

Approach for Disaster Risk Reduction & Management (DRRM) - Lessons Learnt and Challenges Ahead in the Maldives

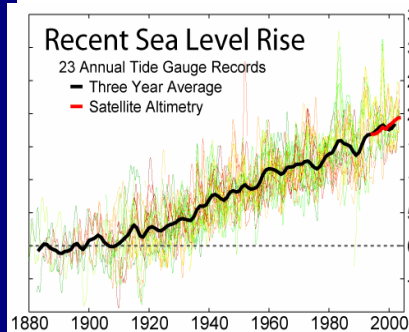
Approach for Disaster Risk Reduction and Management (DRRM) in the Maldives

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Global warming & Sea-level rise



- 1 to 3 mm/yr since 1900,
- 3 mm/yr since 1992 (satellite altimetry from TOPEX/Poseidon)
- predicted to cause significant rises in sea level over the course of the twenty-first century

(Source: Climate Change 2001: Working Group I: The Scientific Basis,
http://www.grida.no/climate/ipcc_tar/wg1/425.htm)

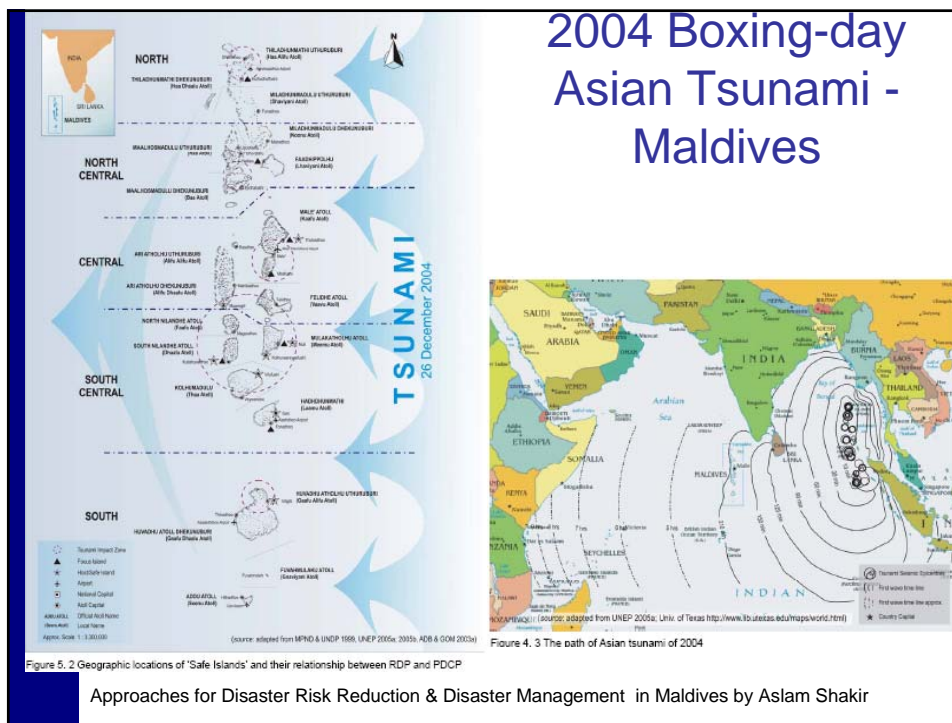
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Disasters, Risks & Vulnerability

- Heavy Rain – Monsoon etc
- Tidal surges
- Flooding (1987)
- Tsunami (Boxing day 2004)

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Tsunami impacts

- Huge –ve impacts on the region (coastal areas)
- Maldives: Most severely affected – throughout the country

