



JOINT POLICY BRIEF
TECHNOLOGIES FOR AVERTING, MINIMIZING, AND
ADDRESSING LOSS AND DAMAGE

Launching of TEC climate technologies publications
29 July 2020

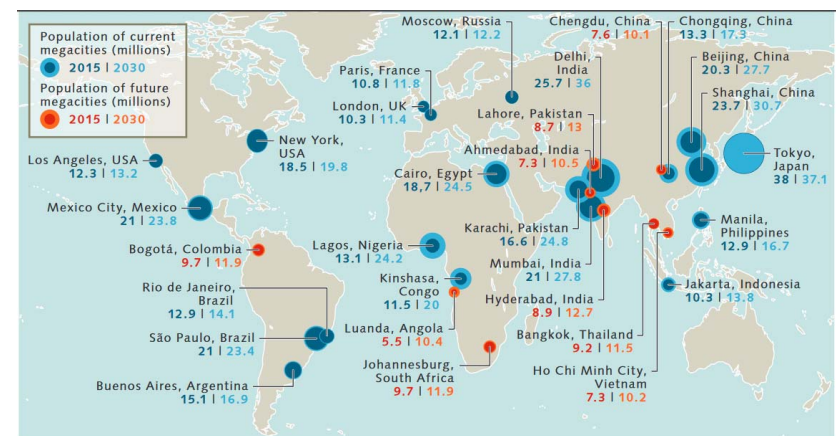


MAREER HUSNY
Chair of the Technology Executive Committee

TEC

WHY THIS TOPIC

- Coastal zones: a critical component of national economies, including shipping, aquaculture, tourism and other coastal services and industries
- Recent **TNAs** synthesis (2020) indicate one-third of developing countries placed infrastructure including in coastal zones as prioritized sector – most prioritized technologies related to coastal protection
- Impacts of climate change on coastal areas - e.g. sea-level rise, extreme weather intensity become more disruptive
- Intersection of areas of work TEC & WIM Executive Committee



Approximately 60 per cent of the world's 39 metropolises whose populations exceed 5 million people are located within 100 kilometres of a coastline, including 16 of the world's 23 cities with populations greater than 10 million (Source: World Ocean Review)

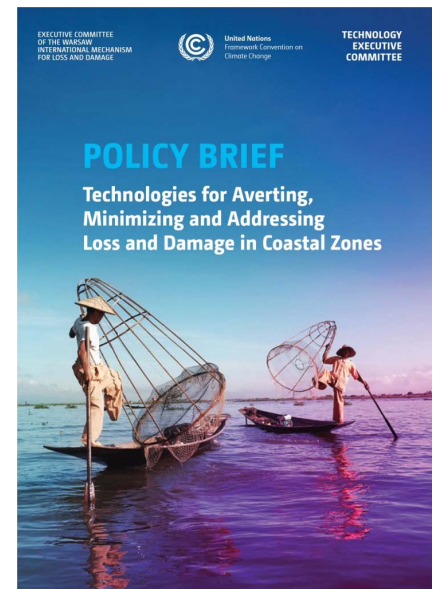
THE BRIEF – IN A NUTSHELL 1/2

Chapter 1.: Introduction

- People and the coast
- Loss and damage in coastal zones
- Response to hazards and risks to prevent loss and damage in coastal zones

Chapter 2.: Technologies for Risk Assessment

- Setting the scene: key perspectives on coastal risk assessment
- Overview of types of technologies
- Opportunities and challenges
- Case study



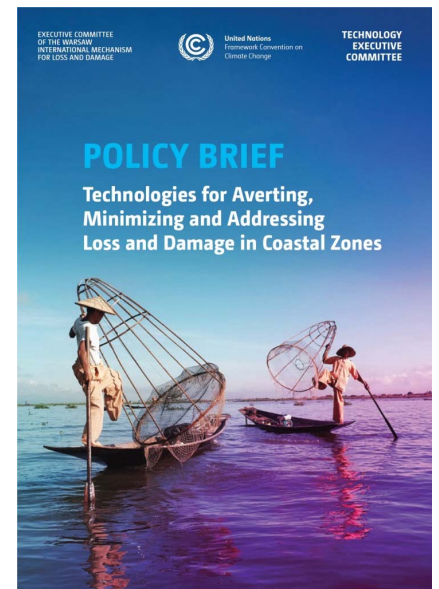
THE BRIEF – IN A NUTSHELL 2/2

Chapter 3.:Technologies for Risk Retention

- Setting the scene: key perspectives on coastal risk retention
- Overview of types of technologies
- Opportunities and challenges
- Case study

Chapter 4.:Technologies for Recovery and Rehabilitation in Coastal Zones

- Setting the scene: key perspectives on recovery and rehabilitation in coastal zones
- Overview of types of technologies
- Opportunities and challenges
- Case study



An aerial photograph of a coastal town with a sandy beach and turquoise water. The town features numerous houses with red roofs and green trees. The water is clear and shallow, showing the sandy bottom. A dark blue and green horizontal bar is overlaid on the top part of the image, containing the title text.

EXAMPLES OF TECHNOLOGIES TO ASSESS RISKS

- International Union for Conservation of Nature Red List of Ecosystems seeks to assess the global risk of collapse for mangrove forests and coral reefs, and regional assessments of coastal ecosystems are underway – such assessments are used to check for gaps in protection and inform ecosystem-based actions, such as NbS.
- Satellite-based technologies for monitoring and assessment of chlorophyll (e.g. the Joint Monitoring Programme of the Eutrophication of the North Sea with Satellite data (JMP-EUNOSAT))



EXAMPLES OF TECHNOLOGIES TO MANAGE RISKS

Climate Risk and Early Warning Systems (CREWS), hosted by the World Meteorological Organization secretariat - a mechanism that funds risk-informed early warning services for LDCs, and SIDS based on clear operational procedures. Such mechanisms encourage partnerships for synergies. For example, a new partnership on risk-informed early action was launched in 2019 at the United Nations Climate Action Summit



EXAMPLES OF TECHNOLOGIES FOR RECOVERY AND REHABILITATION

- Data collection method using (e.g. KoBoToolbox) can assist during recovery when communication systems are affected by the disaster. It facilitates the rapid collection and analysis of various types of data to inform recovery efforts and allows for both online and offline collection
- Assessment framework for resilience building (e.g. Rebuild by Design initiative developed after Sandy Hurricane)

SUMMARY 1/2

- Technologies to assess risks
 - Appropriate methods and tools are required to consider multiple types of hazards (rapid and slow onset events) and governance scales
 - International partnerships are important for countries' joint efforts and for sharing knowledge and experiences of coastal risk assessment
- Technologies to manage the risks
 - Variety of hard-, soft-, org-ware techs are available
 - Improving technologies for managing coastal zone risk is a continuous process and should be supported by experience-sharing across regions



SUMMARY 2/2

- Technologies for recovery & rehabilitation
 - Investing in technologies to reduce disaster risks with a focus on prevention and preparedness, while also ensuring effective emergency response and rehabilitation, is crucial for addressing potential loss and damage associated with climate change impacts in coastal zones
 - Involving indigenous peoples and using local knowledge can strengthen recovery and rehabilitation technologies.



ACKNOWLEDGEMENT

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- Experts from different organizations have provided extremely valuable inputs to the content of the draft joint policy brief, including various case studies

MORE INFO: <https://unfccc.int/ttclear/coastalzones/>



MAREER HUSNY
CHAIR OF TEC

TEC