

OAS CIP 01<sup>st</sup> Regional Workshop on

"Improved disaster risk management project for ports in the Caribbean"

November 02<sup>nd</sup> 2021 1000hrs

American States More rights for more people

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# **PRESENTATION OUTLINE**

1. CDEMA who we are and what we do

2. Regional Response Mechanism – experiences and challenges

3. Port Risk Management – Caribbean context

4. Risk management for Ports (Pallis, 2017)

5. Key takeaways



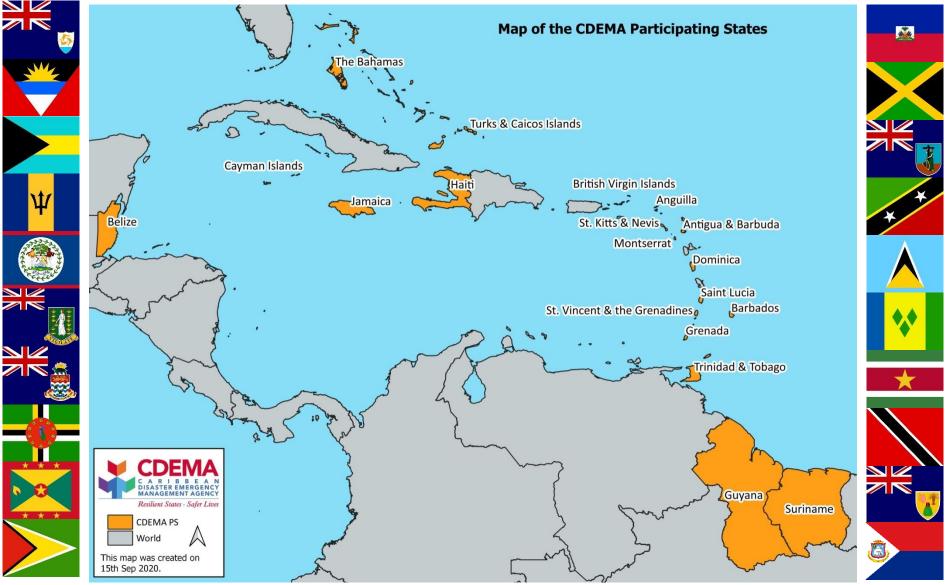
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# **CDEMA**

Who we are and what we do

# **CDEMA's 20 Participating States**





Anguilla, Antigua and Barbuda, Cayman Islands, Commonwealth of the Bahamas, Barbados, Belize, Commonwealth of Dominica, Grenada, Republic of Guyana, Haiti, Jamaica, Montserrat, Sint Maarten, St. Kitts & Nevis, Saint Lucia, St. Vincent & the Grenadines, Suriname, Republic of Trinidad & Tobago, Turks & Caicos Islands and the Virgin Islands (UK).





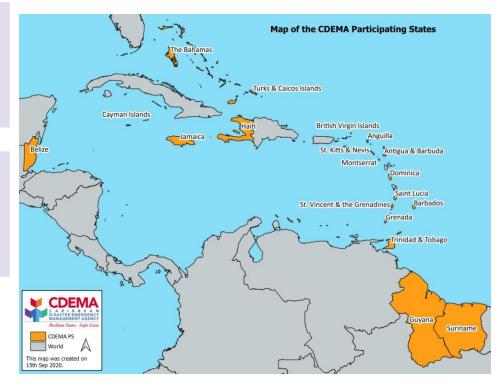




#### Mitigating consequences of disasters

Providing comprehensive information on disasters Encouraging disaster loss reduction and cooperative arrangements and mechanisms

