



INTERNATIONAL RECOVERY FORUM 2009

BUILDING BACK BETTER AND GREENER
ENGAGING PARTNERS FOR
ENVIRONMENTALLY SOUND RECOVERY

26–27 January 2009, Kobe–Hyogo, Japan

Presented by: Honorable Defence Minister Mr. Ameen Faisal



Presentation Outline



- 1. About Maldives**
- 2. Key Vulnerability Factors**
- 3. Some Major Challenges**
- 4. Building Back**
- 5. Improving the Capacity of Disaster First Responder in the Maldives**
- 6. Conclusion**



The Republic of Maldives



➤ **Location :**

- ❖ Located in the Indian Ocean with closest neighbors Sri Lanka and India

- ❖ The islands stretch ≈ 820 Kms in Length and ≈ 130 Kms in Width



➤ **Number of Islands:** 1,192

- ❖ Inhabited *: 194 (88 Resort Islands and 34 Industrial and other islands)

- ❖ Uninhabited *: 998



➤ **Number of Administrative Atolls:** 20

➤ **Population (2006):**

- ❖ Total Population : 298,968

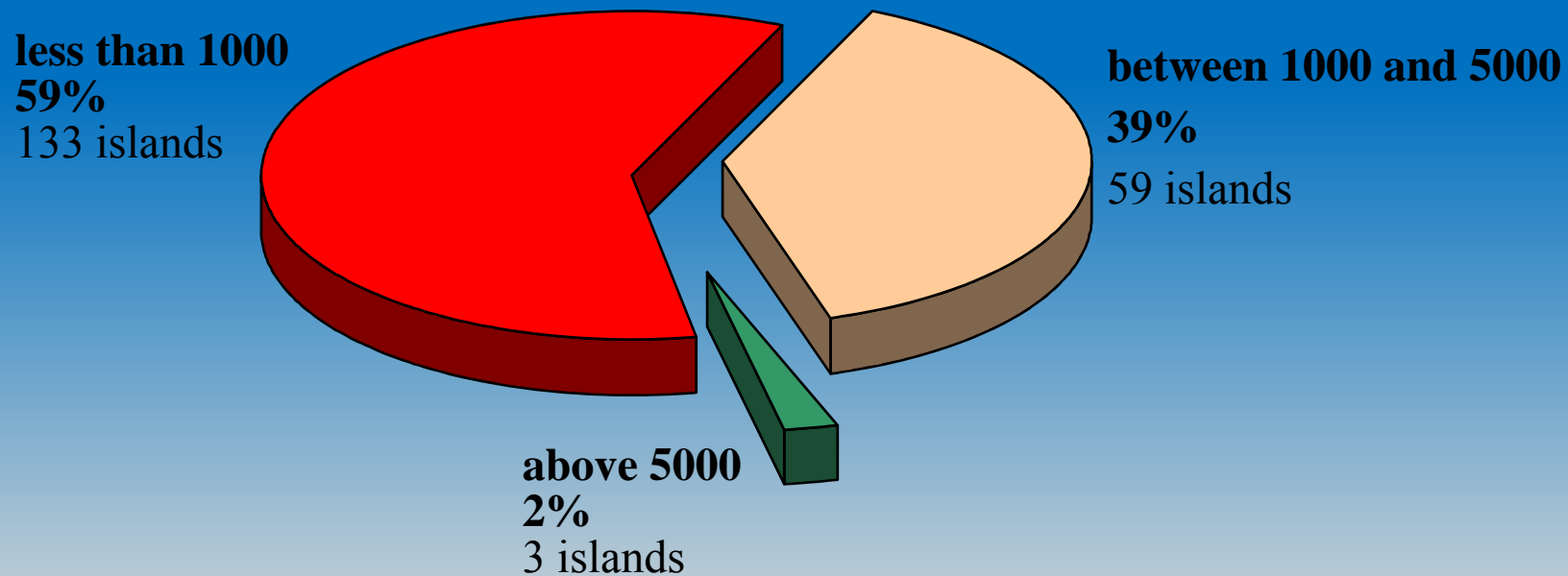


Key Vulnerability Factors



➤ Low population density and wide dispersion of population across the country

Population Distribution (excluding Male')



