

Coastal Protection Guidelines

A guide to cope with erosion in the broader perspective of Integrated Coastal Zone Management

Kees Dorst (*Rijkswaterstaat/Ministry I&E, the Netherlands*)



*Severe coastal erosion affecting the coastal road, north of Chennai, Tamil Nadu, India.
(photo: R. Misdorp)*

Summary

As with many countries in the world, India suffers from coastal erosion. This can have a considerable influence on both the natural and the socio-economic systems of a country. Vulnerability assessment helps establish whether an area has a serious erosion problem and help to develop response strategies to combat them. It is advisable to put any anti erosion strategy into a broader perspective. Drawing up an Integrated Coastal Zone Management plan, is one way of achieving this. Implementing such a plan, which takes account of the many interests in the coastal zone, can help ensure coordination between different activities, both in the short and long term.

A coastal guide has been produced to help coastal managers understand what measures they can take to reduce or arrest coastal erosion. It discusses the entire spectrum of (hard and soft) coastal defence measures and the relationship to integrated coastal management. The guide is general in character and based on long term experiences. Three main types of response strategies to coastal erosion are distinguished:

- Retreat: allow the erosion to take place, people and habitats to move landward;
- Accommodate: allow erosion to take place and accommodate change by changing land-use;
- Protect: several options are identified including both hard or soft solutions for arresting acute or chronic coastal erosion.

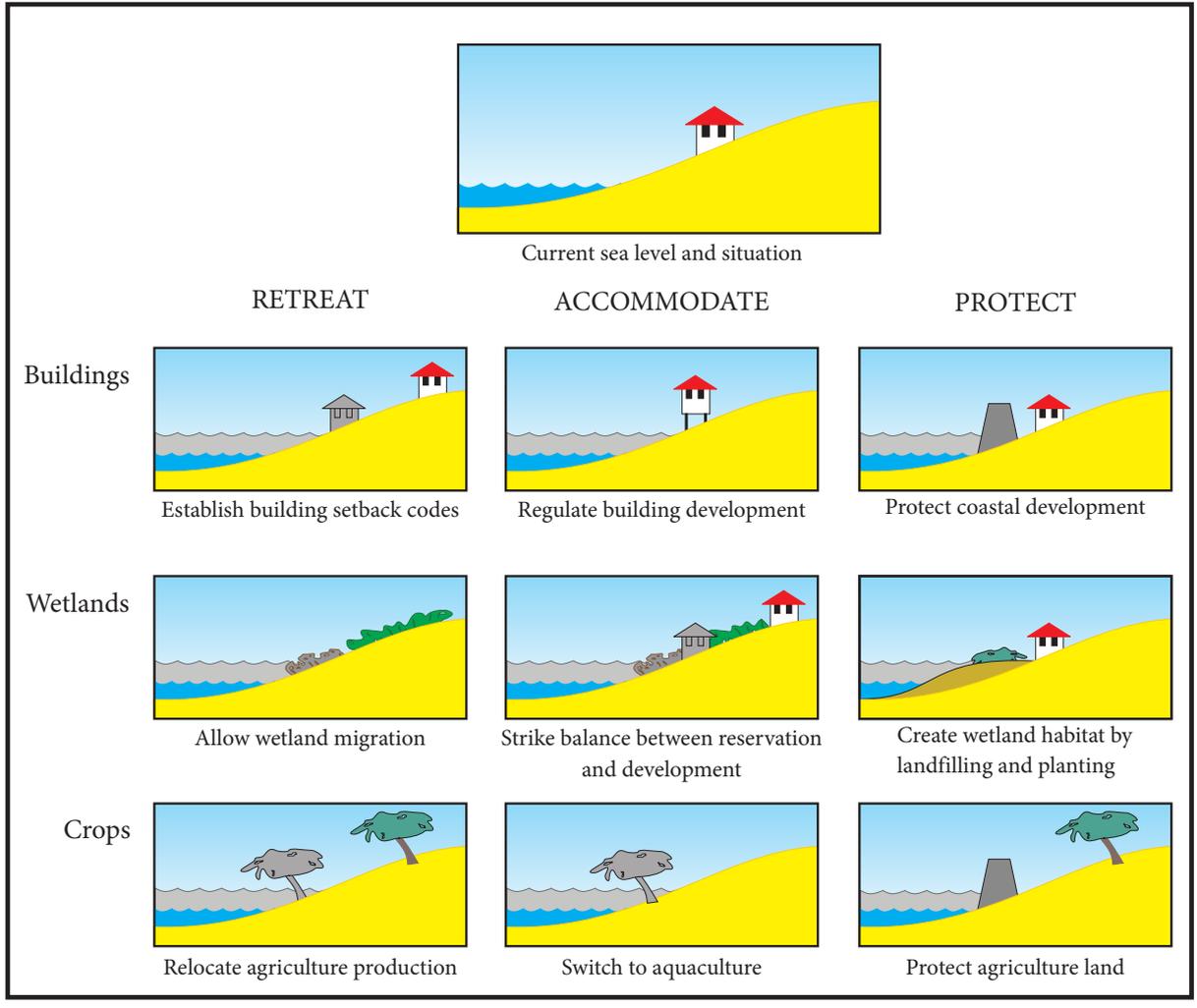
During the selection process determining the most appropriate measures, several assisting tools are available: Environmental Impact Assessment, Cost-Benefit Analysis and Multi-criteria analysis. The criteria and indicators needed for selection, can also be used later for monitoring and evaluating the efficiency of the executed coastal protection measures.

The Coastal Protection Guidelines, downloadable via the CCC-website (see CCC V-1), may be helpful for this process of selection.

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Summary of three main strategies for coping with erosion in this example forced by sea level rise



Summary of three main coastal strategies: Retreat, Accommodate and Protect addressing coastal erosion.