

Responses to Climate Change: Adaptation Pathways to Change



A component of project ADB/GEF project R-CDTA 7753: Strengthening Coastal and Marine Resources Management in the Coral Triangle of the Pacific (Phase 2)

Climate change has the potential to severely impact coastal and inland environments and ecosystems. All rural communities need to be aware of the potential impacts of climate change, and take measures to adapt, so that they can become resilient to these changes. Only by identifying the risks associated with climate-change, can communities initiate a plan that prepares them to adapt, and thus manage the social, economic, and environmental impacts of climate change on their communities.

While many climate change initiatives have been undertaken in the Pacific region over the past decade, only a few of these have detailed a plan for implementing adaptation actions to respond to climate change. This project, **Responding to Climate Change Using an Adaptation Pathways and Decision-making Approach**, funded by the Asian Development Bank (ADB), aims to strengthen coastal and marine resource management in the Coral Triangle of the Pacific, by assisting communities in Fiji, Papua New Guinea, Solomon Islands, Timor Leste and Vanuatu to develop their own climate change adaptation implementation plans. The project aims to build capacity among inland and coastal communities living within this region that are dependent on natural resources for their livelihoods, to enable them to respond and adapt to climate related change.

Overview

This project aims to identify key decision-makers within affected communities in the region, and provide guidance on how to develop a long-term action plan, or pathway, that will act as a roadmap to implementing adaptation actions. This decision-based approach is undertaken in collaboration with key stakeholders and decision-makers in target communities, taking into account that the adaptation process is an ongoing and dynamically evolving pathway that will be navigated by decision-makers at all levels in society. An example of how this adaptation pathways and decision-making approach has been used to plan the adaptation pathway for managing flood risks relating to sea level rise on the city of London, is shown in Fig. 1.

