

Integrated coastal zone management (ICZM)

Goal, Objectives and Scope

Introduction

- Coastal zone is a place of natural dynamism where huge amounts of natural energy are released and a great abundance of life is nurtured
- If coastal resource systems are to remain productive, their management requires a holistic and comprehensive approach

What is ICZM?

- Process of governance
- Legal and institutional framework
- Development and management plans
- Integrated with environmental goals
- Participation
- Maximize the benefit
- Minimize the conflict

ICZM

- Concept- 1992 , Earth Summit of Rio de Janeiro
- Policy regarding ICZM is set out in the proceedings of the summit within Agenda 21, *Chapter 17*

Goals and Objectives of the ICZM Programme

overall goal

- To ensure optimum sustainable use of coastal natural resources
- maintenance of high levels of biodiversity
- Real conservation of critical habitats
- ✓ Supporting fisheries
- ✓ Protecting the community from storm ravages
- ✓ Attracting tourists
- ✓ Promoting public health
- ✓ Maintaining yields from mangrove forests
- ✓ Preserving coral reefs

Example

Fisheries and tourism- Port services, infrastructure system that supplies water, sanitation, transportation, and telecommunications -plans for both tourism and fisheries should be integrated with those for transportation and public works through ICZM

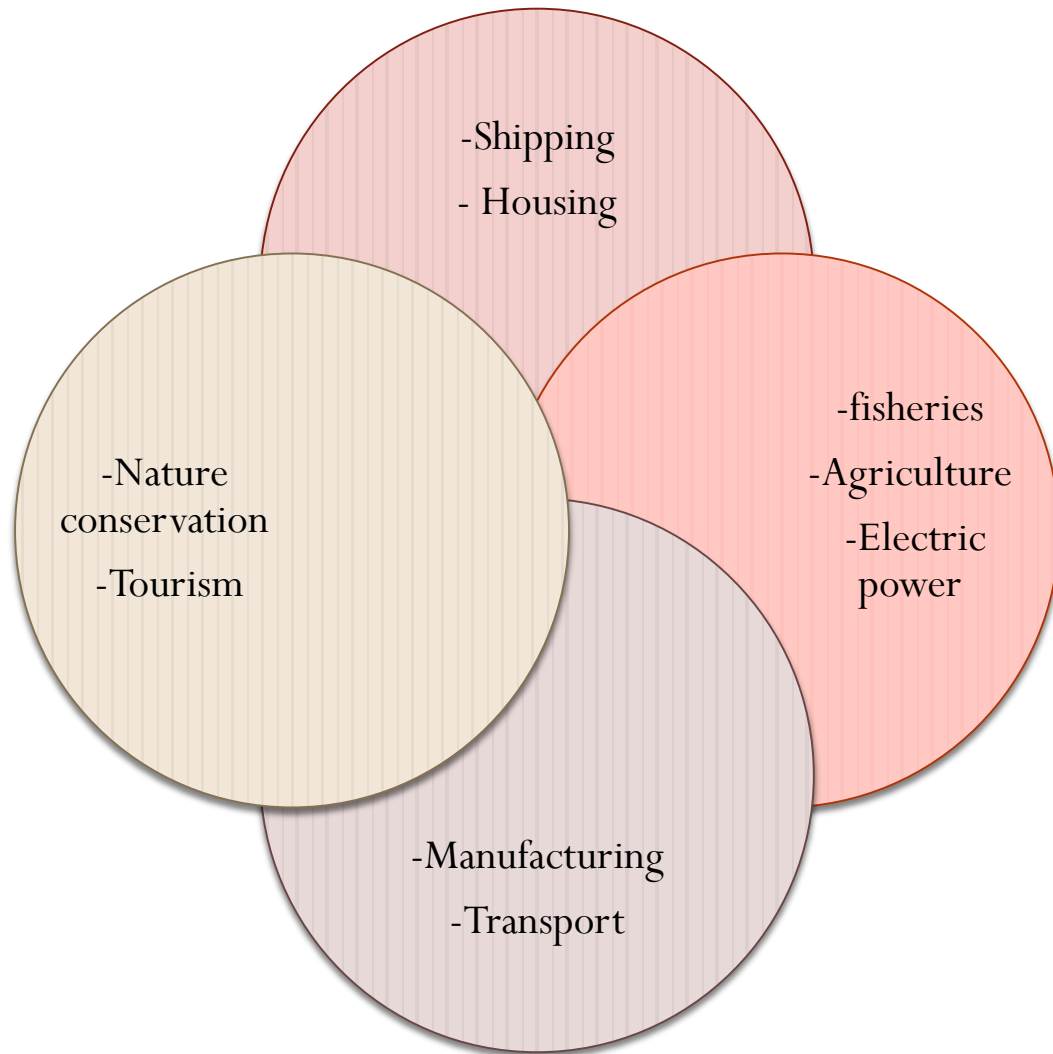
Objectives cont...

