

National Marine Ecosystem Diagnostic Analysis (MEDA)

Outline based on existing MEDAs with additional sections added to ensure 'deep sea' information is captured. Countries can use this as a guideline, but should adjust to suit their national requirements

- 1. Country Overview**
- 2. Biophysical Environment**
 - 2.1.1. The coastal zone
 - 2.1.2. The coastline
 - 2.1.3. Islets and coral banks
 - 2.1.4. Coral reefs
 - 2.1.5. Seagrass beds
 - 2.1.6. Mangroves
 - 2.2. General description of climate**
 - 2.2.1. Wind
 - 2.2.2. Rainfall
 - 2.2.3. Air temperature
 - 2.2.4. Sea surface temperature
 - 2.2.5. Ocean column temperatures
 - 2.3. Marine and Coastal Geology and Geomorphology**
 - 2.3.1. Bathymetry
 - 2.3.2. Seabed type
 - 2.3.3. Land elevation
 - 2.3.4. Soil type
 - 2.3.5. Seamounts / Knoll
 - 2.3.6. Hydrothermal vents
 - 2.3.7. Continental shelf extent
 - 2.3.8. 350 nm extent
 - 2.4. Freshwater resources and drainage, including rivers, groundwater, springs, estuaries, deltas and coastal lakes**
 - 2.5. Major river basins, drivers impacting on river flows, impact on downstream ecosystems, management interventions**
 - 2.6. Physical Oceanography**
 - 2.6.1. Currents (Coastal hydrodynamics and offshore current systems)
 - 2.6.2. Tidal regime and waves
 - 2.6.3. Sea level change
 - 2.6.4. Ocean temperature
 - 2.6.5. Salinity patterns
 - 2.6.6. Ocean-atmosphere interaction
 - 2.7. Chemical and Biological Oceanography**
 - 2.7.1. Nutrients
 - 2.7.2. Persistent organic pollutants

- 2.7.3. Land based pollutants (sources, types, impacts, monitoring and institutional frameworks)
- 2.7.4. Marine litter (sources, types, impacts, monitoring and institutional frameworks)
- 2.7.5. Primary production
- 2.7.6. Secondary production
- 2.7.7. Ekman· pumping· velocities· and· thermocline· variability
- 2.8. Coastal zone and continental shelf**
 - 2.8.1. Description and extent of coastal and marine habitats (mangroves, Rias, tidal flats, sand· beach, cliff, coral·reef, estuaries, deltas, dune, rocky shores)
 - 2.8.2. Productivity of the coastal zone (corals, mangroves, seagrass beds)
- 2.9. Microfauna and meiofauna**
- 2.10. Macrofauna**
 - 2.10.1. Invertebrates
 - 2.10.2. Fish and fish resources
 - 2.10.3. Mammals
 - 2.10.4. Reptiles
 - 2.10.5. Birds
 - 2.10.6. Exotics and invasive species
- 2.11. Long term predicted atmospheric changes, including observed and expected impacts of climate change**
- 2.12. Natural hazards and human-induced hazards**
 - 2.12.1. Tsunami
 - 2.12.2. Storm· events
 - 2.12.3. Floods
 - 2.12.4. volcanoes
 - 2.12.5. earthquakes
 - 2.12.6. Coastal·erosion
 - 2.12.7. Cyclones
 - 2.12.8. Ship strikes
- 3. Human environment**
 - 3.1. Coastal and island populations – current status and trends
 - 3.2. Sites of historical, religious or cultural significance
 - 3.3. Human Health
 - 3.4. Infrastructure (roads, undersea cables, ports, harbours, oil pipelines, water supply, railway, shipping lanes, lighthouses, buoys)
 - 3.5. Blue/Ocean Economy
- 4. Coastal Livelihoods Assessment**
 - 4.1. Tourism and recreation
 - 4.2. Industries
 - 4.3. Factories
 - 4.4. Fisheries
 - 4.5. Dairy

- 4.6. Forestry
- 4.7. Mariculture
- 4.8. Commercial algae
- 4.9. Seaweed farms
- 4.10. Sand harvesting
- 4.11. Salt
- 4.12. Titanium
- 4.13. Seabed mining
- 4.14. Refineries
- 4.15. Oil and gas drilling
- 4.16. Coal
- 4.17. Charcoal
- 4.18. Marine-based renewable energy

5. Ocean Policy and Governance

- 5.1. Administrative regions on land (coastal districts, municipalities)
- 5.2. Administrative/legislative zones of the sea
- 5.3. Legislation
- 5.4. National, provincial and local authorities in coastal/marine affairs
- 5.5. NGOs / private sector
- 5.6. International relations, conventions and committees

6. Planning and management

- 6.1. National disaster management plans
- 6.2. Environmental sensitivity mapping
- 6.3. Coastal Management and Development Plans
 - 6.3.1. Integrated Coastal Zone Management Plans (ICZM)
 - 6.3.2. Multilateral agreements, international conventions and protocols
- 6.4. The institutional framework linked to integrated coastal zone management (ICZM)
- 6.5. Areas under special management (world heritage sites, Ramsar sites (wetlands), scientific reserves, nature and game reserves, national parks, ecoregions, transboundary marine protected areas, marine parks and reserves, other conservation areas e.g. LMMA)
- 6.6. Monitoring, Control, Surveillance
- 6.7. Marine spatial planning

7. Cost-Benefit Analysis

- 7.1. Coastal Agriculture
- 7.2. Coastal Forestry
- 7.3. Value of critical ecosystems
- 7.4. Tourism
- 7.5. Ports and Harbours
- 7.6. Coastal Mining
- 7.7. Coastal Resources and Poverty Alleviation

8. References