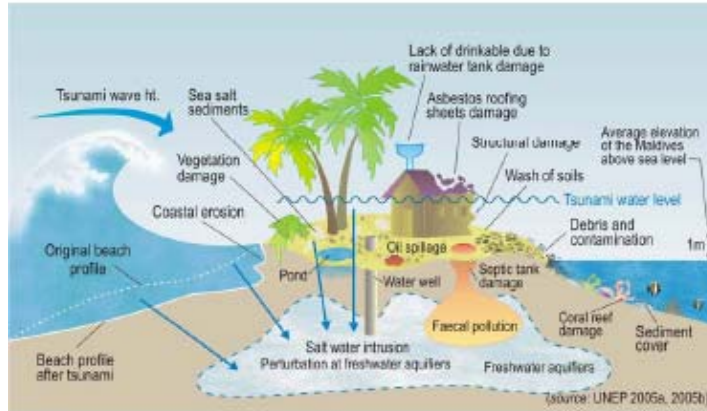


Figure 4. 4 Tsunami inflicted environmental damages on the Maldives

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Tsunami Impacts

- Loss of life & and Livelihood
- Loss & damage to basic necessities
 - Food water
 - Medical/medicines
 - Cloth
 - Shelter
- Damage to Information, communication & transportation systems
- Damage to the development infrastructure

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DRRM Policy and Programme

- National National Disaster Management Centre (NDMC),
 - 1 The National Disaster Relief Coordination Unit (NDRCU);
 - 2. The National Economic Recovery and Reconstruction Programme (consisting of 2 units);
 - a. The National Economic Recovery Unit (NERU) coordinated by Ministry of Finance and Treasury (MoFT) and;
 - b. The Housing and Infrastructure Redevelopment Unit (HIRU) coordinated by the Ministry of Planning and National Development (MPND);
 - 3. The Transport and Logistics Unit (TLU).

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National Recovery & Reconstruction Plan (NRRP)

- needs for emergency shelters for the displaced and homeless;
- revival of livelihoods and sustainable economic recovery;
- and the reconstruction of houses and infrastructure to replace the assets that were lost or destroyed(MPND, 2005; 7 – NRRP)
- US\$374.9 million divided in to 13 sectors, including development of islands to host new communities that are relocated (MPND, 2005; 7 – NRRP).

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Safe Islands

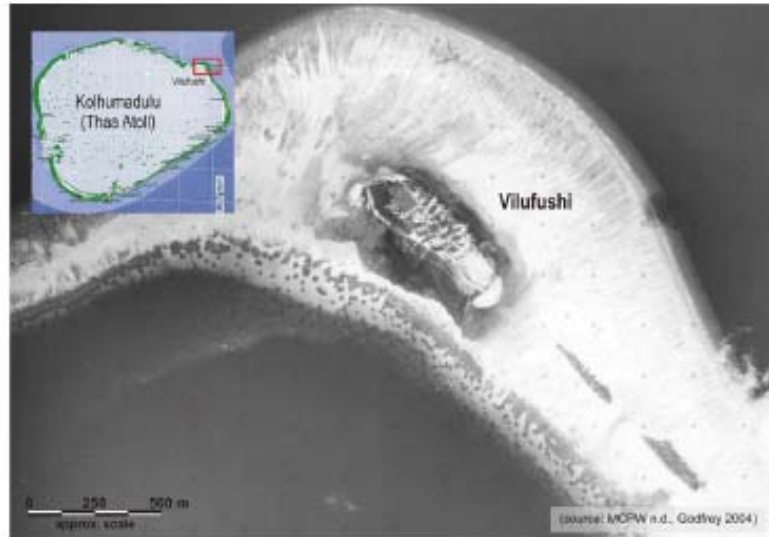


Figure 5. 5 An island selected for 'Safe' Development

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Safe Islands

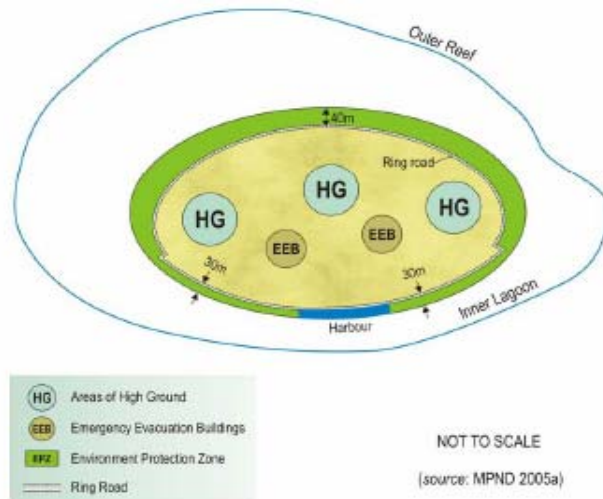


Figure 5. 3 A Concept plan for the 'Safe Islands'