- Resources management and environmental conservation
- To coordinate the initiatives of the various coastal economic sectors
- coastal tourism and fisheries depend to a large extent on a high level of environmental quality - impacted by “spillover” effects such as pollution - loss of wildlife habitat and aesthetic degradation from uncontrolled oil and gas development

Objectives cont...

- Protect against natural hazards
- Restore damaged ecosystem
- Encourage participation
- Provide planning guidance
- Provide development guidance

ICZM- Scope



Significance of the term 'integrated' in ICZM

Integration among different sectors

Industrial
Governmental
Non-governmental

Integration among levels of government

Taluka
District
State and national levels

Integration between land and water elements of the coastal zone

All the ecosystems that exist along the coast and their interdependence

Integration among disciplines

Scientific
Cultural
Traditional
Political
Local expertise

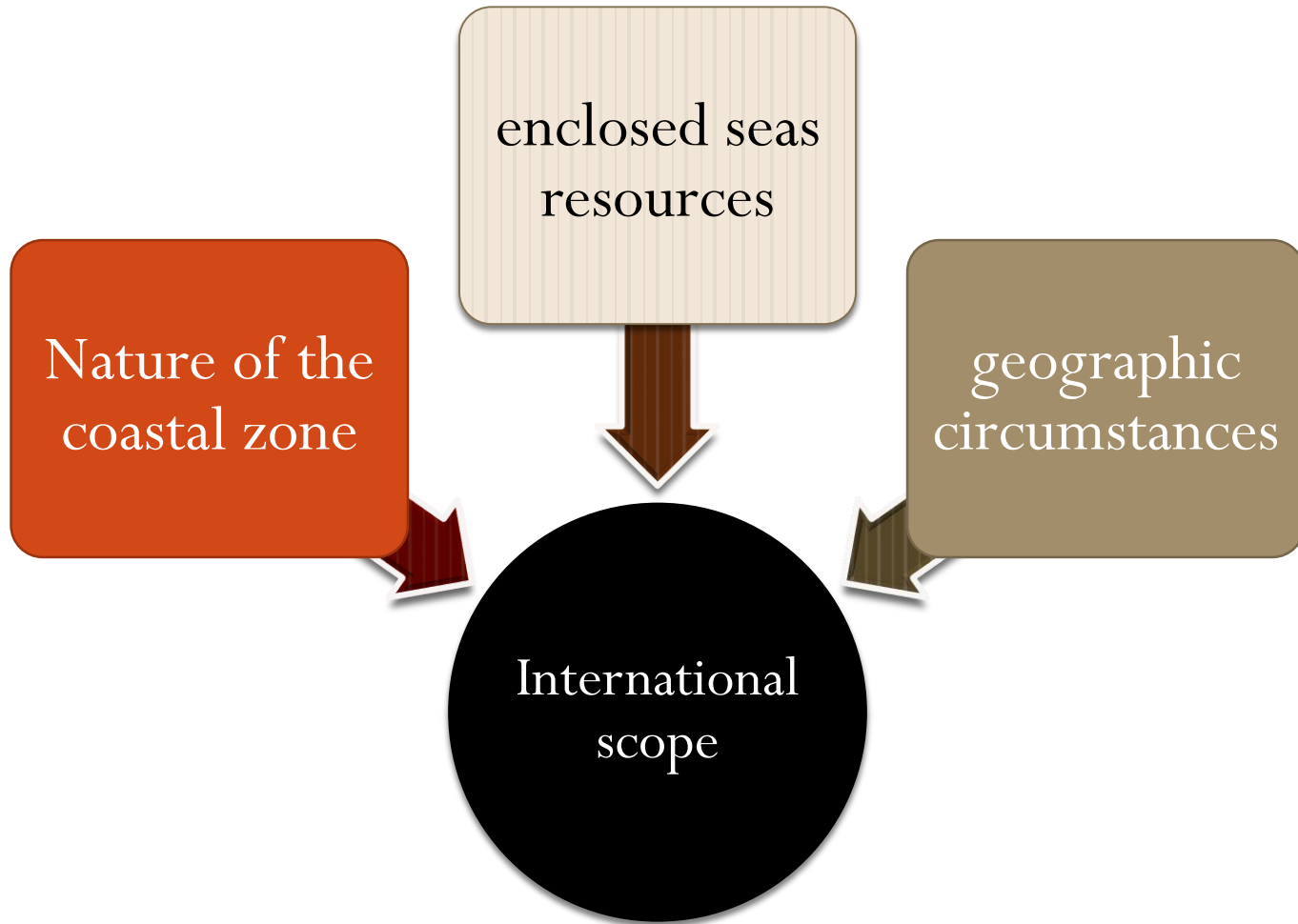
Integration between nations

National actions

- Policy commitment
- Resources and environmental objectives
- Establishment of a governmental office
- Review of development projects, including environmental assessment
- Accumulation of technical information
- Design and development of effective planning and management programmes

- ICZM programme- management of the physical development process
- Regarding fisheries- protect fish habitat, nursery areas, and water quality in fishery areas
- *Do not address fisheries operations such as controls on harvesting (e.g. sizes, closed seasons, gear type, etc.)*

