

BRIEF PROJECT MANUAL ON INTEGRATED COASTAL ZONE MANAGEMENT

Problems to be addressed:

- 1- Protection of the sea water quality at beaches
- 2- Protection of the aquatic flora and fauna.

- 3- Health risk levels for bathing beaches
- 4- Discharges of wastewater, including leachate from landfills.
- 5- Eutrophication – ponds and lakes
- 6- Erosion problems – coastal and inland (rain and sedimentation).
- 7- Run off.
- 8- Inland pollution from watercourses and rivers.

- 9- Air pollution
- 10- Waste disposals (liquid and solid) in coastal zones.
- 11- Dredging of ports and ship lanes
- 12- Land use – breakdown into: industry (small and large scale), residential and recreation.
- 13- Pollution originated from agriculture and fishery

Strengths:

- Analyses of the aquatic conditions and the degree of pollution related to the bathing water quality.
- Analysis of health risks related to bathing water quality.
- Implementation of cost-effective solutions on wastewater treatment technologies - integration of ecological engineering and advanced high technology.
- Implementation of environmentally friendly cost-effective coastal protection against erosion by innovative pressure equalisation technology.

Technology transfer Issues:

- Health problems related to aquatic recreational areas.
- Quality assessment of the aquatic environment.
- Cost-effective solutions on wastewater treatment.
- Cost-effective solutions against coastal erosion.

Feasibility study:

Identification of the specific problems in a selected reference area. The selection of the region in which the feasibility study should be carried out in close co-operation with relevant authorities. The feasibility study will select the specific reference area that will be subject for analysis.

It is a pre-requisite for the selected site that a problem with bathing water quality has been recognised. Furthermore, there should also be problems with wastewater and coastal erosion in the reference area.

It is important that the main project comprise implementation of technology transfer within one or more of the solutions that will be proposed.

Technology transfer program.

The technology transfer programme is a very important and integrated part of the concept and should be designed, planned and executed in co-operation with local polytechnic and medical universities.

The technology transfer programme is addressing two target groups:

- 1- Relevant authorities and
- 2- Scientists, engineers and contractors.

The technology transfer programme should be executed parallel with the implementation of the selected appropriate solutions as practical exercises within the training.