

Path dependency and future adaptation of coastal cities: examples from the Asia-Pacific

Why did we undertake this study?

The need for Asia-Pacific coastal cities to adapt effectively and sustainably to sea-level rise is growing. If such adaptation does not occur in a timely manner, then it could result in socio-economic problems that will reverberate throughout the region.

How was it done?

Drawing on examples of coastal Asia-Pacific cities characterised by differing geographical settings and cultural contexts, we explored coastal hazards, adaptation drivers, past and planned approaches to adaptation, capacity (constraints and resources) and path dependencies.

What did we find?

Path dependency has a powerful influence on recent and planned (future) adaptation to climate change in coastal cities across the Asia-Pacific region. Further:

- Despite advocacy for transformation, the futures for all five cities favour protection, which is also the most common recent (past) approach.
- There is a lack of sufficient funds to enable transformational rather than incremental adaptation, particularly in poorer contexts like Nadi and Manila.
- The dominance of ‘protect’ approaches is an expression of inhabitants’ desire to maintain city’s original purpose: growing prosperity.

While adaptation planning in the region is hampered by the historical favouring of ‘protect’ responses, it is those cities where decision-makers are regularly elected (rather than appointed) that may be slowest to embrace more transformative responses because of popular resistance to their disruptive effects.

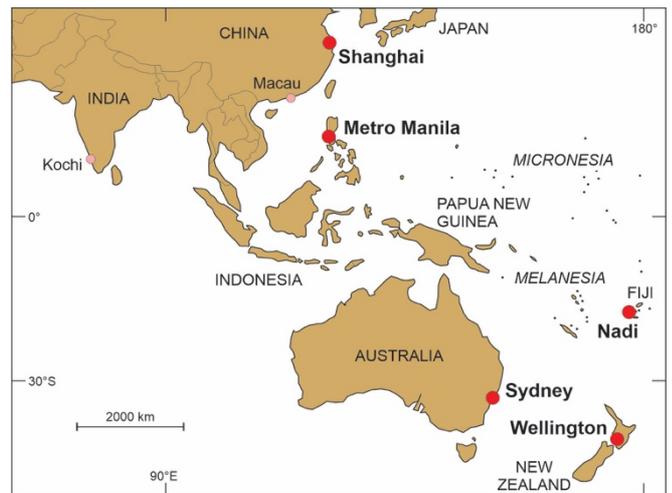


Figure 1: The Asia-Pacific region showing the five case study sites

What are the implications?

For the future, it must be hoped that a growing awareness of the severity and immediacy of climate change, as well as the likelihood of irreversible multi-century future sea-level rise, will inform not simply the agendas of key government decision-makers but also the minds of all urban dwellers so that transformative adaptation will become more widely adopted.

Want more information?

The full paper is available from: <https://doi.org/10.3389/fenvs.2021.642385>

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Coastal Governance: Embracing Vulnerability and Change

