

Surviving Mega Disasters: Policy Measures After Tsunami

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Country Profile

- 1,190 islands.
- 170 Inhabited Islands.
- Total land area 300 km²
- Islands range b/w 0.2 – 5 km²
- Population approx. 400,000
- Economy - Tourism and Fishing
- No proven non renewable energy resources





Vulnerabilities

- Low-lying islands
- Extremely flat topography (highest point of elevation is 1.5m above sea level)
- Geographic dispersion of population and remoteness of islands
- Narrow economic base(main economic activities are tourism and fishing)



Before the Tsunami

- Maldives had achieved considerable socio-economic progress
- Was on-course to achieving high sustainable developmental goals
 - High literacy rate
 - Increase in access safe drinking water
 - Maternal and Infant mortality rates was declining rapidly
- Tourism sector had huge growth
- Maldives was recommended for graduation from the group of LDCs



Indian Ocean Tsunami - Snapshot

- 53 of 199 island severely damaged
- 1/3 of the population directly impacted
- 5 islands completely damaged and reconstructed
- 30,000 people displaced
- Economic damages and losses equivalent to 62% of GDP
- Total asset losses were estimated to be \$472 million
- Communication Network completely down
- Sever damages to essential infrastructures in most islands. E.g. jetties, power house, etc

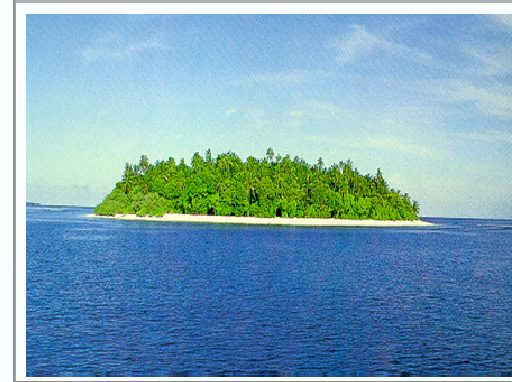


Environmental Damage of 2004 Tsunami:

Main Findings of the UNEP Assessment

Coral reef damage:

- damage caused by direct wave impact
- damage from sedimentation and excessive amounts of debris



Coastal damage:

- extensive beach erosion and
- damage to coastal protection measures



Beach, soil, vegetation and crop damage:

- extensive washing-off of soil
- stress and dieback noted in certain species from direct impact and possible salt contamination



