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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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 underdeveloped intra-island shipping
- Low Liner Shipping Connectivity Index (UNCTAD)

![Liner Shipping Connectivity Index - 2013 Selected Countries](image)
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

Impact of Temperature and Precipitation on Total International Transportation Expenditure - Barbados (2008 $USD Millions)
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

Thank You!