Coastal Risks Retention in the Maldives

Expert Dialogue on technologies for averting, minimizing and addressing loss and damage in coastal zones
Session 3: Technologies for coastal zone risk retention
17 June 2019 | Bonn, Germany

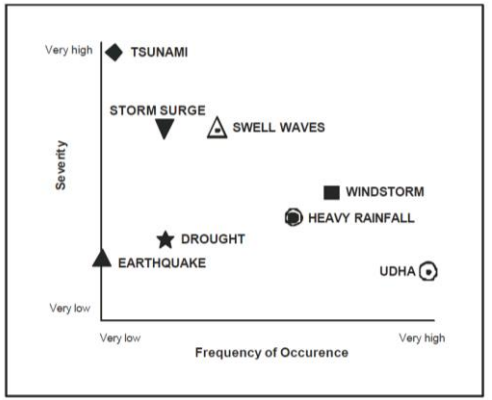
Background

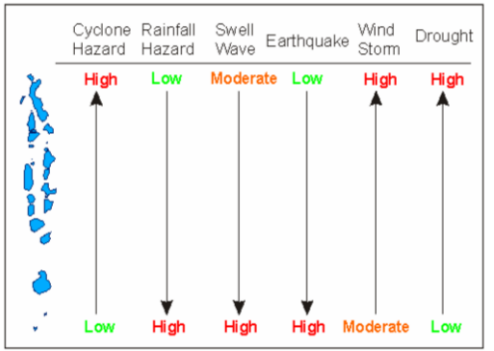
Coastal vulnerability

- 2,300 km long
- Beach areas is 13 km2
- Highly dynamic beaches with substantial changes during seasons
- 97% of the beaches report
- Small and low-lying island
- More than 44% of human settlement and more than 80% of critical infrastructure in Maldives is within 100m of coast

Coastal Risks

- Erosion and accretion is a natural island building process (Kench et al 2001)
- Climate and non-climatic factors make this process unstable.
- Islands started reporting severe erosion since early 1970's.
- Several Technologies were undertaken to 'retain' this coastal risk

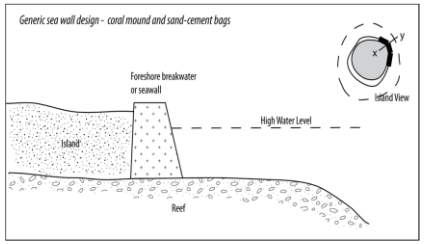


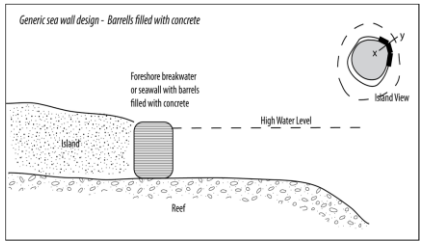


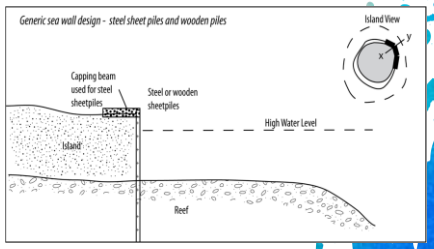
Risk Retention

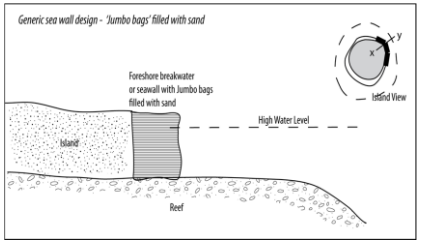
- Risk retention: in the loss and damage context involves **absorbing** risk by those faced with potential adverse impacts (FCCC/TP/2019/1)
- Risk retention: types of available technologies that can be used to both **manage and accommodate** climate impacts