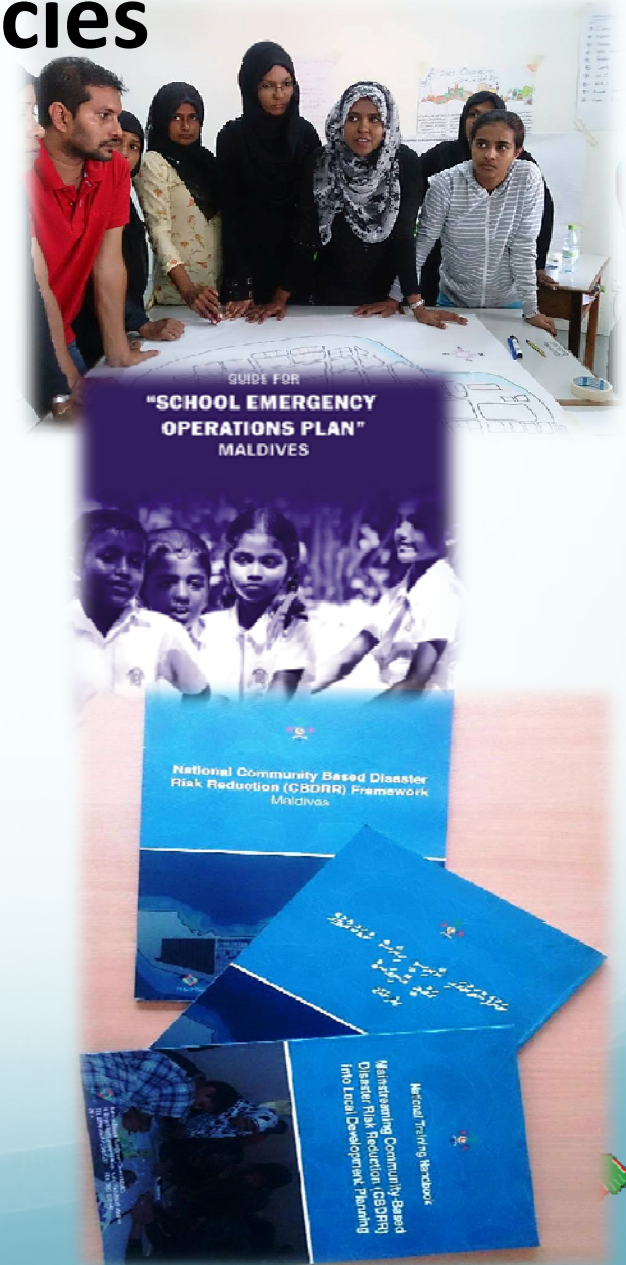
After the Tsunami

- Disaster Management was introduced to the Maldives
- National Disaster Management Centre was established
- Recovery and reconstruction efforts was coordinate through multi-sector coordination mechanism
- IDPs was managed using SPHERE standards
- Capacity building at island level was undertaken to manage and coordinate tsunami recovery efforts.
- First DM plan was formulated and introduced
- Safe island as a policy was established
- First Disaster Risk Profile of the country was undertaken
- Detail island risk assessments of 10 safe islands was conducted
- Networking with regional meteorological agencies was strengthened
- Capacity in terms of hardware was acquired to monitor and predict hazards

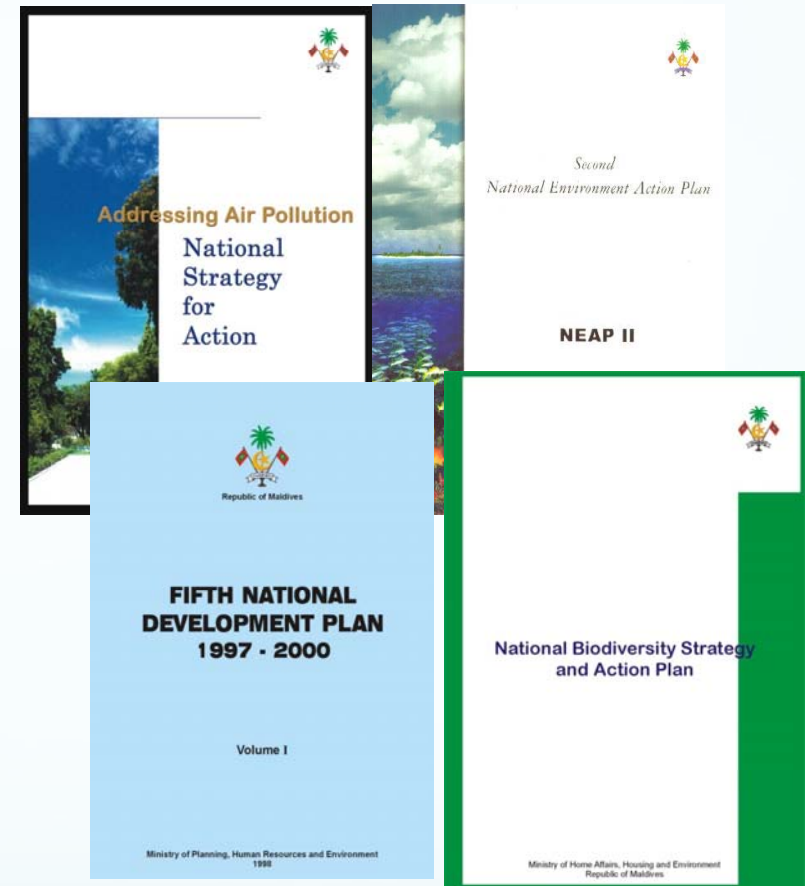


10 years after the Tsunami – Main Strategies and Policies

- National DM Act has been ratified on September 2015
- National Emergency Operations Plan (NEOP) Drafted which outlines the national response mechanism through a multi-stakeholder approach
- Established a national Framework on Community Based Disaster Risk Reduction to increase island level capacity for disaster management
- Strengthen island level response mechanisms by providing them basic disaster response equipment such as flood drainage pumps



- Development of Strategic National Action Plan (SNAP)
- Enhancement of community capacity for disaster response
- Strengthening the National Early Warning Systems
- Establishment of Maldives Red Crescent in 2009
- Strengthening Policies and guidelines on IDP management and Relief Management
- Enhancement of capacity in disaster statistics



Challenges and Opportunities

- Institutional and legal framework needs to be expanded and streamlined
- Islands lack the basic level of preparedness including weather and climate hazards monitoring that are prerequisite for preparedness and effective response to disasters
- Hazard and risk assessment needs to be developed to all inhabited islands
- Inadequate allocation of financial resources for disaster management
- Inadequate expertise in hazard early warning and dissemination for both sudden onset and slow onset events
- Limited involvement of all segments of society in multi-stakeholder, multi-role approaches to Disaster Risk Reduction and Climate Change Adaptation



Good practices and lessons learned

- NDMC has formulated a multi sector partnership approach with different stakeholders to diversify resources and skills
- The sharing of information between Maldives Meteorological Services and NDMC has been strengthened in the past few years
- NDMC has pioneered a resort resilient programme to build capacity in the tourism industry
- NDMC has strengthened the network with local councils and responses to coordinate local disasters
- NDMC has formulated national early warning Standard Operating Procedures (SOPs)



Thank you

