



Hot Topic- Climate Change & Tourism

What is climate change?

Our climate is changing because as human beings we have increased the amount of certain gases, called greenhouse gases, in our atmosphere.

We burn oil, coal and gas to produce energy for homes, factories and businesses and for our transportation needs. Burning these fossil fuels also produces greenhouse gases like Carbon Dioxide, Methane and Nitrous Oxide.

Excess greenhouse gases in our atmosphere are trapping too much heat around the earth. This heat makes our earth warmer, like a greenhouse. This is what is known as global warming. It is this increase in temperature over time which results in climate change. Jamaica's tourism product of sea, sand and sun faces serious challenges because of the changing climate.



How Climate Change can affect Jamaican Tourism...

Threat	Impact
Warmer temperatures	Heat stress for tourists, increased cooling costs for hotels, changes in: plant wildlife, insect populations and distribution range, changes in infectious disease e.g. more dengue
Increasing frequency and intensity of extreme storms	Beach loss; damage to tourism facilities, flooding, increased insurance costs or loss of insurability, business interruption costs. Adverse conditions will lead to cancellations leading to job losses.
Less rainfall	Water shortages; competition for water between sectors; desertification.
Increased frequency of heavy precipitation events	Flooding damage to historic architectural and cultural assets, damage to tourism infrastructure.
Sea level rise	Coastal erosion, loss of beach area, higher costs to protect and maintain waterfronts and to implement sea defences
Sea surface temperature rise	Increased coral bleaching and degradation of marine resources and aesthetics in dive and snorkel locations
Changes in terrestrial and marine biodiversity	Loss of natural attractions and species.
Dry conditions and more frequent and larger forest fires	Loss of natural attractions, damage to tourism Infrastructure



7 Things we can do about Tourism and Climate Change Impacts...

- 1 Invest in alternative tourist offerings including community based tourism, eco-tourism and sports, heritage and health tourism.
- 2 Raise stakeholder awareness about the relationships between tourism and the natural environment
- 3 Implement infrastructural changes to protect the environment e. g. groynes, levees.
- 4 Consider sea wall defences and break waters and replant mangroves to provide protection to coastal areas against sea level rise and storm surge.
- 5 Position infrastructure further away from coast
- 6 Enforce proper coastal zone management.
- 7 Retrofit tourism facilities to withstand more intense weather events and warmer temperatures.
- 8 Implement water and energy conservation and efficiency measures at hotels, resorts and attractions.

What's at stake for Jamaica?

- Tourism generates USD \$1.934 billion dollars annually. Tourism is Jamaica's second most important foreign exchange earner.
- Tourism is a major creator of jobs, both directly and indirectly.
- Climatic and environmental features are an integral part of the country's tourism product offering. The local tourism product is dominated by resort tourism ("sun, sea, sand and fun") and is location specific.
- Tourism is concentrated in coastal areas making it vulnerable to sea level rise and extreme climate features. Estimates have shown that a 1m rise in seal level will impact about 8% of major resorts in Jamaica, while a 2m rise will have an impact on 18% of these resorts.
- To protect our resorts some 22 miles of coastal protection are needed.
- Depending on the measures contemplated the projected cost of adapting to climate change can range from a low of
- US\$ 92.3 million to a high of US\$ 993.8 million (2011 dollars).

Sources:

CARIBSAVE (2009) **Caribbean Climate Change, Tourism & Livelihoods: A sectoral approach to vulnerability and resilience**
Final Report: Negril-Jamaica

Climate Studies Group, Mona (CSGM), 2012: **State of the Jamaican Climate 2012: Information for Resilience Building (Full Report)**.
Produced for the Planning Institute of Jamaica (PIOJ), Kingston Jamaica.

The Second National Communication of Jamaica To The United Nations Framework Convention on Climate Change 2011
<http://unfccc.int/resource/docs/natc/jamnc2.pdf>

UNECLAC (2011) **The Economics of Climate Change in the Caribbean Summary Report**

This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of the Climate Change Adaptation and Disaster Risk Reduction Project and can in no way be taken to reflect the views of the European Union.

