and suggested the construction of chains of offshore breakwaters.

## 9. Success and Fail factors

Lack of inter-disciplinary approaches and fragmentation in decision-making, led to the failure of the implementation of a very efficient and Integrated Coastal Management Strategy in the specific area of Alaminos.

#### 10. Unforeseen outcomes

The fact that coastal erosion is not included in the planning processes creates implications in implementing ICZM in most coastal areas in Cyprus. Piecemeal solutions, mainly in the form of constructing hard coastal structures, are usually implemented as emergency measures. And this is far from an integrated approach.

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#### 13. Sources

- Coastal Zone Management for Cyprus, Phase II report, Nicosia 1994, Delft Hydraulics
- EUROSION Project, FINAL REPORT, WP 3.1: Case study in Dolos- Kiti, Cyprus, (2002) 108 p, X.I. Loizidou



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