



India

Dr. B.P. NILARATNA
Joint Secretary
Ministry of Environment and
Forests
Government of India





Indian efforts on Conservation and Management of Coral Reefs Eco systems

- Scheme on Conservation and Management of Coral Reefs & Mangroves initiated in 1987
- High priority accorded by the Government for conservation and management of coral reefs & Mangroves in India
- Coastal Regulation Zone Notification (1991) under the Environmental Protection Act (1986)
 - Recognizes Coral Reefs and Mangroves as ecologically sensitive
 - Categorizes them as CRZ-I (i)
 - Ecosystems accorded protection of the highest order.

National Environment Policy

National Guidelines for Conservation & Management of Coral Reefs & Mangroves

- Structured guidelines for Conservation & Management of Mangroves & Coral Reefs have been prepared & circulated to help State/UT Governments in formulation of management plans
- These guidelines also useful for other countries in the region as well as IUCN-MFF Secretariat for preparing regional toolkits and programme

National Committee on Coral Reefs

New Initiative

- The Government of India has decided recently to set up a 'National Institute for Research in Mangroves and Coastal Bioresources' in West Bengal, in proximity to the Sunderbans.

Major Issues

1. Anthropogenic Factors

- Fishing (Destructive & Over fishing) - Trawling, shore seine, push net, dynamite etc.
- Mining
- Pollution (Industrial & Domestic)
- Sedimentation
- Coastal development activities like urbanization, industries, salt pans, aquaculture etc.
- Others - like trap fishing, seaweed & mollusc collection, tourism etc.



Coral Reefs and Climate Change

- Most biologically diverse habitats on Earth
- Temperature induced mortality causing mass bleaching
- At today's levels of 387 ppm CO₂ – reefs seriously declining
 - Proposal to limit CO₂ to 450 ppm not expected to control loss of corals
 - Need to reduce CO₂ below 350 ppm for coral viability
- For safe level, need for active removal of CO₂ from atmosphere
- Ecosystem based management essential for survival of coral reefs



Source : The Economics of
Ecosystems and
Biodiversity, 2009

Gap areas

Gaps areas in the country's coastal & marine biodiversity research

- Conservation biology
- Research on insufficiently known species
- Database creation & Networking
- Economic Evaluation
- Training & Capacity Building
- Bio-prospecting
- Long term reef monitoring & assessment of sedimentation rate
- Reef restoration through transplantation in phased manner to support natural recovery
- Strengthening of National Coral Reef Research Institute
- Strengthening of universities & research institutions



An underwater photograph of a coral reef. The water is a deep blue-green, and the coral is a mix of brown, green, and blue. The coral is in the foreground, and the background is slightly blurred. The text "Thank you" is overlaid on the image in a large, colorful, sans-serif font. The letters are outlined in white and have a rainbow gradient. The 'T' is pink, 'h' is red, 'a' is orange, 'n' is yellow, 'k' is green, 'y' is blue, and 'u' is purple.

Thank you