

**Sea level rise, salinization,
coastal erosion and
inundation**

Experience and good practises

Building the basis - elements

- **Projections/Mapping**

- Mapping the extent of hazards, ex. Barbados sealevel rise mapping (pilot)
- GIS simulations of impacts – scenario mapping

- **Assessments - impact on sectors and geographical areas**

- Cost-benefit analysis – creating better basis for decision making - from scenarios to probabilistic assessment more detailed mapping of impacts, adaptation options and their costs – what do actually make sense to implement, Australia

- Regional initiative, Carribean. Economic assessment of expected losses, a suite of adaptation options to use as basis for dialogue with decision makers on what options may be considered

- **Monitoring climat change and its impacts**

- Data collection – infrastructure in place, Barbados
- Building databases nationally and regionally

Building the basis – best practises

- Capacity building programmes
 - UNDP programme for post disaster, including medium and small scale events
- Regional cooperation as well as cross regional learning
- Potential for using existing data from ex. existing DRR databases (GAR), IFRC hurricane hazards and also floods
- Involving a range of organisations and stakeholders, St.Lucia: stakeholder meetings to assess the impacts due to costal erosion
- Dialouge with decision makers

Risk reduction/adaptation

- Infrastructure

- Coastal erosion, coastal defence such as seawalls, St.Vincent, timberlogs, Sechelles
 - Seadefence measures, Barbados, south coast resulted in more sand

- Ecosystem services

- Mangrove planting , Singapore

- Rainwater capture as alternative to desalination plants, Maldives

- Insurance as tool for risk reduction, sealevel walls and information on risk management, Barbados

- Tradition approaches, Marshall Islands

- Diversification strategies for food security

- Temporary relocation to parts less affected where food is available

- Civil Society and NGOs as drivers – show casing for government action

- Early warning system, Thyphoon Warning, Marshall Islands

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Risk retention, risk transfer and residual risk

- Risk transfer

 - Build in incentives in insurance to reduce exposure by providing reduced premiums if risk reduction measures are taken, Barbados

 - Experience increased premiums
 - CRIF –

- Displacement, Marshall Islands

 - Building upon experiences from nuclear displacement.
 - Bikini Island inhabitants were given a new atoll
 - Trust fund to assist the displaced

Gaps and limitations

- **Capacity and skills**, including ability to quantify losses
- **Institutional structures**
- **Enabling environment**, including regulatory frameworks
- **Insurance** – do not accommodate for slow onset
- **Data sharing** in relevant and targeted forms
- **Public awareness**
- **From policy to implementation**

Responses and strategies

- Capacity and skills
- Institutional structures
- Enabling environment
- Insurance
- Data sharing
- Public awareness
- From policy to implementation

Priorities

- Holistic approaches

Responses and strategies

Gaps and limitations

Recommendations

Capacity and skills

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- Projections/Mapping – GIS simulations
- Assessments
- Monitoring