



Climate Change in Asia-Pacific: Impending dangers and possible solutions

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Abstract: Developing countries in Asia-Pacific, particularly the Pacific Islands, are at greatest risk from imminent climate change disaster, despite having contributed least to global warming. Industrialised nations must meet their pledges and support crucial mitigation and adaption strategies in the region.

Asia-Pacific is the most populous region in the world, with the second and third biggest greenhouse gas emitters after the United States, namely, China and India. Densely inhabited areas, low-lying land, small islands, extensive coastlines and a high dependence on [natural resources](#) also make Asia-Pacific the most [disaster-prone region](#). Moreover, the area has many developing countries with high poverty rates: ironically, these poorer communities contribute least to greenhouse gas emissions but are the most impacted by environmental penalties of climate change.

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Frequent and extreme weather conditions coupled with rising sea levels are expected to create a [range of threats to Asia-Pacific countries](#)—many of which have already suffered natural disasters.

Pacific Islands particularly vulnerable

The Pacific Island Countries ([PICs](#)) Network is composed of the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Niue, Nauru, Palau, Solomon Islands, Tuvalu, Tonga, Vanuatu, Samoa and Papua New Guinea. These countries are all classified as either least developed or developing countries. The [World Bank's Pacific Island member countries](#) have a combined population of about 2.3 million spread over islands scattered in an area equivalent to 15 per cent of the earth's surface.

These islands are incredibly vulnerable to climate change effects and subsequent disaster risks, despite accounting for only [0.3 per cent of the world's total greenhouse gas](#) emissions. Climate mitigation and adaptation has become the heart and priority of policies in the region. The World Risk Index 2019 ranked five Pacific Island Countries among the top 20 countries at most risk, with Vanuatu and Tonga first and third respectively. Tropical cyclones, rising sea levels and other climate-related hazards seriously threaten local economies and livelihoods, resulting in displacement and [forced migration](#). Remote location and limited natural resources present unique additional challenges. Without the capacity to move away from deteriorating circumstances, thousands will be trapped.

Island countries in the Pacific build back after every storm and cyclone that barrels across the islands causing widespread damage. For example, in 2020, Cyclone Harold affected around 40 per cent of Vanuatu's population and left some communities [isolated and without aid](#) for weeks and more recently, the [volcanic eruption in Tonga](#) has also left the population in Tonga waiting for aid and resources. While countries can adopt strategies to reduce the impact of storms and cyclones, adapting to slow effects of climate change is easier said than done. Heat stress, varying temperatures, changing rainfall patterns, rise in sea level and coastal erosion mean lifestyle changes. Land becoming unfit for agriculture will lead to subsequent dips in income and consequently, families may be unable to afford children's schooling, adequate food supplies, rent and other necessities. In this context, several human rights, including the rights to food, water, education and shelter are at risk. The world talks about the climate crisis, its impacts such as sea level rises, disasters and loss of livelihoods. But how many times do we think about the fact that there are actually real people who will have to leave their homes, islands and countries? How many times do we think of the psychological effects? A fear of the future, and a constant worry in the minds of Pacific Islanders who depend on sea and land for livelihoods, is something that hasn't been fully captured. [The land they live in is sacred to most of them](#), and has been home for generations of their families. They will want them to remain home for their children. We are staring at a future where Island Nations can go underwater, leaving thousands of people without a state. What happens to their status? How often do we think of these possibilities? If they lose their country, and there is a remote possibility of an extinction of their way of life, why should they accept it? Especially when they have least contributed to warming the globe?

Mitigation and adaptation

[How far can adaptation to climate change really go](#)—especially when livelihoods are hit, and survival itself is under threat? Most of these economies depend on fishing, agriculture, foreign funding and migrant labour schemes in New Zealand and Australia. With transport a barrier even within some of these island countries, funds are needed to support resettlement of coastal communities, reconstruction efforts, access to markets and to promote mitigation strategies like labour migration.

On the world stage, efforts to address climate change have recently culminated in COP26, which is being dubbed as a 'monumental failure' by many Pacific delegates. The world is well aware of what climate change is doing to us and agrees that reaching net-zero is absolutely critical. But are we seeing that seriousness in action?

Pacific leaders have iterated and reiterated their concerns and statements. Tuvalu's Foreign Minister gave his [speech to COP26](#) standing in knee-deep seawater pointing to the realities of climate change, and the fact that it is happening now. However, active, concrete and quick changes and commitments are still a dream and the impacts of climate change continue to worsen year after year in the Pacific Islands. They are crusading the climate crisis in the front line, but the response has been thin, weak, and half-hearted. What of justice for these frontliners?

The road ahead

It is widely assumed that fast-rising sea levels will entirely submerge small island countries like [Tuvalu](#), [Palau](#) and some islands of [Vanuatu](#), costing these countries billions of US dollars in damages. Economic costs are quantifiable; however, loss of identity, culture and tradition are immeasurable, again threatening a wide range of socio-economic rights that fall within the realm of human rights.

Adaptation and mitigation are not a long-term solution to climate change for countries such as these, where sustained internal migration might also not be viable. There must be a conscious call for greater understanding of climate-induced migration, so that policies can target specific vulnerable populations, helping them build resilience and adapt to climate change or migrate as a last resort. Above all, we need countries to display the will and commitment to go out of their way to address global warming. But what was seen in COP26 was the opposite. The developed world has disappointed and betrayed the Pacific Islands despite their historical responsibility for climate change by refusing to support a funding facility for loss and damage. Keeping the warming threshold to 1.5 degree celsius is crucial to the survival of nations like Tuvalu and Palau, and the Pacific Islanders played a key role in ensuring that this was adopted at the 2015 Paris Climate Accords, and was perhaps the only commitment that was left unaltered at COP26.

There might be several roadblocks ahead due to bigger countries and economies dominating policy and frameworks, and there has not yet been an incident where one country has sued another for climate change-related damages though it may be a future option. Political support, mass movements, awareness, continuous negotiations, regional integration and development of stronger collaborations on climate change could, possibly,

strengthen the ability of these islands to adapt to effects of climate change until a particular time and then to facilitate migration in the future. But the loss of a nation, a country, a home, can never be compensated. The world, I believe, still hasn't accepted these realities, and is in a state of denial, for no one wants to imagine a nation or a country disappear underwater. But, for people of atoll nations, who stand to lose their world, it is an existential threat. We wouldn't want that for our children, would we?

The loss that comes with climate-induced mobility, and loss of land, is the cost the people of these countries pay for the emissions of strangers in another part of the world, the irony being that it is invisible to the rest of the world. Bold moves, and alternate actions are needed for a secure tomorrow