Scope cont...



Primary objectives of the ICZM India Project

- ✓ *Implemented by the Ministry of Environment & Forests, Government of India in collaboration with the World Bank*
 - a. To contribute towards increased understanding and acceptance of the need to protect, conserve and manage coastal natural resources
 - b. To ensure safety to human life during natural disasters
 - c. To ensure protection of the economically and environmentally sensitive areas through habitat restoration programs and to develop management action programs for their sustainable development

- d. To develop alternative livelihood sources
- e. To develop a mechanism for sound management of quality of the environment
- f. To promote environmentally, socially and sectorally compatible development activities along the coast

BENEFITS

- Promote sustainable development of coastal areas
- Encompasses community based management of coastal resources
- Large-scale infrastructure development (ports, industrial and residential parks, etc.)
- Pollution and erosion control
- Aquaculture, tourism and recreation development in a controlled manner
- Oil spill controlling and navigational risk assessment

- Increase mangrove afforestation
- Ensure livelihood enhancement & security of the coastal communities
 - assistance for microenterprises establishment -
 - development of livelihood opportunities.

Conservation and management of Marine National Park & Sanctuary

- Database creation of varied parameters such as
- floral and faunal diversity,
- existent mangrove cover,
- existent coral reef covers,
- chemical and bio-physical contents of coastal waters