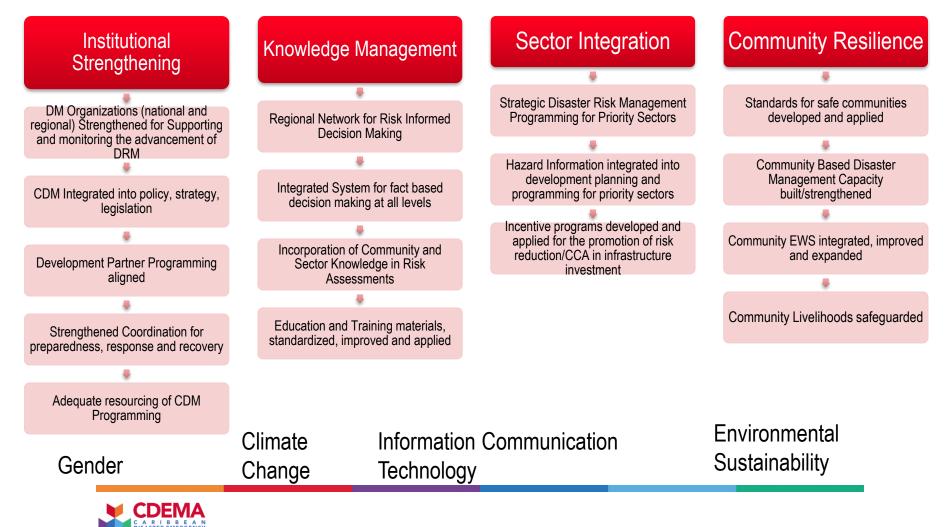
Establishment enhancement and maintenance of adequate emergency disaster response capabilities among the Participating States



#### THE CDM STRATEGY 2014-2024

Regional Goal: Safer more resilient and sustainable Caribbean States

Resilient States · Safer Lives





# **CDEMA:** Mechanism

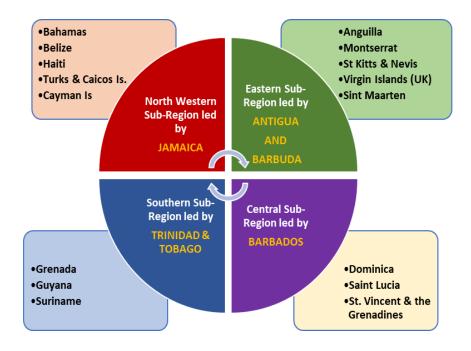
- The CDEMA mechanism is made up of 20 Participating States – small states with high vulnerabilities and varying individual capacities
- Guided by the CDEMA Articles of Agreement (2008) – 43 Articles
- CDEMA is the Champion for
  Comprehensive Disaster Management
  (CDM) in the Caribbean Region





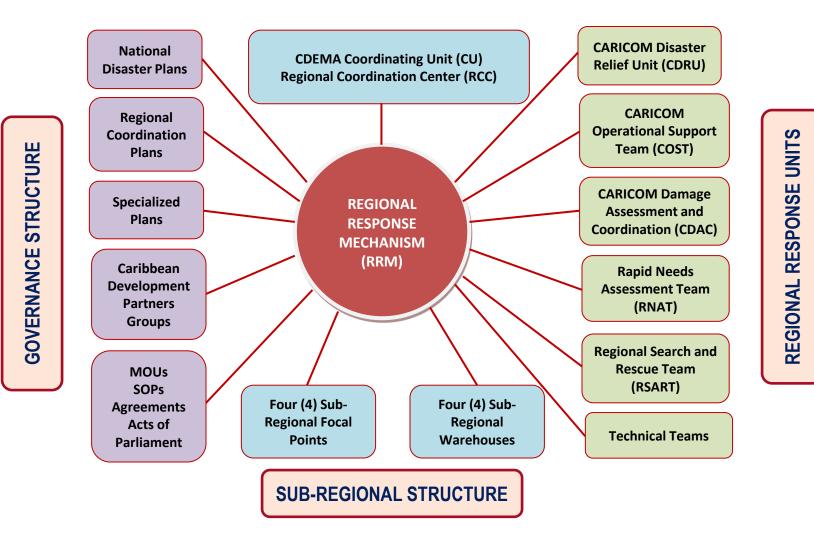
#### **Sub-Regional Focal Points (SRFPs)**

- The Sub-Regional Disaster Emergency Response Operational Units (SRDEROUs) aka. SRFPs are geographically formed groups from which response support is provided within the CDEMA System.
- There are 4 SRFPs are located within the National Disaster Office (NDO) of the PS where it resides.
- The function and responsibilities of the SRFPs are outlined in Article XVI of the Agreement Establishing CDEMA.





#### **Conceptual Framework for the RRM**





### Regional Response Mechanism (RRM) Doctrine

**AIM** – To provide effective and efficient coordinated disaster response support to CDEMA Participating States requiring regional and/or international assistance for their response to the consequences of an event based on regionally agreed Principles, Concepts and Realities.