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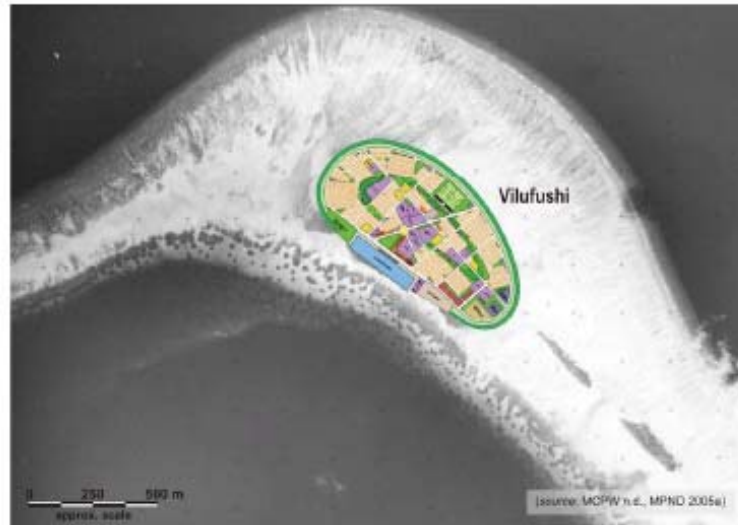


Figure 5. 6 A proposed land use plan for a 'Safe Island' including the lagoon and the reef Approaches for Disaster Risk Reduction & Disaster Management in Maldives by Aslam Shakir

Safe Islands

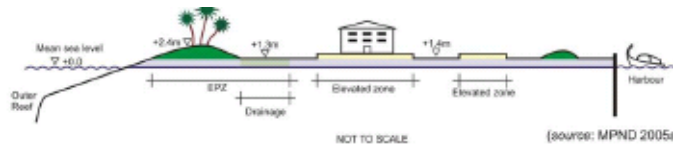


Figure 5. 7 A cross-section of a 'Safe-Island'

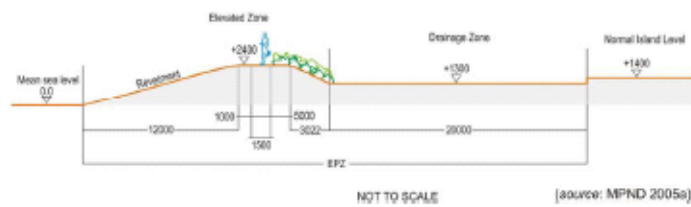


Figure 5. 8 Cross-section of Environmental Protection Zone (EPZ) of a 'Safe Island'

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Specific Issues for Maldives

- Geographic & environmental
 - dispersion & isolation
 - Communication and transport (ICT)
 - Uneven population density
- Physical nature – land and topography
 - a coastal country with no hinterland or mountains
 - Highest point is 3.5m above sea-level
 - Weak and porous soil
 - Ground water contamination and crop damage
 - Low bearing capacity, poor foundation and infrastructure

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Coastal & Low-lying Islands



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Scope for Regional Cooperation

- **Help integrate DRRDM into Development Planning**
 - **Technical & Financial assistance**
 - **Capacity building**
 - **Sharing of Experiences: good & bad**
- **During disasters**
 - **Delivery of water, food & other essentials**
 - **Evacuation of people**
 - **Air lift**

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Active and proactive role for

- **Regional Governments**
- **SAARC**
 - **Meteorology Research Centre (SMRC)**
 - **Disaster Management Centre (SDMC)**
 - **Coastal Zone Management Centre (CZMC)**
 - **Media**
 - **Other Organizations, Universities, Research Organizations & individuals.**
- **Continuation of regional cooperation in a realistic & meaningful way**

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Thank You.

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