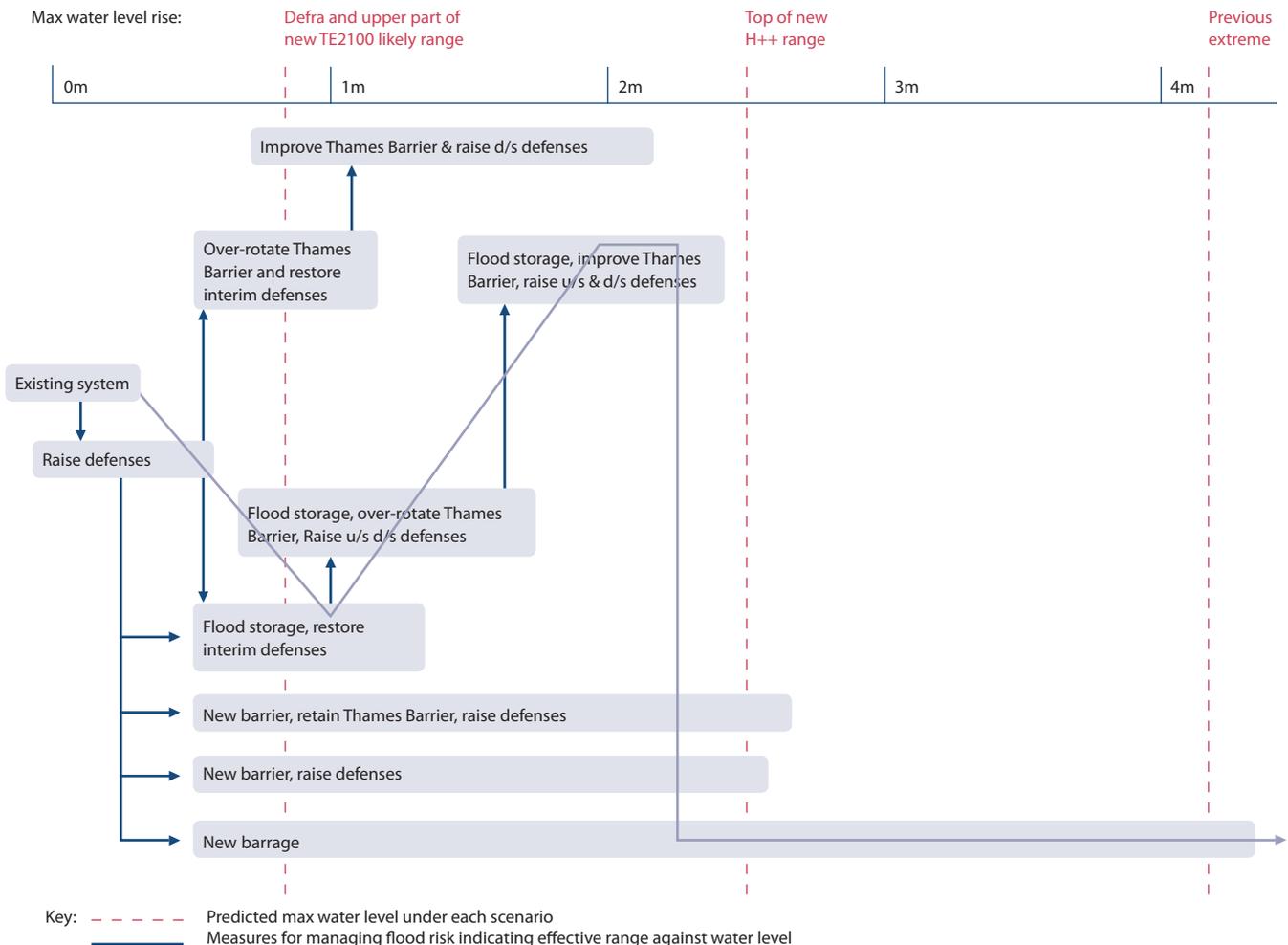


Figure 1. Schematic summarising the adaptation options for managing sea level rise impacts on the Thames Estuary. Adapted from: Ranger et al., (2012). Reference – Nicola Ranger, Antony Millner, Simon Dietz, Sam Fankhauser, Ana Lopez and Giovanni Ruta (2012) Adaptation in the UK: a decision-making process. Environment Agency, London. <http://personal.lse.ac.uk/RANGERN/PB-adaptationUK-rangeretal.pdf>

Notable Features of Adaptation Pathways and the Decision-making Approach

- Decision-making, and progress along the adaptation pathway, is focused on tangible thresholds that are relevant to the community.
- Takes into account historical data and risk assessments, and builds upon them, to increase the knowledge base.
- Takes into account contested values, particularly those related to visions of the future.
- It is scale-neutral and can be used in planning and decision-making processes at local or national level simultaneously, allowing communities and regions to develop a nested approach to adapting to climate change.
- Considers climate-change adaptation a dynamic and ongoing process that is constantly evolving, and consequently requires a long-term, flexible strategy, with ongoing management.

Table 1: Proposed stakeholder participatory workshops.

Location	Number of workshops	Number of country representatives funded for attendance
Solomon Islands	2 intensive workshop	Solomon Islands = 25
		PNG = 2
		Vanuatu = 2
		Fiji = 2
Timor Leste	2 intensive workshops	Timor Leste = 25
PNG	1 findings workshop	PNG = 25
Vanuatu	1 findings workshop	Vanuatu = 25
Fiji	1 findings workshop	Fiji = 25

How Stakeholders will Benefit

This project has been developed to respond to the needs of coastal community stakeholders, and to provide these communities with relevant information that will assist them in climate-change adaptation decision-making processes. The WorldFish project consists of a team that has a broad range of skills, which enables us to evaluate the merits of different adaptation actions, taking economic, social and environmental issues into consideration.

Learning Materials and Resources

This project aims to develop a number of learning materials and educational resources that can assist stakeholders in the decision-making process, including:

- User Manual – A manual outlining the methods that stakeholders can use to analyze and assess adaptation pathways.
- Knowledge Database – An online database of previous risk assessments and adaptation recommendations will be available, together with an evaluation of existing community adaptation tools/methods, to assess their effectiveness in preparing for climate change.
- Project Reports – Mid-term and final project reports will be submitted to ADB, together with a Policy Briefing. These reports will communicate key findings to both funders and participating regional organizations and stakeholders.

Project Outcomes

These learning materials and resources will increase our knowledge of climate change vulnerability, and provide a valuable reference from which to develop a plan to respond to the impacts of climate change.

Regional stakeholders will benefit by gaining knowledge that will empower them with a greater capacity to adapt to climate change through effective planning, implementation, and monitoring of adaptation actions. This will enable them to devise long-term responses that will assist their communities to adequately cope with change. In addition, these communities will gain an enhanced capacity for integrating these actions on a broader scale within future planning and human development initiatives.

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