#### **PRINCIPLES:**

- 1. Respect for sovereignty
- 2. Regional solidarity
- 3. Compliance with international Humanitarian Standards: *Humanity, Impartiality, Neutrality, Independence*
- 4. Adherence to principles of partnership: transparency, results oriented, responsibility, complementarily.





## **RRM Actors:**

















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Global Affairs Canada

OCHA











Foreign, Commonwealth & Development Office







#### PORT RISK MANAGEMENT THE CARIBBEAN CONTEXT

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**REGIONAL CHALLENGES** 



#### **Diverse hazards**













Hurricane Tomas Landslide – Marc Saint Lucia (2010)





#### **The Operating Context: Multi Hazard,** meteorological, health and biological, geotechnical, among others

Varied level of planning for pandemic	Economic impact & livelihood implications	Environmental Security impacts traditional security
COVID19 – We are still learning	Varied risk perception	All of Government and Society Response: <u>Inter-sectoral</u>
Uncertainty	Complex multi-hazard environment – drought, hurricane season, COVID-19	Regional Solidarity Inter-sectoral



#### **Port Risk management the Caribbean Context** Lessons learnt over the years

- High vulnerability of ports
  - physical structures,
  - coping capacity,
  - ability to return to business operations;
  - staffing,
  - overload of unsolicited goods
- Need for supplementary port equipment (cranes, reach stackers etc) to deal with increasing volume of goods.
- Increased need for service and maintenance of equipment due to increased usage.
- Supplementary storage at port often required to accommodate increased influx



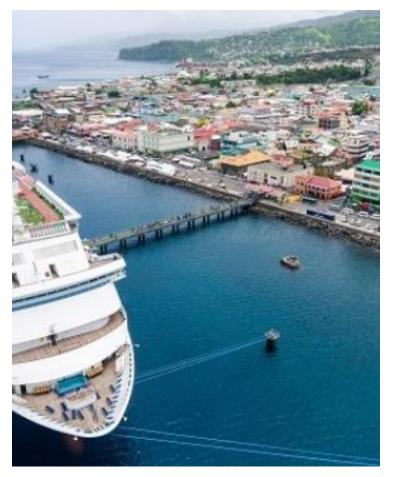
Source: https://www.newsecuritybeat.org/2019/01/disaster-relief-law-updated-enhance-resilience-critical-infrastructure/



#### **Importance of Port readiness**

#### Main entry points for aid

- Nodes for maritime and multi modal transport in both inbound and outbound logistics processes and a logistical platform
- Any impact on the port could have a direct impact on the national economy, supply chain and much more

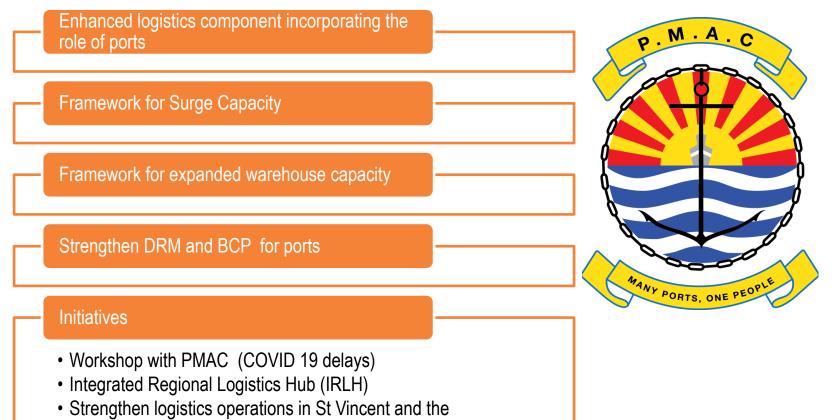


A Carnival ship, berthed at the Roseau Cruise Terminal in Dominica. Carnival is one of several cruise lines planning calls to Dominica in 2018 and 2019. Source <u>https://maritime-executive.com/article/dominica-rebounding-after-hurricane-maria</u>



