Linking Climate Early Warning Information to Early Response in Caribbean Tourism

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Day 1, PANEL DISCUSSION III, Wednesday 6 APRIL 2022
CMO Member States

<table>
<thead>
<tr>
<th>1) Anguilla</th>
<th>9) Guyana</th>
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<td>2) Antigua and Barbuda</td>
<td>10) Jamaica</td>
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<td>3) Barbados</td>
<td>11) Montserrat</td>
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<td>4) Belize</td>
<td>12) St. Kitts / Nevis</td>
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<td>5) British Virgin Islands</td>
<td>13) St. Lucia</td>
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<td>6) Cayman Islands</td>
<td>14) St. Vincent and the Grenadines</td>
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<td>7) Dominica</td>
<td>15) Trinidad and Tobago</td>
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<td>8) Grenada</td>
<td>16) Turks and Caicos Islands</td>
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**Mandate:** “... to assist in improving and developing the Meteorological and Hydrological Services, as well as, providing awareness of the benefits of Meteorology and Hydrology for the economic well-being of the CIMH member states. This is achieved through training, research, investigations and the provision of related specialized services and advice.”
CIMH Climate Early Warning Products

Climate early warning months in advance
Climate as opportunity and risk

Caribbean tourism is very reliant on the region’s climatological pattern. **Average annual temperatures in the range of 24°C - 32°C is ideal for year round visitor recreation and comfort.**

![Graph showing visitors to Antigua vs rainfall (2008-2010)]

**Caribbean annual tourism high season (December to March) typically coincides with the Dry season (December to May)**

In the extreme case of drought: Direct impacts - insufficient potable water supplies to meet water intensive demands of tourists. Indirect impacts - Other sectors (e.g., agriculture/food production, fire service) likely competing for scarce water resources – compounding the problem.
Scaling up Climate Risk Management in Caribbean Tourism and supporting sectors

Climate risk management (CRM): “a systematic and coordinated process in which climate information is used to reduce the risks associated with climate variability and change, and to take advantage of opportunities, in order to improve the resilience of social, economic and environmental systems” (Martínez et al. 2012).

Climate early warning information catalyses CRM
CTO and CHTA sign the multi-lateral Consortium LoA at SOTIC, September 16th, 2016

The Consortium is a key regional mechanism to champion the design, development and delivery of tailored climate products and services in the agriculture and food security, disaster risk management, energy, health, tourism and water sectors.
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Recognised Observers – CARICOM Secretariat, OECS Commission, CCCCC, UWI CSGM, PAHO, AACARI

New period of Partner commitment: Jan 2020 - Dec 2022
Joint climate risk messaging through the Caribbean Tourism Climatic Bulletin

A Joint Bulletin of the CTO, the CHTA and the CIMH

CARIBBEAN TOURISM CLIMATIC BULLETIN

for Tourism Businesses and Policymakers

March - May 2022 | Vol 6 | Issue 1

(http://rcc.cimh.edu.bb/caribbean-tourism-climatic-bulletin/)

• Climate-smart tool informing a range of decisions:
  1) operational resource mgmt; 2) guest mgmt; 3) marketing of seasonal campaigns, including the timing of marketing blasts; 4) pricing of tourism packages; 5) anticipating extreme weather conditions either in the region or in source markets; 6) informing rate adjustments (pricing) in anticipation of increased or decreased demand; and 7) informing emergency...
Climate Advisories: Caribbean

March through May marks: 1) the transition between the dry season (up till April) and the start of the wet season (in May) in the Bahamas, Belize, the Greater Antilles and the Guianas; 2) the second half of the dry season in the Lesser Antilles; and 3) the long dry season in the ABC Islands. What should you do?

On average, March to May forms the second half of the Caribbean Dry Season in Belize and the Caribbean Islands, characterised by relatively few wet days and a small number of wet spells, but many dry days and quite a few dry spells.

The intensity and frequency of rainfall increases towards May, especially in the Greater Antilles and the Guianas. **Extreme wet spells** become a possibility and very wet spells a more frequent occurrence from April onwards across the region. Extreme wet spells may result in flash floods, land slippage, power outages and possible contamination of food and water supplies. Therefore, proper planning / contingencies for these scenarios is imperative in tourism disaster plans (please see page 13, Glossary, for definitions of extreme and very wet spells).

**Short term drought** (on a 3-6 months timescale) is evolving by the end of May in The Virgin Islands and Sint Martin (medium confidence). Short term drought implications may include impacts on food production, water quality, flow rates from small streams, and water levels in small ponds and other surface sources.
Climate Advisories: Caribbean Source Markets

March to May marks the spring season in the source markets. What should you do?

Northern source markets will experience winter cold, short days and limited sunshine. This may create a climate driven increase in demand for Caribbean vacations, as well as vacations to Florida, the desert southwest and the southeast of the United States. Drier and sunnier weather than usual is expected in the south of the US. Inbound Tour Operators should be aware of reports of inclement weather at this time of the year. They should also monitor extended weather forecasts in northern source markets during this season.

(http://rcc.cimh.edu.bb/caribbean-tourism-climatic-bulletin/)
Joint climate risk messaging through the Caribbean Tourism Climatic Bulletin

With this issue, the CTO, CHTA and CIMH celebrate the 5th Anniversary of the publication of the Caribbean Tourism Climatic Bulletin!

- Co-produced quarterly by the CTO, CHTA and CIMH since May 2017
- 20 issues to date
- Celebrated 5 years of co-production with the MAM 2022 issue!
- Disseminated on CTO, CHTA and CIMH platforms

(http://rcc.cimh.edu.bb/caribbean-tourism-climatic-bulletin/)
1. There is demand for new kinds of outlooks, particularly around forecasts that credibly and quantitatively relate climate to business outcomes.

2. Need to improve tourism and climate data collection, sharing, and interoperability at national and regional levels; and integrated modelling capacity as a way of facilitating the required R&D underpinning the development of new integrated, interdisciplinary products.

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**LEVEL** | **RESULTS**
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Paradigm shift objective (30-year change) | To significantly reduce weather and climate-related damage and losses in key socio-economic sectors in the Caribbean.

**Consortium mission** | Multi-sectoral alliance for climate resilience across the Agriculture and Food Security, Water, DRR, Health, Tourism and Energy sectors.

**Roadmap goal (11-year change)** | Increased resilience of climate sensitive sectors in the Caribbean.

**Roadmap objectives**
1. Strengthened institutional context for climate risk management (CRM) at regional, national and sectoral scales;
2. Enhanced and harmonised climate and sectoral information production systems across climate timescales;
3. Increased generation of tailored, sector-specific climate information at regional and national scales; and
4. Improved sectoral decision-making for CRM at regional and national scales.

**Roadmap Outcome Areas (11-year change)**

| OA 1: Enhanced mechanisms for the collection, management and dissemination of climate and sectoral data |
| OA 2: Improved quality of climate information and services through enhanced scientific and interdisciplinary research |
| OA 3: Improved and harmonised Climate Services Information Systems at regional, national and sectoral levels |
| OA 4: Enhanced User Interface mechanisms at regional, national and sectoral levels |
| OA 5: Strengthened Capacity Development and enabling context for the provision and use of climate services at regional, national and sectoral levels |

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Thank you for your kind attention – Questions or Comments?

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