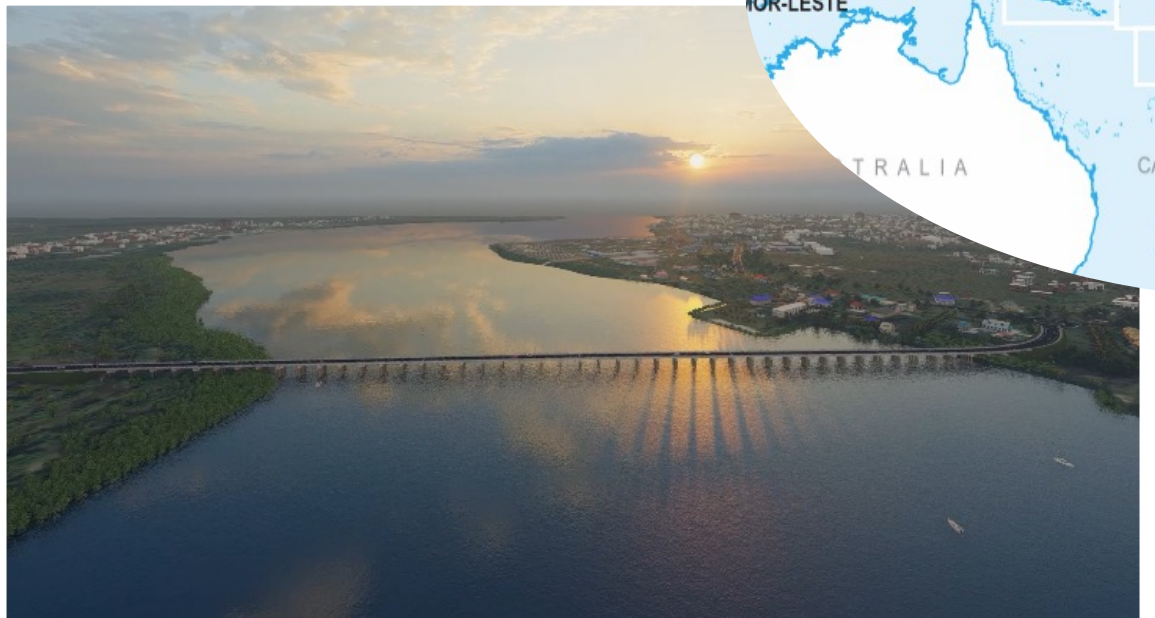
Risk assessment frameworks for resilient infrastructure

Pacific Regional Department

Resilience Infrastructure in the Pacific Region



Residual Risks in Disaster-Resilient Infrastructure

The Importance of Residual Risks

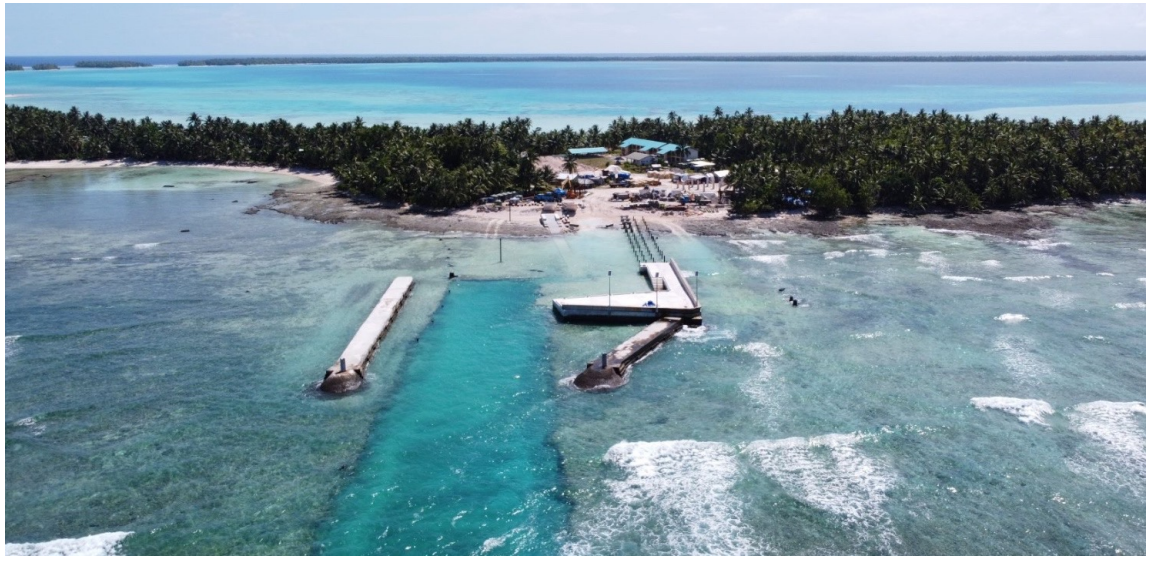
- No project or investment can address and eliminate all climate change and disasters impacts:
  - It is not technically possible.
  - It is not within the funding envelope or budget.
  - It is not economically efficient.