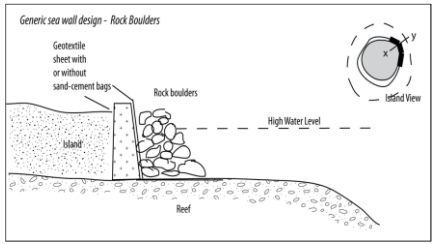
Coastal works: ‘hard’ measures

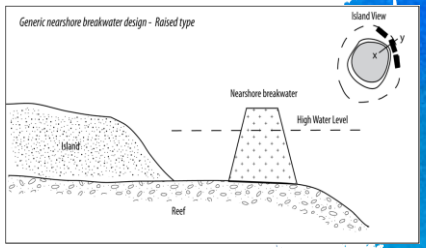


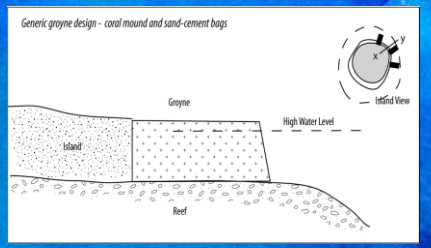


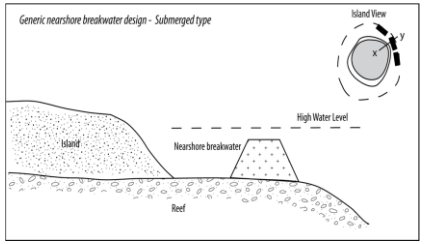


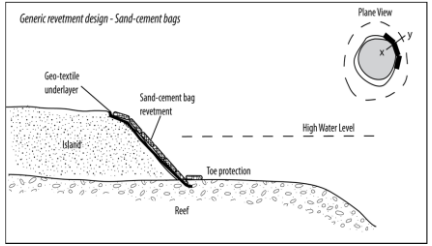


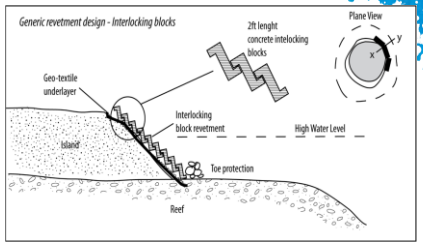




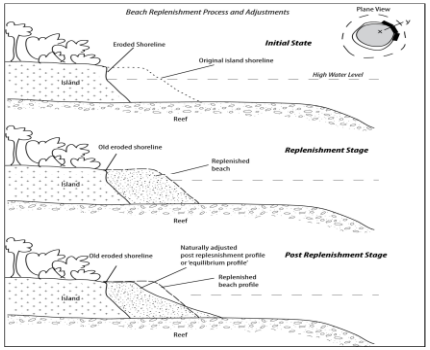


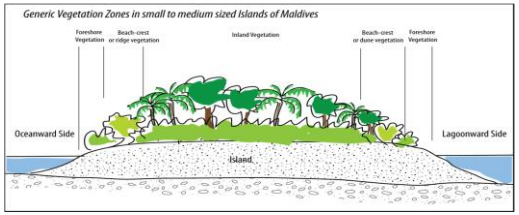


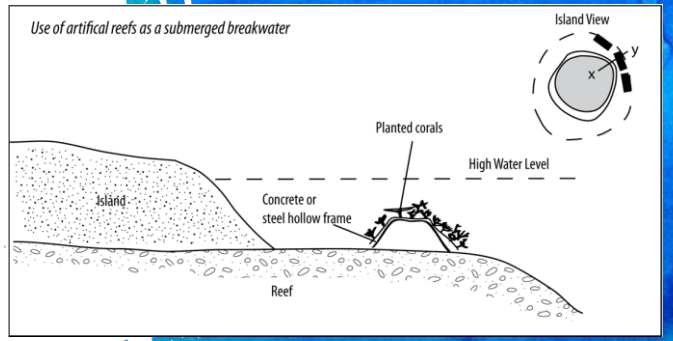




