

Effective domestic climate policies to protect small island states



Q1 Small island states, often referred to as small island developing states (SIDS), are disproportionately affected by the impacts of climate change, including rising sea levels, increased frequency and severity of natural disasters, and ocean acidification. As SIDS are surrounded by oceans and are often low-lying, they are naturally susceptible to inundation, coastal erosion and sea-level rise due to global warming. Collectively, environmental changes threaten their very existence and call for policy frameworks that support effective and enduring climate change adaptation and mitigation in SIDS. Although there are some successful current domestic policies, there are still many areas where urgent and effective action is needed (Fig. 1).

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SIDS have been at the forefront of global climate policy, which evolved through milestone conferences, agreements and alliances, including the 1992 United Nations Conference on Environment and Development in Rio de Janeiro (Earth Summit), the 1994 Barbados Programme of Action, the 2005 Mauritius Strategy, the 2014 SAMOA Pathway, the Alliance of Small Island States, the United Nations Framework Convention on Climate Change global gatherings and, most recently, the decision of the Conference of the Parties to establish a loss-and-damage fund to compensate poorer countries for climate change impacts. Notably, SIDS have fervently advocated in the global arena for the ambitious 1.5°C temperature goal necessary for their survival.

Despite the appearance of a unified public front, there are considerable climate policy differences within individual island nations, especially in archipelagic contexts characterized by an uneven distribution of resources¹. There are also fundamental differences in policy effectiveness between independent SIDS, which are mostly in the Pacific and comparatively resource poor, and those with strong ties to wealthier (continental) neighbours. Among the former is Vanuatu, for which a recent study showed that national (sustainability) policy had a negligible impact at the (rural) community level while serving a greater role in determining priorities for external aid².

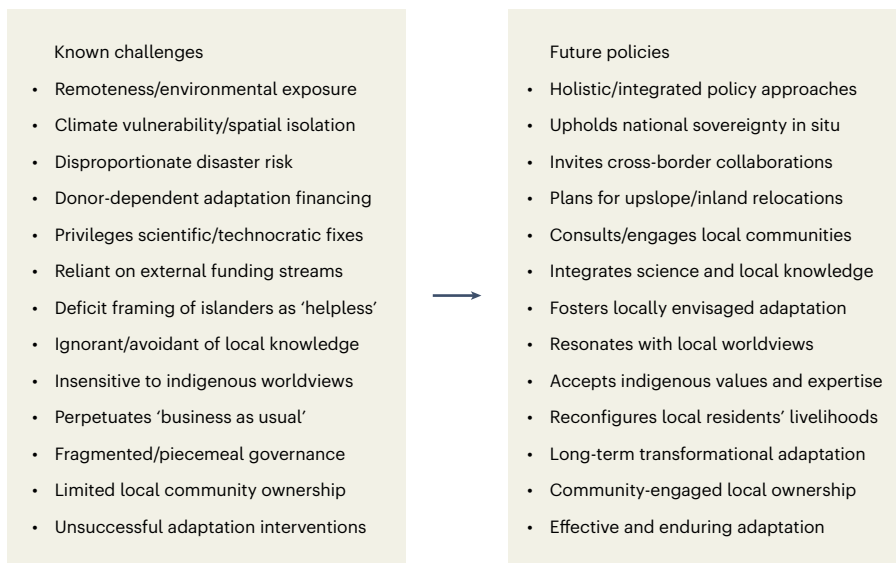


Fig. 1 | Known challenges and future climate policies to protect SIDS. Concept by authors.

Among the latter is Dominica, which designed a Climate Resilience and Recovery Plan that is well supported by available resources and has been heralded as a model for other Caribbean SIDS³. Across the Caribbean, innovative solutions such as the Caribbean Climate Risk and Adaptation Tool have been used to improve the coordination of climate action and policy at the national and regional levels⁴.

Notably, much policy development in SIDS is donor-funded and, therefore, donor-designed and influenced. The situation often privileges the deficit framing that island people are 'helpless' in the face of fundamental 'problems'⁵. The method of addressing apparent vulnerability in SIDS using external finance, largely for adaptation, has rarely been questioned and is widely hailed as effective⁶. Yet it has clearly created a (growing) dependency on external funding for many SIDS and seems unsustainable, not least because richer countries will inevitably become less generous in the future as the costs of their domestic climate change adaptation soar⁷.

Another important point is the (uncritical) privileging of Western/science-based knowledge in climate change adaptation





funding in SIDS, a situation that often contrasts sharply with the worldviews of local residents⁸. This may explain the failure of many climate-change adaptation interventions in SIDS, especially those in the Pacific, over recent decades⁹. Yet it is possible for adaptation to embrace worldviews that are not science-based or, as has been proposed, to develop ways of combining 'scientific' and 'traditional' worldviews to develop future-focused adaptation pathways¹⁰.

Much climate change adaptation policy in SIDS has focused on 'business as usual', meaning finding ways to pursue long-term development goals while continuing to do what has been done in the past. This policy context is inconsistent with climate and sea-level projections for the rest of the twenty-first century and beyond. On many islands, this involves planning for the upslope/inland relocation of coastal infrastructure and settlements, together with the reconfiguration of residents' livelihoods. Evidence has shown successful autonomous (community driven) adaptation in some places¹¹.

Challenges such as fragmented governance, inadequate institutional capacity, insufficient

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stakeholder collaboration and limited local community uptake impede effective climate policy in SIDS and call for long-term transformational adaptation¹². There is also a need for more effective government policy (rather than statements of intended policy) in SIDS that addresses the need for future relocation. Transnationally, future climate change policies in SIDS should involve cross-border collaborations and transcend national boundaries¹³. More international cooperation is needed to help SIDS upscale capacity-building initiatives, access climate finance and technology transfer, reduce greenhouse gas emissions, transition to clean energy sources and adopt sustainable agricultural practices that build resilience and mitigate the impacts of climate change. Crucially, climate policy frameworks are needed that resonate with local/indigenous communities' values and worldviews^{14,15}.

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Competing interests

The authors declare no competing interests.

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