Source: Census 2006



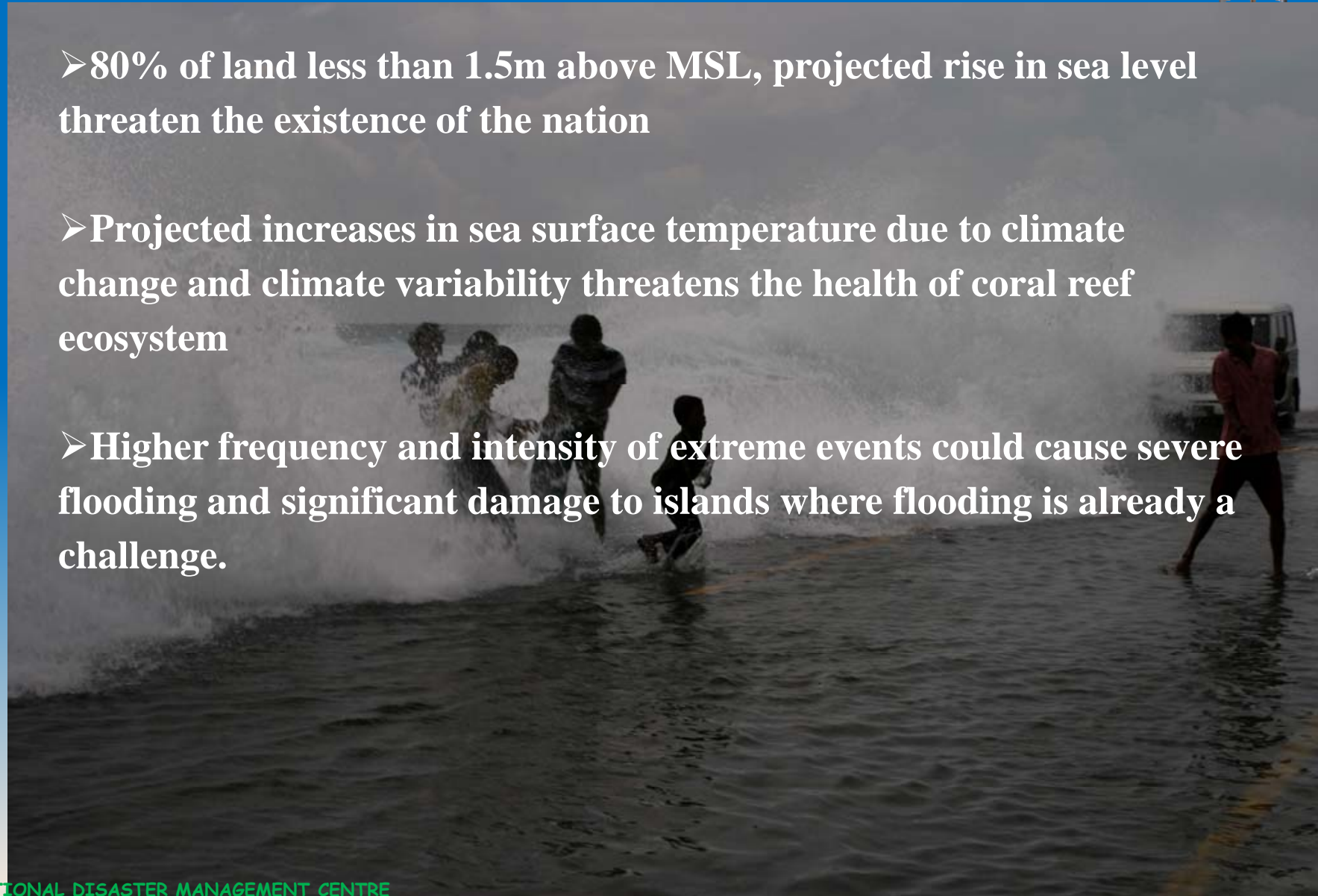
Key Vulnerability Factors



➤ **80% of land less than 1.5m above MSL, projected rise in sea level threaten the existence of the nation**

