A COASTAL MANAGEMENT PROGRAM FOR ACCESS CHANNELS LOCATED ON BACKBARRIER SYSTEMS

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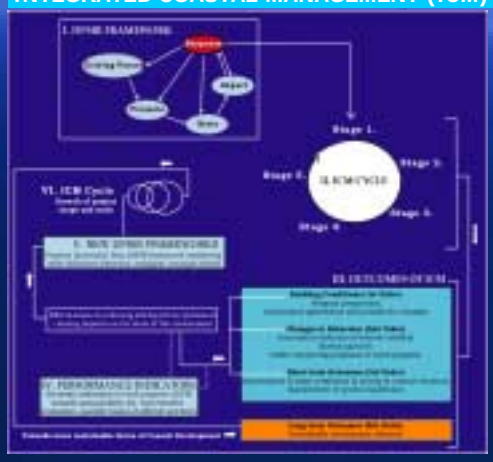
ECO-IMAGINE

INTEGRATED COASTAL MANAGEMENT (ICM)



ICM PROBLEMS

- Socioeconomic indicators are rare at National level;
- Use of governance/performance indicators are still in the beginning stages;
- DPSIR indicators helps, but not every area can be assessed based on quantitative information;
- Difficulties to define efficient coastal indicators integrating environmental, socioeconomic and governance aspects;
- Many regions/locals are not yet ready to ICM implementation, but it does not means that some areas cannot be managed;
- Existence of coastal asymmetries and different socioeconomic realities turns difficult a generalised national ICM.

NEED OF A LOCAL / REGIONAL APROACH IMPLEMENT COASTAL MANAGEMENT PROGRAMS (CMP'S)

COASTAL MANAGEMENT PROGRAM (CMP)

ADVANTAGES OF CMP IMPLEMENTATION

1. To increase the knowledge of environmental aspects of the coastal systems;
2. To group socioeconomic and environmental issues; clarify socioeconomic goals and objectives of future development on short and long-term bases;
3. Define various types of coastal indicators (environmental, socioeconomic and governance) concerning different issues that normally cannot be grouped;
4. Promote debate between different sectors of activity about the problems of the coastal region, resulting on local agreements and changing policies, towards the achievement of a broader ICM program;
5. Clarify reasons of discordance on the beginning stages of a broader ICM program.

APPLICABILITY ON ACCESS CHANNELS LOCATED ON BACKBARRIER SYSTEMS

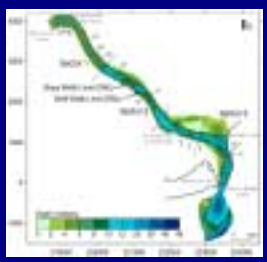
BACKBARRIER SYSTEMS

Complex environments, with precarious equilibrium conditions, exposed to storm erosion, subsidence and sea-level rise, amongst other factors;
Several activities like aquaculture, fishing, shipping, mining, salt extraction and tourism, take place at these ecosystems and often are not compatible with each others;
ICM must congregate different types of management, involving several stakeholders with different ideas on how to develop.

Problem: Policies and guidelines are often sectorial and do not take into consideration all the sectors of activity and/or the environmental aspects.

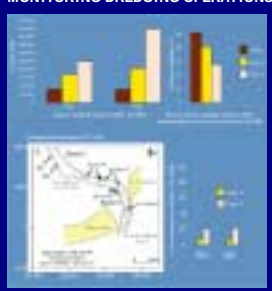
STUDY AREA

CHANNEL DEPTHS AND NAVIGABLE SETTINGS

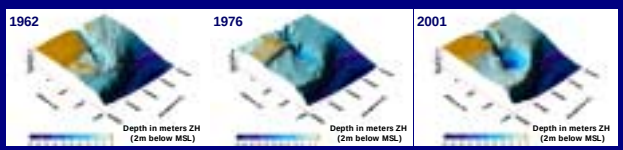


ADJACENT SHORELINE EVOLUTION

MONITORING DREDGING OPERATIONS



INLET AREA EVOLUTION - EBB DELTA FORMATION AND INLET THROAT SCOURING



SHORT AND LONG-TERM OBJECTIVES

- Clarify the need of sediments within the coastal systems FOR IT RESTORATION AND PRESERVATION;
- Improve treatment/disposal of contaminated sediments;
- Promote equity in the access to coastal resources and on the distribution of benefits from their use (apply effective SEDIMENT MANAGEMENT ACTIONS - Sediment as a valuable resource);
- Clarify the difficulties of future accomplishment of an ICM PROGRAM (jurisdictional aspects);
- Define adequate socioeconomic, environmental and governance indicators and evaluate losses on the affected activities;
- Improve the HYDRODYNAMIC and NAVIGABLE CONDITIONS (physical, chemical and biological) of the system and SAFETY of PORT OPERATIONS;
- Readjust the port activities to it REAL ECONOMIC VALUE and promote debate about future socioeconomic goals of the region;
- Improve the SYSTEM EQUILIBRIUM DYNAMICS and increase the knowledge of it short and long-term evolution (prevision of risk and impact scenarios of coastal evolution).