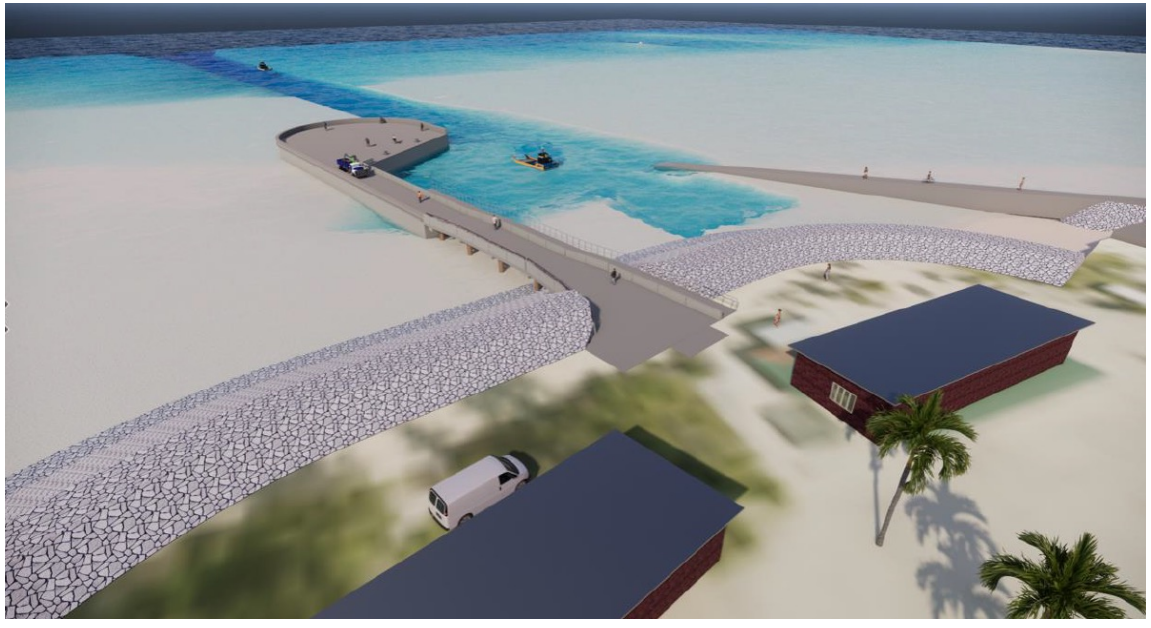
- After an investment, there are residual risks that were not addressed.

- It is important to state these risks for transparency, accountability and liability.

- Need to describe and quantify the risks and explain why they were not addressed.

- Include mitigation measures to address residual risks.





The Importance of Residual Risks

Examples of residual risks in the Nuku'alofa Port Upgrade Project in Tonga:

- Earthquake resilience of existing cargo wharves could not be improved due to cost as they had to be demolished and rebuilt. Not adopted due to high cost and disruption to operations during construction.

- The facility is located in a part of the city that is lower and vulnerable to the long term impacts of climate change. There may be climate change risks after the service life of the infrastructure. To be fully proofed, the facility should have been relocated but was not within the available funding envelope.