

International Conference “Enhancing Climate Diplomacy in a Changing Political Environment”

Focus Region: The Caribbean

Known as one of the most highly tourist-reliant regions in the world, the Caribbean Islands are faced with, (like other island nations), the ever-growing adverse effects of climate change. Inhabited by an estimated 39 million people, the Caribbean region is renowned for its rich marine, coastal ecosystems and biodiversity. Countries in this region include: Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Trinidad and Tobago, Aruba, Netherlands Antilles, Suriname, Guadeloupe Martinique, Puerto Rico, US Virgin Islands, Anguilla, British Virgin Islands, Cayman Islands Montserrat, Turks and Caicos. In terms of climate change repercussions, the region is affected by increased quantity and intensity of hurricanes, high tides, droughts, floods, inconsistent rainfall patterns and heat waves.

Main Environmental Challenges

A number of pressing **direct challenges** are occurring and at rapid rates. A first major setback is evident through the repercussions of climate change that have devastated the biological diversity making up these fragile, yet essential ecosystems safeguarding these islands. For example, coral reefs are not only essential for tourism and fisheries, but most importantly, they protect against coastal erosion. Recent studies suggest that **80% of living coral reefs in the Caribbean have been lost in the past 20 years**; an unprecedented rate of degradation. It has been estimated that the continued decline of coral reefs could cost the region between US\$350m and US\$870m per year by 2050. **Availability of freshwater** constitutes another pressing challenge in the Caribbean SIDS, more than in the oceanic islands. At current population levels, the available water supply in some of the Caribbean SIDS is significantly lower than the international standards on water scarcity. **Inconsistent rainfalls** are a contributor to this. For example, in islands such as Barbados, Grenada and Anguilla, more than 65% of total annual rainfall may be recorded in the wet season. And considering that many islands rely on single sources of water such as groundwater, imports, rainfall or other surface flows, this issue will escalate as irregular weather patterns increase. In addition, poor water management has led to further land degradation associated with human induced behavior such as unsustainable farming techniques, habitat destruction, deforestation, and exacerbated soil erosion.

These climate change threats leave this region increasingly vulnerable as their livelihoods depend on the very coasts that these natural disasters have targeted. Therefore, several pressing **indirect challenges** are becoming unavoidable. **Population concentration** in coastal cities and towns—accounts for approximately 70% of the Caribbean population. For example, more than half of the population lives within 1.5 km of the coast which also surround international airports, main roads and capital cities. With the direct climate burdens listed above, dominant tourist, harbor-based and export-oriented economies are under extreme threat.

This fragility is intensified by the constraints of limited natural resources and interdependence of the environment for economic prosperity. This can be made evident in the region’s core industry sectors. For example, tourism is the most rapidly growing industry across the region, contributing a third to a half of the GDP in the majority of countries, while simultaneously the most vulnerable to the changing patterns of the Caribbean’s climate. Amongst the larger islands, the mining and mineral extracting industries are also important for economic growth and development. For example, mining in Guyana as well as Trinidad and Tobago account for 19.3% and 10.6% of GDP. However, extractive activities can

cause severe problems for coastal zone conservation. Other important sectors include agriculture and offshore banking (15% of the GDP of The Bahamas), all of which are likely to be disrupted by extreme weather events. A last main economic driver is the fish industry. Fish provide a vital resource for citizens and specifically poorer communities. In fact, approx. 7% of the protein consumed by people in the Caribbean region are accounted for from fish products. Fishing also provides jobs, estimating around 200,000 people directly employed in this sector. Another 100,000 jobs deal with processing and marketing fish products or surrounding industries (i.e. boat building etc.). **Limited investments in waste management systems** surrounding some cities and industries, continue to leave these areas contaminated with solid waste, sewage, and chemical-run off; contributing to the estimated eroding rates of 0.25-9m per year, and 70% of Caribbean beaches. Overall, this concentration of socio-economic activities within the coastal areas means that activities on land are likely to have a negative impact on local and regional ecosystems. The heightened effects of climate change however, face serious repercussions including complete evacuation of islands, leaving potentially millions as stateless, climate refugees.

Main Security Threats

These direct and indirect challenges pose security risks for the Caribbean region. Whether that is loss of territory caused by sea-level rise, extreme dry conditions leading to food and water scarcities, or tropical storms destroying infrastructure; ensuring safe environments for individuals will become increasingly pressing. Due to the region's geographical isolation, major influxes of **climate-induced migration and climate refugees** are expected. This could pose national security threats for surrounding island states and mainland countries, especially the United States, which could experience high rates of unreported individuals seeking entry. Home to some of the world's most notorious tax shelter nations, such as the Cayman Islands and the British Virgin Islands, the region's small governments make it susceptible to both the corrupting influences of **transnational criminal organization**, and the initiatives of larger states with an interest in its affairs. Transnational criminal flows, and their linkage to and impact on local populations, are arguably the greatest source of violence and threat to security in the Caribbean. For instance, **problems of law and order** may be common in certain countries: with seven of the Caribbean SIDS holding the highest murder rates in the world (per 100,000 inhabitants) according to the UN Office for Drugs and Crime.

Ongoing and planned initiatives in the region

[Coastal Protection for Climate Change Adaptation on Caribbean Islands](#)

Running from 2014 to 2018, this initiative aims to contribute to the reduction of climate change induced risks for the population of small island states in the Caribbean, and to improve ecosystem services that reduces the impact of climate change on coastal areas.

[Climate Change Adaptation Program \(CCAP\)](#)

USAID and the Caribbean Community Climate Change Center contributes \$25.6 million USD investment over the next 4 years. The goal is to reduce risk to human and natural assets resulting from climate change vulnerability. Additionally, the objectives include to strengthen an integrated system for the implementation and financing of sustainable adaptation approaches in Eastern and Southern Caribbean.

[Regional Planning for Climate Compatible Development in the Region](#)

This initiative focuses on securing investments for action plans as well as proposing a monitoring/evaluation system for how regional and country bodies can work together