Social perception of coastal erosion issues, Zygi-Kiti area – CY

1. Policy Objective & Theme

- ADAPTATION TO RISK: Managing impacts of climate change and safeguarding resilience of coasts/coastal systems
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

2. Key Approaches

- Integration
- Participation
- Knowledge-based
- Socio-economic
- Technical

3. Experiences that can be exchanged

The assessment of social perception of coastal erosion is an important parameter and a significant tool for erosion control and management. Setting the objectives and the targets of erosion management schemes is not an easy or a straight-forward task. A clear, systematic and efficient methodology, adapted to local conditions, is a necessary tool.

4. Overview of the case

Social perception was assessed in a pilot study, through a well documented process, based on field surveys.

5. Context and Objectives

a) Context

The pilot site, Dolos-Kiti, is a coastal area located in Larnaka District, with a 36 km coastline. There are 10 villages in this coastal area, with a total population of 9,173 and several conflicting uses like industry, tourism, agriculture and aquaculture. The coast is, in general, relatively low and flat, and it is mainly characterised by accumulations of gravel and pebble and few tiny, poor sandy beaches. The area suffers from severe erosion which in some areas reaches about 0,5 m/year. The land uses of the coastal area have been mainly agricultural until recently, when, by a reform of the Town Planning regime, most of the agricultural areas have been characterised as tourist or development areas. This led to a sudden increase of pressure for tourism and real estate development. Eventually the problem of beach quality became very important in the area and efforts started to combat erosion, with the construction of coastal structures either through the legal process or illegally.

b) Objectives

One of the main objectives of this study was to assess social perception on erosion management in order to have a tool for decision makers and for planning an awareness raising campaign.

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

a) Management

Coastal Engineer X.I. Loizidou, ISOTECH ltd, was the project manager of the Dolos-Kiti pilot study (coordinator and scientific responsible).

b) ICZM tools

The methodology followed for assessing social perception included a static analysis and a dynamic analysis. The static analysis included the bibliographic work, the collection and evaluation of data and information on physical, socio-economic, administrative and legal characteristics of the area. The dynamic analysis included two kind of field surveys, (i) The beach users survey and (ii) the stakeholders survey. For the beach users' surveys, 200 interviews on the beach have been carried out. Four main criteria were implemented for the selection of five survey beaches along the 36 km coastline of the coastal area:

- Living beaches known to users, mainly used by locals, who have knowledge of the beach evolution through-out the years
- The coastline has been, or still is, under erosion
- The beach is used for amenity reasons
- Hard coastal structures have been constructed in the specific area. For the stakeholders survey, this included 20 in-depth, face to face interviews with persons that have been identified as representatives of the three major stakeholders groups:
- Politicians and officers (e.g. representatives from the Local Authorities of the villages, from the District officer of Larnaca, from the Cyprus Tourist Organisation)
- Experts involved in projects related to the area (e.g. Coastal Engineer, Marine Biologist, Environmental Engineer)
- Economic - Social group (e.g. Members of the Board of the Fishermen Association, from industrial and commercial activities hosted in the area, from NGOs)

7. Cost and resources

The cost of the study was €20,000.

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

The "static analysis" coupled with the "dynamic data" from the results of the surveys proved to be an efficient methodology to assess positive and negative results of coastal erosion management schemes from the perspective of local society, as well as to evaluate their anticipated impact on social and economic assets. These assessments form an important decision making and policy tool.

9. Success and Fail factors

An important factor that contributed to the success of the Cypriot pilot study was the availability of data. Plenty of data existed concerning the physical, administrational and social environment of the area. However, these data have been stored in several Departments and offices and a lot of work was needed to collect and evaluate them.

10. Unforeseen outcomes

According to the results of the beach-users survey, people like hard engineering structures for combating erosion, such as breakwaters. This was an unforeseen result, which needed further evaluation, since it could mis-lead decision makers. By a more detailed evaluation in the characteristics of the surveys sites and the relevant questions, it was evident that beach users were put in front of the dilemma "either breakwaters or beach erosion". They were not given any other alternative. Thus their answer was this specific one. Social perception is based mainly on comparisons and experiences: what people knew in the past and what they see now, what they've seen in other areas and what they would like to have. So, the answers should be

evaluated within the context and the local conditions. This was an important outcome.

The results of the study are still in use by experts and the public in Cyprus. It has been presented in conferences and local workshops. The systematic presentation of the physical, administrative and environmental data for the area has been appreciated in Cyprus, as well as the conclusions and remarks that resulted from the surveys.

11. Prepared by

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12. Verified by

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13. Sources

- EUROSION Project, Final Report, WP 3.1: Case study in Dolos- Kiti, Cyprus, (2002) 108 p, X.I. Loizidou
- Living with coastal erosion in Europe: Sediment and Space for Sustainability. A guide to coastal erosion management practices in Europe (2004), EUROSION

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