

CLIMATE-FRAGILITY RISK FACTSHEET

THE CARIBBEAN

Caribbean countries, most of which are small island developing states (SIDS), have long suffered from the destructive impacts of natural hazards, including hurricanes, severe weather events, drought and sea level rise. Climate change is projected to make them worse. Rising temperatures and flooding risks are anticipated to increase, tropical cyclones are becoming more frequent and intense, and changing precipitation patterns, sea level rise and ocean acidification are threatening the livelihoods and physical security of coastal communities. Moreover, climate change impacts are adding to the pressure of population growth and rapid urbanisation on limited land space and food, water and energy resources, resulting in environmental degradation and rising unemployment, inequality and poverty.

3 CLIMATE FRAGILITY RISKS

Three critical pathways that link climate change to fragility in the Caribbean are:

1 Climate-induced disasters can cause political instability through their impacts on key economic sectors

The Caribbean region is already prone to disasters, but climate change is likely to aggravate their impacts over the next years and decades to come. Governments' delayed or inadequate responses to **disasters can increase citizens' frustration and lead to political instability**. Dependency on external countries for humanitarian assistance and disaster response can also amplify dissatisfaction when such aid is perceived to be delayed or ineffective. Moreover, as the **Caribbean economies are strongly dependent on sectors that are highly vulnerable to the impacts of extreme events (e.g. tourism and export agriculture), climate-induced disasters can contribute to food insecurity, poverty and unemployment**. As women in the region tend to have lower-waged occupations in these vulnerable economic sectors, progressing feminisation of poverty and migration towards urban areas could also be expected.

2 Climate impacts could lead to social unrest by compounding livelihood and food insecurity

More frequent and intense droughts associated with climate change can increase agricultural exposure to water stress. This could reduce food access and increase poverty and unemployment, making Caribbean countries highly vulnerable to food price hikes and shocks. **Climate-induced sea level rise and coastal erosion are also expected to have heavy impacts on food and livelihood security in the coastal areas** of the Caribbean, where most of the population and the region's economic activities are located. The impacts on fish catches in particular can have significant economic implications, with greater levels of illegal, unreported and unregulated fishing activities and resource conflicts between the tourism sector and local consumers. **Irreversible biodiversity losses could also exacerbate food and livelihood insecurity in the region**, with additional economic implications for key economic activities such as fisheries and reef-based tourism.

3 Climate-induced loss of livelihoods could increase opportunities for criminal activity and urbanisation challenges

Increasing levels of climate vulnerability in the region could aggravate domestic public security. Gang activity and organised crime, which are already widespread, could benefit from people turning to illegal livelihood strategies as legal ones become scarcer due to climate change impacts. **In turn, increased crime rates deter investors and tourists, cause capital flight as well as a loss of skills and talent because people move to safer environments**. Moreover, crime negatively affects social development. **Climate-induced pressures on livelihoods can become a driver of displacement and migration, especially from coastal and rural areas to cities**. This can exacerbate existing security challenges linked to rapid urbanisation, such as resource competition, unemployment, poverty and erosion of living standards.

CLIMATE CONTEXT

The climate is warm and humid with temperatures ranging from 25 - 32°C. The annual wet season runs between May/June and November/December. Due to similar drivers, it coincides with the hurricane season. Furthermore, heat stress is much higher during the wet season. An increase in average annual temperature by 0.2 - 0.7°C has been recorded, together with changing rainfall patterns. The average rate of sea level rise was about 1.8 (+/- 0.5) mm per year from 1962 to 2012. The Caribbean region has also been dramatically exposed to natural disasters.

Future climate projections for the region include:



Mean annual temperature rise by 0.9 - 1.5°C by 2050



Increase in hot days* and disappearance of cold weather events by 2060



Decrease in precipitation throughout the region



Greater frequency of categories 4 and 5 hurricanes by 25 - 30%



Sea level rise**

* 25 - 65% of annual days being hot days

** It is difficult to make accurate predictions



Since 1950, 324 natural disasters struck the Caribbean, killing around 250,000 people and affecting more than 24 million people.

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5 ENTRY POINTS TO ADDRESS CLIMATE FRAGILITY RISKS

These threats are not inescapable. Governments in the region are well aware of climate change impacts and the threats they pose to their countries. They have taken important initiatives to address climate risks and are at the forefront of climate action, especially in terms of disaster risk response. However, to date, they have failed to implement more comprehensive and integrated responses that go beyond climate adaptation and disaster risk response, and have overlooked other socio-economic and political drivers that also contribute to security challenges. Also, the international community has focused on the immense disaster risks in the Caribbean, but has paid less attention to the slow-onset changes and their consequences on livelihoods, which are just as worrisome.

Based on our analysis, we suggest that, to address the compound climate and fragility risks, governments and political decision-makers at national, regional and local levels should move towards:

- 1 Understanding and addressing climate risks in a more integrated way**, including greater incentives for businesses to take climate action, as well as more cross-sectoral cooperation and dialogue between ministries and governmental departments at both national and local levels.
- 2 Coordinating more systematically especially with the security and defence sectors**, to enable a cross-sectoral response to address the full breadth of the environmental, economic, social, political, and security challenges linked to climate change.
- 3 Promoting bottom-up collaborative approaches to resilience-building**, and institutionalising local knowledge and capacity into resilience-building activities and strategies, while also providing an opportunity for the equal and meaningful participation of women, youth, and particularly vulnerable groups such as indigenous communities or persons with disabilities.
- 4 Leveraging existing formats and instances of regional cooperation to address climate-security challenges** and increase integrated and comprehensive risk management, including between different sectors and communities of practice.
- 5 Continuously engaging at the international level to capitalise on opportunities for support and establish partnerships to address climate and security risks**, while at the same time offering climate resilience expertise from the Caribbean to other SIDS.

SOCIO-ECONOMIC FACTS

- Major sources of livelihood include tourism, fishing and agriculture.
- Populations have historically adapted to climate variability via migration and livelihood diversification; however, involvement in gang activities and illicit drug trade have also served as coping strategies.
- Resilience is uneven: those who live in coastal areas, are unemployed, and/or are at the lower end of income distribution (due to structural inequalities, especially women and girls) are less able to prepare for, adapt to, and recover from environmental and climate shocks.

POLITICS & SECURITY

Caribbean countries enjoy a relatively stable political climate without any major disputes between countries. However, instances of civil unrest and conflict within individual countries exist. Across the region, countries have experienced social protests arising from labour and union issues, as well as socio-economic problems, such as unemployment. Organised crime linked to narco-trafficking creates severe security challenges, and illicit drug trade fuels high levels of violence. Domestic violence and mass emigration are other major concerns in the region.

FURTHER READING

- Fuller, Carlos; Kurnoth, Hannah & Mosello, Beatrice (2020). Climate Fragility Risk Brief Caribbean (full version)

LEGAL NOTICE

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The **Climate Security Expert Network**, which comprises some 30 international experts, supports the **Group of Friends on Climate and Security and the Climate Security Mechanism** of the UN system by synthesising scientific knowledge and expertise, advising on entry points for building resilience to climate-security risks, and helping to strengthen a shared understanding of the challenges and opportunities of addressing climate-related security risks.

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