

Coastal Zone Management (CZM)

What are coastal zones?

Coastal zones are defined by the extent of territorial waters up to the high water mark. Generally the world's coastal zones are long narrow features of mainland, islands and seas, generally forming the outer boundary of the coastal domain (from 200m above sea level to 200 m below sea level) (Oceans 2020, 2002) Coastal zones include the entire continental shelf and occupy about 18% of the surface of the globe, supplying about 90% of global fish catch and accounts for some 25% of global primary productivity while at the same time being some of the most endangered regions on the planet.

Coastal zone management

At the World Bank, coastal zone management (CZM) is a part of Integrated Coastal Management (ICM), which is an interdisciplinary and intersectoral approach to problem definition and solutions in the coastal zone, it includes a range of initiatives that promote environmentally sustainable development of coastal areas, and encompasses a range of activities such as community based management of coastal resources, large-scale infrastructure development (ports, industrial and residential parks, etc.), pollution and erosion control, aquaculture, tourism and recreation, oil spill contingency planning, and navigational risk assessment. CZM is a process of governance that consists of the legal and institutional framework necessary to ensure that development and management plans for coastal zones are integrated with environmental and social goals, and are developed with the participation of those affected. The purpose of ICM is to maximize the benefits provided by the coastal zone and to minimize the conflicts and harmful effects of activities on social, cultural and environmental resources. (World bank, 1996)

Purpose of Coastal Zone Management

- ✚ Maximize the benefits provided by the coastal zone
- ✚ Minimize conflicts and harmful effects of activities upon each other, resources and the environment
- ✚ Promote linkages between sectoral activities
- ✚ Guide coastal area development in an ecologically sustainable fashion

For some, integrated coastal zone management protects habitats, i.e. wetlands, coral reefs and their water quality and also prevents the loss of life, while for others it provides a means of public access to coastal areas (which sometimes causes conflicts with private bodies)

Principles guiding Integrated Coastal Zone Management (ICZM)

Integrated coastal zone management is guided by two sets of principles

- ✚ Based on agreed international norms, which were set out by the Rio Declaration on Environment and Development.
 - There are 27 principles which were set out by the Rio declaration ([but we will look at 6 of these](#))
 - **Polluter pays principle** – environmental costs of economic actions including the cost of prevention of potential harm should be internalized and not imposed on societies as a whole
 - **Precautionary principle** – lack of scientific certainty is no reason to postpone action to avoid potentially serious or irreversible harm to the environment
 - **Principle of the right to development** - every human being has the right to life and the right to develop his/her potential to live in dignity
 - **Environmental safeguards principle** – be proactive rather than reactive, this relates to the prevention of harm through anticipatory measures, rather than post hoc efforts to repair it or provide compensation for it
 - **Transparency principle** – demands that decisions be made in an open and transparent manner with full public access to information
 - **Principle of inter-relation and integration** – inter relationships between issues and sectors; environment and development; these cannot be considered as separate activities (nothing is exclusive)
- ✚ Based on the bio-physical nature of the coastal zone
 - Emphasis is placed on 'designing with nature'
 - Special protection of rare and fragile ecosystems as well as endangered and threatened species to ensure that biodiversity is not lost
 - New developments in the coastal zone that are water dependent should have priorities over those that are not
 - Historically based claims of indigenous people to ocean spaces and resources should be recognized and traditional practices of dealing with ocean resources from a perspective of kinship and harmony should be followed whenever and wherever possible

Challenges of ICZM

- ✚ Failure to appreciate the interconnections within coastal systems
- ✚ Inadequate legislation and lack of enforcement
- ✚ Limited understanding and experience in ICZM
- ✚ Limited understanding of coastal and marine processes
- ✚ Lack of trained personnel, relevant technologies and equipment

Suggested reading

<http://www.epaguyana.org/iczm/articles.htm>

http://www.un.org/Depts/los/consultative_process/documents/A21-Ch17.htm

http://ec.europa.eu/environment/iczm/pdf/socec_en.pdf

http://www.globaloceans.org/icm/resources/story/icm_def.html

http://www.globaloceans.org/icm/resources/story/icm_funct.html

http://www.globaloceans.org/icm/resources/story/icm_instit.html