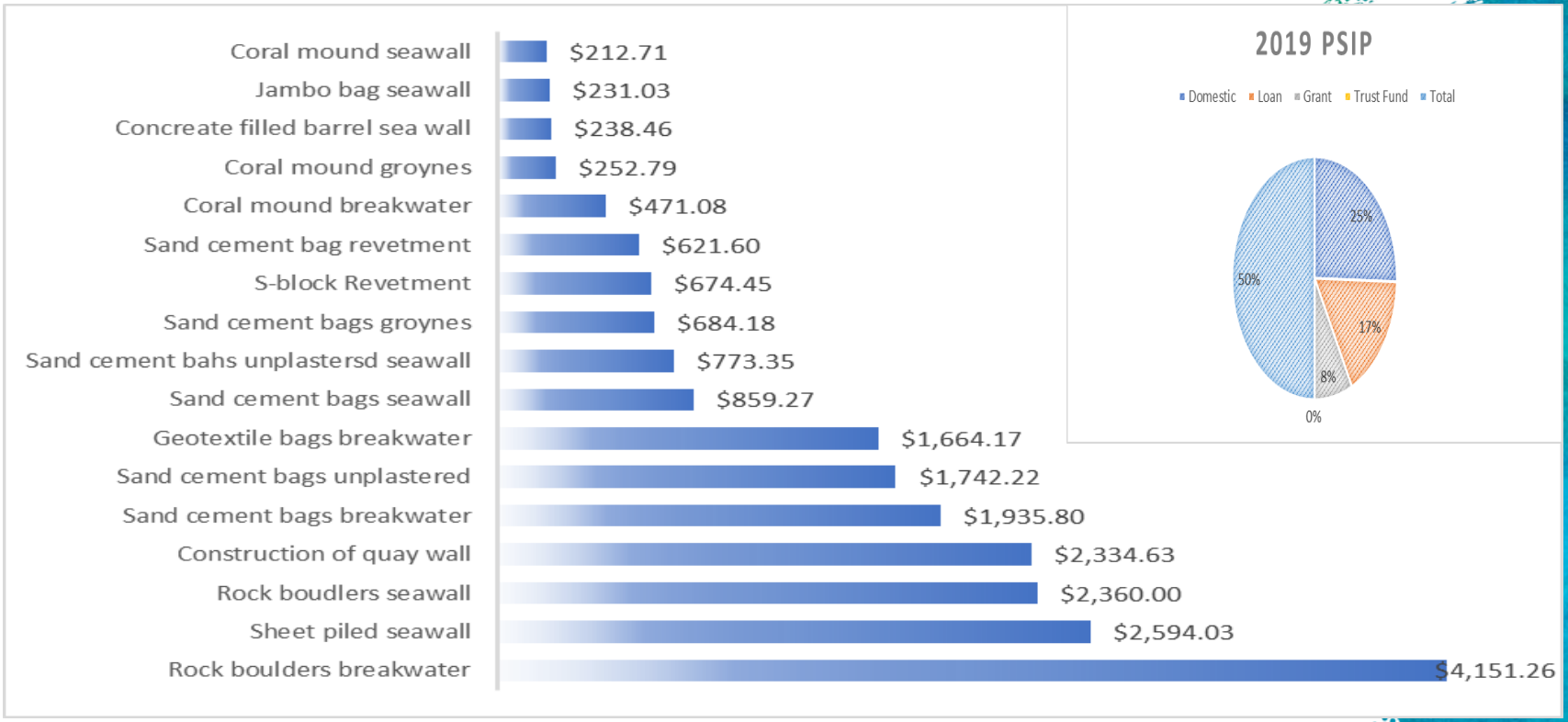
Coastal works: ‘soft’ measures







Financing for coastal protection



Challenges

- Limited site specific studies undertaken for the measures
- Engineering problems
- Problems associated sourced materials
- Aiming towards ‘one-size fit’ solution for coastal protection
- Poor maintenance of the structure
- Lack of funding
- Demand vs supply issue

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