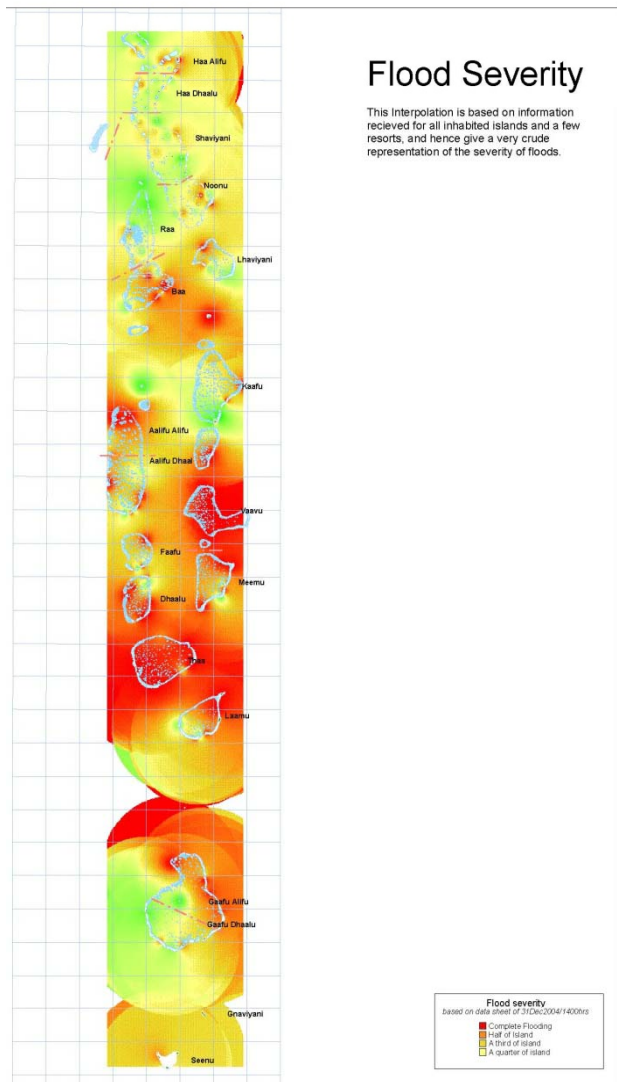
➤ **Projected increases in sea surface temperature due to climate change and climate variability threatens the health of coral reef ecosystem**

➤ **Higher frequency and intensity of extreme events could cause severe flooding and significant damage to islands where flooding is already a challenge.**





Key Vulnerability Factors



➤ **97% of all inhabited islands reported erosion and 64% of them undergo severe erosion**

➤ **Economic dependence on Tourism (Contribution: 28% of GDP) and Fisheries Sector**

➤ **High Import Dependence for products**

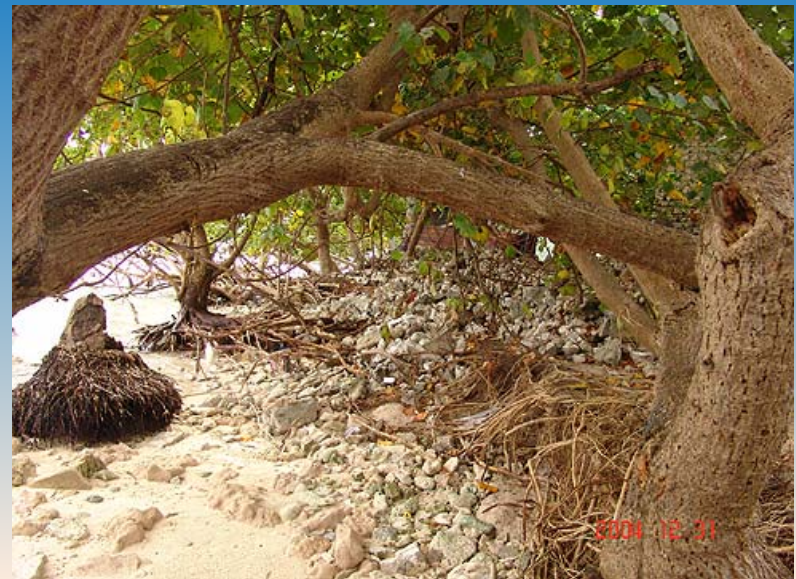
➤ **Natural Hazards – Tsunami, Earthquake, Storm, Floods, Drought and Sea Level Rise**