## **In Collaboration with PMAC**

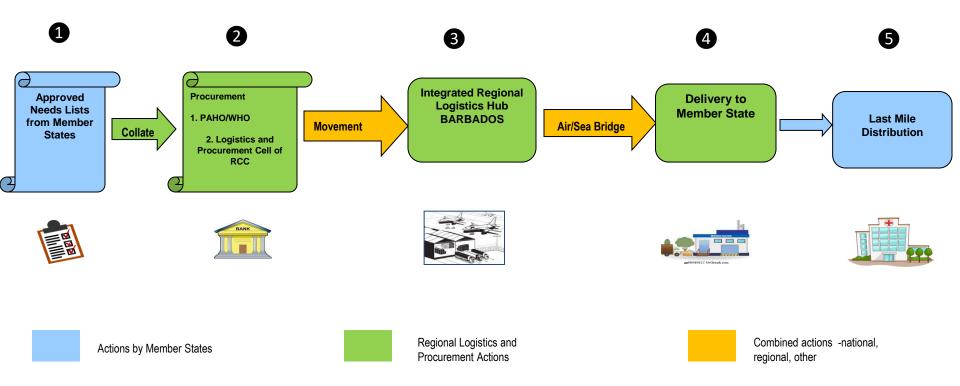
#### **Programme with Ports**



Grenadines



#### **The Integrated Regional Logistics Mechanism (IRLM) – COVID-19**





# **CDEMA & RRM Actions** Relief Management and Logistics

Mobile Storage Units set up at the Arnos Vale Logistics







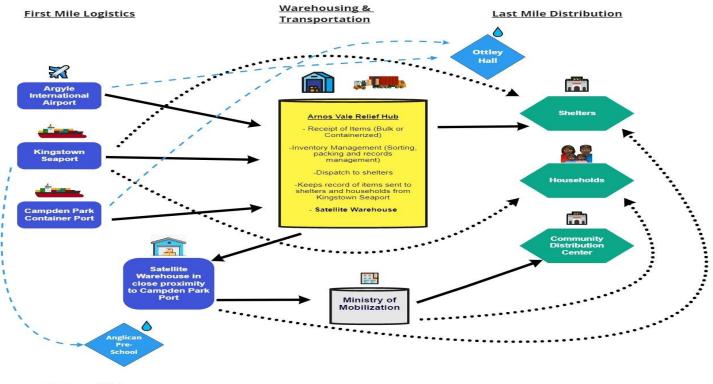








#### St. Vincent and The Grenadines Emergency Logistics Concept Map



**— — —** = Water



# **RISK MANAGEMENT**

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# **Port Risk Assessment** (Pallis, 2017)

Step	Step Feature	Step Content
0	System Identification	Port, container terminal
1	Risk Identification	What may go wrong and which port functions/capabilities should be protected
2	Risk Assessment	Investigation/quantification of the most important port risks
3	Risk Control Options	Measure to mitigate most important port risks and measures to restore port functions and capabilities
4	Cost/benefit assessment	Cost benefit assessment of port risk control measures
5	Decision making	Recommendation and feedback to assessment – Port risks index



#### **Taxonomy of Risks in Port Container terminals** Pallis , 2017

Risk Categories	Risk Sub categories
Human	Ship collisions, grounding, sinking, navigation error, pilotage error, poor maintenance, falling of a crane, falling of a container, error in cargo handling and storage,
Machinery	Fire/explosion, machinery failure, system failure,
Environment	ships emissions, dredging, oil spills, chemical contaminants, ballast waters, ship breaking/salvage activities, air toxics noise pollution
Security	Terrorist, theft, smuggling, illegal trade, vandalism, illegal immigration,
Natural	Earthquakes, Volcanic eruptions, hurricane, strong winds, heavy swells, floods, high temperature during working hours, heavy rains



## **Qualitative and Quantitative Risk Assessment** Pallis, 2017

Frequency index (likelihood of occurrence – frequent, reasonable possible, remote, extremely remote)

Severity index (level impact – minor, significant, severe and catastrophic)

**Risk Matrix** 

Acceptable level of risk and ALARP (as low as reasonably practicable)

Mitigation, emergency preparedness and escalation control



## Key takeaways

- Role and functions of CDEMA
- Regional Response Mechanism
- Ports are a critical component of the RRM Relief and Logistics Programme
- Realities of Caribbean Disaster Management ongoing initiatives as it relates to Ports
- General Risk Management approach



# **THANK YOU**



