

Climate effects on health in Small Islands Developing States



Small Islands Developing States (SIDS) from the Pacific region have been acknowledged for their role in highlighting the negative effects of the climate crisis on the lives and livelihoods of Pacific islanders on a global scale. Contrary to expectations, SIDS leaders were able to elevate the needs of small vulnerable states in the lead up to the signing of the Paris Agreement.¹ The Paris Agreement is the most important global agreement on reducing the emissions of harmful greenhouse gases by the family of nations. Global commitments to the implementation of the Paris Agreement was compromised by the position of the US, but there is renewed optimism with the change of the US Administration.

Pacific SIDS have regularly expressed their dissatisfaction with the paucity of action by the main polluters and global powers. Pacific nations contribute a minuscule amount of greenhouse gas emissions and yet they face the most persistent and severe negative effects of the climate crisis. Pacific communities are exposed to frequent and severe weather events, rising sea levels, and warming sea temperatures, which affect the communities and their food and water sources, and increase the risk of spread of vector-borne diseases such as dengue fever.² There are estimates that agricultural yield could decline by 50% by 2050 and coral bleaching is expected to reduce the availability of seafood. Most of the Pacific communities rely on the sea for their livelihoods and 80% of their protein source is derived from fish and other seafood. Furthermore, the Pacific region provides two-thirds of the global tuna supply and the revenue from tuna sales is a major component of the regional SIDS economies.³

Economic losses in the Pacific region attributed to severe weather events, such as tropical cyclones and droughts, are substantial. In the past 10 years, costs have been estimated to be approximately US\$2 billion in selected SIDS. Tropical Cyclone Pam alone caused more than \$450 million worth of economic damage and 64.1% of the gross domestic product in Vanuatu in 2015.⁴

Pacific SIDS leaders are to be commended for their continuing advocacy for global action to reduce the negative effects of the climate crisis on the people of the region. However, there has been little policy

and advocacy for the health effects of the climate crisis, which have been attributed to the direct effects (eg, death and injury from severe weather events) and indirect effects (eg, loss of food and water security from environmental contamination and coral bleaching).⁵

The Pacific Community is the main science provider in the Pacific region and provides evidence-based advice to all Pacific Member States, including work to adapt to or mitigate the health effects of the climate crisis. Interventions include advice on water and sanitation, disaster preparedness and response, food security, prevention and control of non-communicable diseases, and surveillance and outbreak investigation, mainly for water-borne and vector-borne diseases. The Pacific Community are actively involved in building technical capacity in Member States and supporting community initiatives designed to raise awareness of the effect of the climate crisis. The Secretariat of the Pacific Regional Environment Programme is the main regional body charged with supporting Pacific Member States with their work on the climate crisis at the global level. This work includes supporting Member States with the United Nations Framework Convention on Climate Change process and participation in the annual Conference of the Parties and related meetings.⁶ The Pacific Islands Forum is the main policy agency for the Pacific region and provides support for SIDS Leaders. Pacific SIDS have not developed a formal policy position on the health effects of the climate crisis and the region relies on the work of the Council of Regional Organisations in the Pacific, such as the Pacific Community, the Secretariat and the Pacific Islands Forum.

Pacific SIDS have also benefited from the advice of WHO on the health effects of the climate crisis. Between 2010 and 2012, WHO's Division of Pacific Technical Support, in collaboration with health sector partners, led a regional climate change and health vulnerability assessment and adaptation planning project in 13 Pacific island countries—Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.⁵

In addition, at the Eleventh Pacific Health Ministers Meeting in Fiji in April 2015, ministers of health cited the real and potential effects of climate variability as an

immediate challenge on health and health systems in the Pacific. Human health and climate change in Pacific island countries is the product of collaboration between WHO and Pacific island countries and areas, which assess health vulnerabilities at the country level due to climate change.⁷ Contributions from Australia and other island nations have also assisted SIDS with their responses to the climate crisis.^{8,9} All SIDS need to ensure that the health effects of the climate crisis are included in national development plans.

We declare no competing interests.

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