

**Multi-year Expert Meeting
on Transport, Trade Logistics and Trade
Facilitation**

**Third Session:
Small Island Developing States:
Transport and Trade Logistics
Challenges**

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**Impacts of Climate Change Factors on
the Transport Sector
The Case of the Caribbean**

Presentation by

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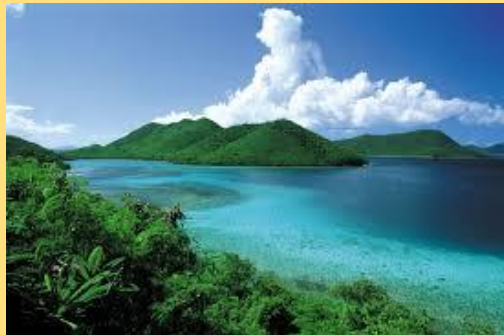
Impacts of Climate Change Factors on the Transport Sector

The Case of the Caribbean

*Presented by
Willard Phillips
UNECLAC*

Transportation Context in the Caribbean

- International, Intra-regional, Domestic
- Economies of Scale
- Subject to Economic and Natural Vulnerability
- Critical for Movement of People and Goods
- Technology and Human Resources
- Financing and Capitalization
- Climate Change an Additional Challenge

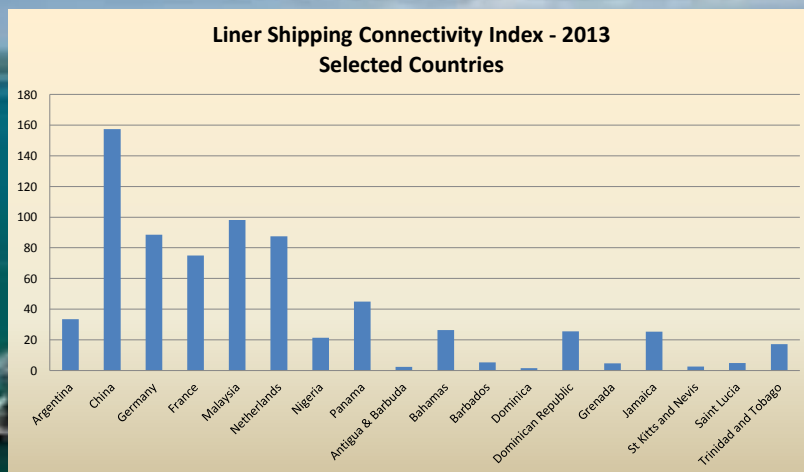


Transportation and Trade



- Transportation is critical for Caribbean trade
- High import demand supported by maritime transport
- But region disadvantaged by low volume imports to multiple destinations – weak scale economy
- Relatively under developed intra-island shipping
- Low Liner Shipping Connectivity Index (UNCTAD)

Liner Shipping Connectivity Index Selected Countries

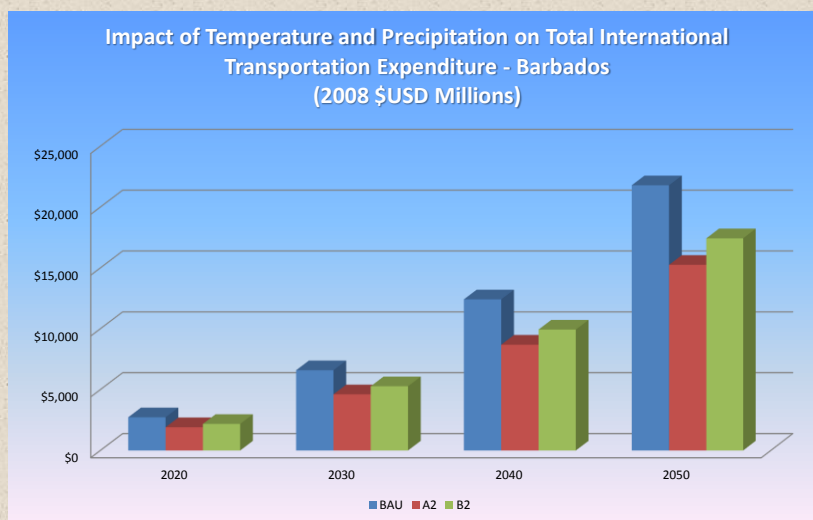


Transportation and Tourism

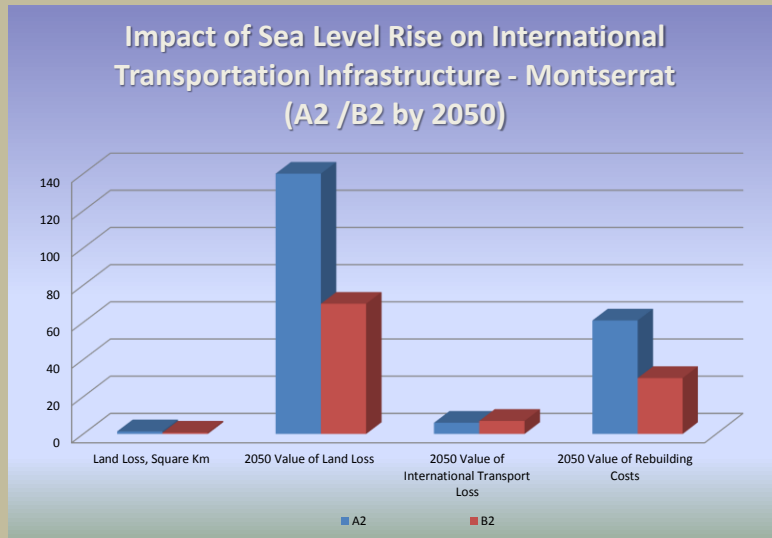
- High trade in services (tourism) supported by air transport.
- High share of global cruise passenger traffic
- International passenger transport critical to regional tourism sector
- High incentive cost to keep international airlines in the region
- High cost (in terms of money and time) for intra-regional passenger travel



Climate Change Impacts: Changes in Temperature and Precipitation



Climate Change Impacts: Sea Level Rise



Climate Change Impacts: Transportation Infrastructure

- Most airports in Caribbean located on the coast
- Sea-level rise would require strengthening of port infrastructure – jetties breakwaters
- Increased risk of overtopping during storm surges
- Enhancements also required for marinas
- Extreme weather can cause flooding of airports and runways



Climate Change Impacts: Extreme Events

Extreme weather can also cause flooding of airports and runways



Adaptation Efforts: Jamaica



Adaptation Efforts: St. Kitts and Nevis



Adaptation Efforts: Dominica



Future Challenges

- Energy security for transportation
- Building Public Private Partnerships
- Risk Reduction and Resilience

A photograph of a city skyline at night, viewed from across a body of water. The lights of the city are reflected on the water's surface. The text "Thank You!" is overlaid in the center of the image.

Thank You!