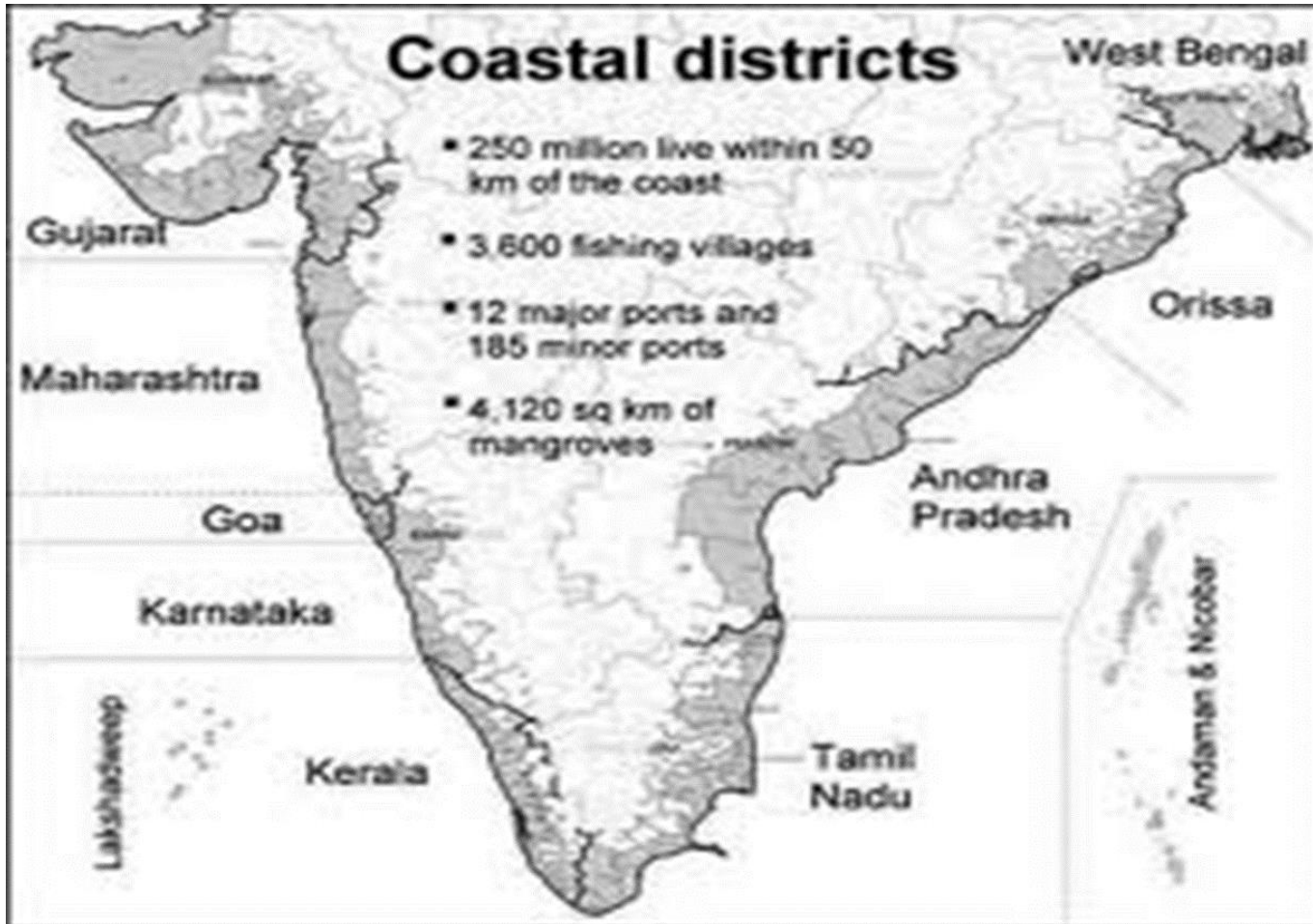
- Coral conservation & regeneration
- Prevent disposal of sewage into the coastal waters ensure a reduction in coastal pollution.
- Active participation of community -lead to stronger commitment
- Effective use of local knowledge and existing linkages.
- Cost effectiveness: burden of information gathering, planning, routine management and enforcement can be shifted from central government

Direct Involvement of all the stakeholder across a wide section of the community

- ensures decisions reflect local, social, economic and environmental conditions

ICZM Project in India

- World bank funded-US\$222 million(INR 1150 crores.)
- Implemented by the MoEF Govt of India in collaboration with the World Bank
- Duration :2010-2015
- Govt of India - initiated a national program
 - ❖ to promote planning and management of coastal area
 - ❖ to protect & conserve natural resources
 - ❖ to secure livelihoods in coastal communities.



Activities

Mangrove plantation



- Regeneration of coral reefs



- Cleaning up of beaches



- sewage and solid waste management
- conservation of cultural heritage
- number of activities aimed at enhancing the livelihoods of coastal communities

PROCEDURE

Identification of issues

2. Plan preparation

3. Formal adoption and funding

4. Implementation

5. Monitoring and evaluation (Olsen et al 1998)

Different components involved in the ICZM India project at the national level

COMPONENT I: Vulnerability and Ecological Mapping

COMPONENT II: National Institution Building and Capacity
Strengthening

COMPONENT III: Development and Implementation of state-
level pilot investment approaches to Integrated Coastal Zone
Management

- The overall purpose of the ICZM-type program is to provide for the best long-term sustainable use of coastal natural resources and for perpetual maintenance of the most beneficial natural environment

Thank you