



## CLIMATE-FRAGILITY RISK FACTSHEET

# LATIN AMERICA & THE CARIBBEAN

Climate change will have different impacts across Latin America and the Caribbean (LAC), a region encompassing ecological systems as varied as the islands of Central America, the Amazon Basin, the Andes and the cerrado. Although much of the region has been free from war for decades, conflict and violence are still present in many countries in LAC. **State fragility**, often related to the expansion of organized crime and widespread human rights violations by the state, has contributed towards elevated rates of violence, while high inequality is shaping how climate affects **security** in LAC and raising new issues about **climate justice** and **climate-related migration**. In short, climate change acts as a risk multiplier in LAC, exacerbating existing conflict and fragility dynamics.

### 5 CLIMATE FRAGILITY RISKS

There are five main climate fragility risks that policymakers should be aware of:

#### 1 Risk 1: Damage to infrastructure and economies exacerbates tensions

Climate change disrupts economic activity in ways that contribute to instability. Water scarcity and droughts can **threaten the energy supply** and **disrupt agricultural production and mining**. A climate of extremes also **takes a toll on critical infrastructure**, hampering essential public services. Such disasters carry the potential to cause temporary or long-term **breakdown in governance and institutions**. Longer-term infrastructure damage and economic disruption can undermine livelihoods and exacerbate grievances and anti-state sentiment.

#### 2 Risk 2: Climate change and organized and environmental crime

Climate change creates a favourable environment for those who commit environmental crimes or belong to criminal organizations. When people have fewer legal options for making a living and have grievances against the government, they are more likely to join organized criminal groups. What is more, **environmental crimes accelerate climate change**, therefore **exacerbating existing climate-induced fragilities**. These dynamics often emerge around extreme weather events. When the government's ability to provide basic services breaks down after extreme events, criminal groups find governance vacuums that play into their hands.

#### 3 Risk 3: Climate change contributing to migration and urban violence

Many of the security repercussions of climate change in Latin America are related to agriculture and food security. Those who lose agricultural livelihoods to climate change impacts such as droughts may **move elsewhere to pursue economic opportunities**, either to nearby urban centres or neighbouring countries. Urban centres that cannot accommodate the newcomers **risk higher levels of urban crime and violence**.

#### 4 Risk 4 The future of extractives in a changing climate

Extractive resources (minerals, oil and gas) are very important for economic development in LAC, but they are also a source of conflict. These conflicts will most likely get worse as **climate change increases pressure on land and water resources** and **exacerbates the environmental impacts** of mining, particularly affecting indigenous people. Climate change will increase the risks of negative environmental and social impacts of mining, while fossil fuel-dependent countries will face further challenges as decarbonisation reduces their revenue.





#### 5 Risk 5: Increased spread of disease

The consequences of climate change for health security vary across LAC. Higher temperatures might **increase the incidence of asthma and other respiratory illnesses**. In addition, intensifying climate phenomena cause **changes in disease vector populations** and **facilitate the spread of water-borne diseases** like malaria. Increased climate instability has already contributed to the **emergence of mosquito-borne infections** like Dengue, Chikunguya, and Zika.

### CLIMATE CONTEXT

Latin America and the Caribbean (LAC) increasingly experiences extreme climate and hydro-meteorological events. These include storms, floods, droughts and extreme temperatures. In particular, more frequent extreme droughts may trigger a "tipping point" of losses of forests and biodiversity, such as the Amazon rainforest.

Future climate projections for LAC include, among others:

-  Increasing annual mean temperatures
-  Prolonged dry periods; increased uncertainty of rainfall patterns
-  Increased intensity and frequency of extreme weather events
-  Sea-level rise; ocean acidification; coastal erosion

Damage to infrastructure is expected to cause economic losses in the order of 1.5% to 5% of the region's GDP by 2050.



## 4 ENTRY POINTS TO ADDRESS RISKS

LAC states have taken some steps to address climate impacts and risks, making significant commitments to **reduce emissions**, investing heavily in **renewable energy** and its associated technologies, and working to **curb deforestation**. A number of countries have **boosted their disaster risk management capacity**. Stakeholders have also begun to focus more on assessing the projected impacts of climate change across critical sectors of the economies, and on promoting environmental laws, urban innovation, and environmental protection programs.

These efforts, however, are threatened by political change, with some national leaders undermining climate initiatives and cooperative frameworks. Despite support from organisations such as UN Environment and the European Union, LAC still needs **more robust capacity in assessment, planning and response design** in order to address the projected impacts of climate change, including how these relate to security. There is still a general **lack of awareness** about the links between climate change and security in the region.

To encourage cooperation between different actors and policies four topics are particularly relevant:

- 1 Existing structures on **Disaster Risk Reduction (DRR)** can serve as strategic platforms for starting the discussion and promoting cooperation. To address all aspects of climate and security, it is essential to **broaden the discussion**.
- 2 The **consolidated research and policy literature** on the subject can be used to address environmental crime, in particular findings on the **links between criminal activities—such as illegal deforestation, fauna and flora extraction, pollution and contamination, or illegal mining—and security outcomes**. At the national level, institutional structures dealing with environmental crime constitute another entry point for drawing clear **linkages between climate change and security**. Regional platforms such as the Police Community of the Americas (Ameripol) and OTCA can provide space for **regional cooperation** on these issues. In addition, **bilateral cooperation** can be strengthened around the tasks of preventing and dismantling the criminal networks that carry out environmental crimes.
- 3 For rural populations and all those who depend on the balance of the elements of nature, climate change is an immediate risk to survival. **Technical, educational, and financial support** towards the restoration of degrading lands, the implementation and maintenance of sustainable food production systems and natural conservation can help **alleviate the trends of migration and displacement**.
- 4 **Fostering resilience to climate shocks in urban centers** is a crucial security strategy. **Investing in additional** hybrid and decentralized **energy sources, creating** strategically located **green oases** that absorb floods and contain fires and **creating emergency** plans for catastrophic scenarios are some examples of how to make cities more resistant to climate and less vulnerable to social crisis in light of extreme climate events.

## SOCIO-ECONOMIC FACTS

- in 2017, **39.8%** of the LAC population lived in high or extreme poverty.
- LAC is home to **8%** of the world's total population, of which around **80%** live in urban areas.
- LAC is one of the world's most violent regions, with **33%** of all homicides and the **highest murder rates**.
- Around **14%** of the economically active population across the region works in agriculture.
- The **Venezuelan crises** generated high levels of **migration**, which contributed or exacerbated **social tensions**.

## POLITICS & SECURITY

Rising political instability and the weakening of key institutions may exacerbate the negative impact of climate change on security in the region. The increase of authoritarian tendencies has undermined the legitimacy of elections, while political and economic crises have displaced people and contributed to refugee movements.

## FURTHER READING

- Masters, Jeff 2019: Fifth Straight Year of Central American Drought Helping Drive Migration. Scientific American.
- Abdenur, Adriana Erthal, Giovanna Kuele and Alice Amorim (eds) 2019: Climate and Security in Latin America. Rio de Janeiro: Igarapé Institute/Climate and Society Institute.

## 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. [www.climate-security-expert-network.org](http://www.climate-security-expert-network.org)

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