



Climate change impacts on weather in the Caribbean – FACT SHEET

Introduction: The Caribbean, with its beautiful islands and diverse ecosystems, is facing significant impacts from climate change. Understanding these changes is crucial for individuals, communities, and policymakers to develop strategies for adaptation and resilience. Here's a fact sheet on how climate change is likely to impact the weather in the Caribbean:

1. Increased Hurricane Intensity:

- Climate change is expected to lead to more intense and frequent hurricanes in the Caribbean.
- Rising sea surface temperatures provide more energy for hurricanes, making them stronger and potentially more destructive.

2. Rising Sea Levels:

- Melting ice caps and glaciers, along with the thermal expansion of seawater, contribute to rising sea levels.
- This puts low-lying coastal areas in the Caribbean at an increased risk of flooding and erosion. Along with risks of greater and more damaging storm surge.

3. Changes in Rainfall Patterns:

- Climate change is likely to alter rainfall patterns in the Caribbean.
- Some areas may experience more intense rainfall, leading to an increased risk of flooding, while others may face prolonged droughts.

4. Coral Bleaching and Ocean Acidification:

- Warmer sea temperatures contribute to coral bleaching, affecting the vibrant coral reefs of the Caribbean.
- Ocean acidification, a result of increased carbon dioxide absorption, poses a threat to marine life, impacting the health of the Caribbean Sea.
- Damage to coral reefs is important to us as they act as our first line of defense in a hurricane and can dampen wave strength before it hits us.

5. Temperature Extremes:

- Climate change may bring about more frequent and prolonged heatwaves in the Caribbean.
- Increased temperatures can have implications for human health, agriculture, and ecosystems.



6. Impact on Agriculture and Fisheries:

- Changes in temperature and precipitation patterns may affect crop yields and fisheries in the Caribbean.
- This can impact food security and livelihoods for communities dependent on agriculture and fishing.

7. Threats to Biodiversity:

- The changing climate poses threats to the rich biodiversity of the Caribbean, including unique plant and animal species that are adapted to certain storm strengths.
- Shifts in ecosystems may lead to the loss of habitats and changes in the distribution of species.

8. Community Resilience and Adaptation:

- Building resilience in Caribbean communities is crucial to cope with the impacts of climate change.
- Adaptation strategies, including sustainable land use planning and infrastructure development, are essential for minimizing risks.

9. Importance of International Cooperation:

- Addressing climate change in the Caribbean requires international cooperation and support.
- Collaborative efforts are needed to mitigate greenhouse gas emissions and provide resources for adaptation measures.

10. Advocacy for Sustainable Practices:

- Individuals and communities can contribute to climate resilience by adopting sustainable practices.
- Advocacy for policy changes and community engagement are vital components of building a sustainable future for the Caribbean.

Understanding the potential impacts of climate change on Caribbean weather is the first step toward proactive and effective adaptation strategies. By working together, communities and nations can enhance resilience and protect the natural beauty and resources of the Caribbean for future generations.