Some Environmental Impacts of the 2004 Indian Ocean Tsunami on the Country



- **35 percent of the inhabited islands were directly affect causing severe damage to buildings, infrastructure, crops and natural vegetation**
- **Wide spread deposition of municipal waste and hazards substance, damages to septic tanks and sewerage systems**
- **Salt water intrusion into the freshwater system in the islands**
- **Extensive damage to the fragile coral reef system that protects the islands**



2004.12.31



SOME MAJOR CHALLENGES



- **Lack of environmental data on Maldives**
- **Lack of Geographic Information Systems(GIS), satellite imagery and other visual information**
- **Absence of Impact Assessment Methodologies for Maldivian conditions**
- **Lack of environmental reporting mechanisms at the island and atoll levels**
- **Logistical obstacles to inspecting impacted areas**
- **Limited environmental research capabilities**



SOME MAJOR CHALLENGES



- **Environmental management capacities at the Atoll and Island level are minimal**
- **Inadequate enforcement and environmental inspection capacity**
- **Coastal Zone Management responsibility spread over several ministries**
- **Major Environmental issues identified by the Government are:**
 - **Climate Change,**
 - **Scarcity and pollution of Fresh Water Resources**
 - **Waste management,**
 - **Air pollution, and**
 - **Bio diversity conservation**
- **Capacity Building / Training**



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- **Decentralized governance system**
- **Population relocation programs**
- **Exploring the possibility of alternative greener sources of energy: Pilot**

Project to create electricity using wind turbines.

- **Project Selamat**
- **Building Code of Maldives**
- **Developing safer islands**
- **Disaster education and environmental awareness in the national curriculums**



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- **Establishing Waste Management systems**
- **Sewerage systems in the islands**
- **Maintain strict environmental protection measures**

- ❖ **Environment Protection and Preservation Act of Maldives**
- ❖ **National Environmental Action Plan (NEAP)**
- ❖ **National Legal Framework for Environment Protection**
- ❖ **Mandatory Environmental Impact Assessment (EIA) for all developing activities.**





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- Publication of **State of Environment (SOE)** report to assess the issues and development of the environment.
- Environmental Research Centre fulfils the function of providing decision makers with required research and data.
- Documents such as the **National Biodiversity Strategy and Action Plan, State Environment and Millennium Development Goals**-Highlights the need for national approaches to environmental management.



Improving the Capacity of Disaster First Responder in the Maldives

- **In the Maldives, Maldives National Defence Force (MNDF) is the designated Disaster First Responder.**
- **During the Tsunami of 2004 and even before it has been an auxiliary function of MNDF to act as the primary responder to all disasters, both natural and manmade.**
- **Today MNDF is the lead agency and the primary responder to all national emergencies by the act of parliament (Defence Force Act 1/2008).**





Improving the Capacity of Disaster First Responder in the Maldives



- **Establishment of a TETRA communication system to which covers all the regions of Maldives.**
- **Conducting workshops seminars and conferences to build human capacity and conduct joint **humanitarian and relief operations exercises.****
- **Establishing regional commands capable of addressing locally to disasters in that particular region**
- **Strengthening the assets of the Maldives Coast Guard in terms of acquiring more search and rescue vessels including fixed and rotary wing aircraft.**



Conclusions



- **Lack of Centralized Environmental Information system makes access to environmental information difficult**
- **Few studies have looked into long term environmental aspects**
- **Waste is one of the most environmentally challenging issues in Maldives, disposal practices vary from island to island**
- **Environmental legal framework has a number of substantial gaps, making enforcement impossible in many cases**
- **Minimal active environmental protection at island level noticed**
- **Lack of comprehensive research into coral bleaching and its impact on Maldivian islands and Training and Development in this area.**



Conclusions



- **GoM has embraced ambitious plans in rebuilding the country**
 - **Governance**
 - **Economic recovery**
 - **Restore livelihoods**
 - **Educate the general population**
 - **Capacity building at all levels**
- **Challenges to Maldives remain hardly unchanged**
- **Lack of resources remain the major constraint**
- **GoM will continue to require the assistance and cooperation of International partners including governments, donor agencies and NGOs.**



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