## Climate change forces Panama islanders to relocate: What happened?

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As the impacts of sea level rise intensify, the plight of small islands like Gardi Sugdub in Panama illustrates the increasing human cost of such climate crises. (Wikimedia Commons) *Written by Adi Roy* 

Earlier in June, around 300 families were relocated off the island of Gardi Sugdub in Panama's Guna Yala province due to concerns over rising sea levels. The families were moved to a newly built housing development called Nuevo Cartí, on the mainland in Guna Yala, which is an autonomous region in the country.

Gardi Sugdub is home to nearly 1,300 members of the Guna community, an indigenous population settled in autonomous regions of Panama and a few villages in Colombia.

Here is a look at why families have been relocated off Gardi Sugdub, which other island nations are at risk of flooding, and how fast the global sea level is rising.

## What is happening in Gardi Sugdub?

Panama is situated in the Caribbean, where **sea level rise** currently averages around 3 to 4 millimetres per year, according to a 2023 report by Science News. With soaring global temperatures, it is expected to hit 1 centimetre per year or more by the end of

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In response to this crisis, the Panamanian government initiated the construction of 300 new houses on the mainland, according to a report by *The Associated Press*.

## How are other island nations affected by sea level rise?

Many of the small island developing states (SIDS) — located in the Caribbean, the Pacific, and the Atlantic, Indian Ocean and South China Sea — are facing existential threats due to rising oceans. Small islands are particularly vulnerable to these changes due to their low elevation and high dependency on marine resources, according to a 2022 report by the Intergovernmental Panel on Climate Change (IPCC) — a UN body, which prepares several kinds of reports assessing the state of knowledge of climate change.

The rise in sea levels is driven by a number of different factors, including the thermal expansion of seawater as it warms and the melting of land-based ice, such as glaciers and ice sheets. (Wikimedia Commons)

SIDS such as Tuvalu, the Marshall Islands, and Kiribati are experiencing some of the most dramatic effects of rising sea levels. These islands, along with losing their land, are also facing existential threats to their culture and economies. Such rising levels, combined with storm surges and 'king tides' (the highest high tide of the year at a coastal location), are causing coastal erosion, salinisation of freshwater resources, and increased vulnerability to extreme weather events.

As the impacts of sea level rise intensify, the plight of small islands like Gardi Sugdub in Panama illustrates the increasing human cost of such climate crises. The loss of island homes is not just an environmental issue but a cultural one as well. The Guna people are known for their vibrant molas—intricately sewn textiles that represent both artistic expression and cultural identity.

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## How fast is the global sea level rising?

Since 1880, the global sea level has ascended by approximately 21–24 centimetres, with the rate of increase accelerating in recent decades. These rising levels are mainly because of global warming, with vulnerable coastal regions and countries of the Global South being the worst affected. Today, the global average temperature has increased by at least 1.1 degree Celsius since 1880.

This rise is driven by a number of different factors, including the thermal expansion of seawater as it warms and the melting of land-based ice, such as glaciers and ice sheets.