Coral Reef Conservation and Management: Challenges in the Maldives

Abdulla Naseer Ministry of Environment Maldives



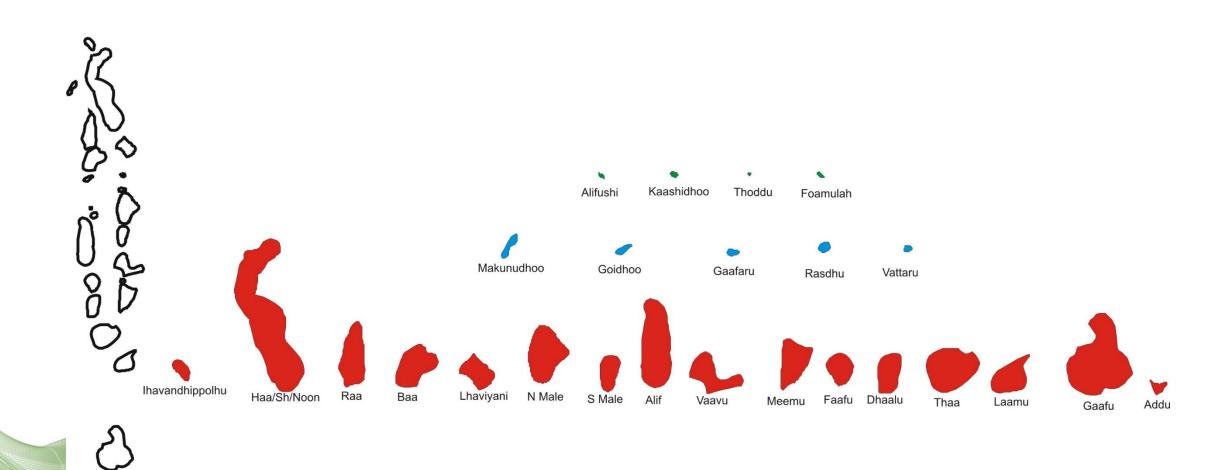
The Maldives Coral Reef System

- 16 complex atolls
- 5 simple atolls
- 4 Oceanic reefs
- 2000 + reefs
- 1200 reef islands
- Largest 2 atolls of the world
- total reef area 5000 sq kms





Maldives coral reef system



Dependence on reefs

- Way of life
- Source of bait
- Lagoon and beach fisheries
- Island biodiversity
- Taro pits and mangroves
- Tourism 1970
- Live grouper fisheries 1990

Protecting coral reef species

- Coral and Sand mining
- Phasing out of coral mining
- Use of concrete blocks as alternatives
- Protected species:
 - Sharks and rays
 - Napoleon wrasse
 - Black corals
 - Lobsters
 - Sea cucumbers
 - Oysters

Dredging and Reclamation

- Land is scarce
- Population increase
- 60% vegetation loss on inhabited islands
- Tourism development
- Harbours, ports and airports
- Sedimentation and Coastal erosion

Management approaches

- IRRM, ICZM, LMMA
- State owned reefs no tribal land
- Little local intervention until 2008
- Difficult to apply measures locally
- Decentralization law of 2009
- Local councils
- Whole reefs vs small areas

Management Success stories

- Baa atoll biosphere
- Nature parks and wetlands
- Community acceptance
- Case of Fuvahmulah Island
- Tourist resorts as conservation centers
- Private sector partnerships
- Grouper spawning aggregations

Challenges

- Coral bleaching
- Waste management
- Sewage and wastewater
- Marine plastics
- Frequent Political changes
- Laws and regulations
- Environmental Impact Assessments
- Planning tools
- Education and awareness

Financing conservation

- External finance
- Green tax 2014
- Green Fund
- Investing in conservation
- Tourism and conservation