The Role of Forest in Building Resilient Caribbean Communities

Presented by
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PRESENTATION OUTLINE

- MAIN OBJECTIVE
- CARIBBEAN RISK AND VULNERABILITY CONTEXT
- IMPACT OF HAZARD EVENTS IN THE REGION
- LESSONS RECONFIRMED
- REFLECTION ON THE ROLE FOREST PLAYS IN RESILIENCE
- RECOMMENDED ACTIONS
- THE CONTEXT FOR REGIONAL REFLECTION ON ADVANCING RESILIENCE

MAIN OBJECTIVE

- Examine the linkages between the state of our Forests and the resilience agenda. The presentation will examine the social and economic vulnerabilities in select CDEMA Participating States. In particular it will examine the effects of of Climate sensitive hazards on these states and further examine measures towards broader community and state level resilience.

DEFINING RESILIENCE

- *Resilience is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions (The United Nations Office for Disaster Risk Reduction (UNISDR), 2009).*

CARIBBEAN RISK, VULNERABILITY AND EXPOSURE CONTEXT

- CARIBBEAN MOST VULNERABLE TO THE EFFECTS OF A RAPIDLY CHANGING CLIMATE
  - SMALL SIZE AND SMALL EXPOSED ECONOMIES
  - CLIMATE SENSITIVE INDUSTRIES
  - RAPID URBANIZATION
- CLIMATE CHANGE IMPACTS REFLECTED MORE AS A THREAT TO HUMAN SECURITY
- PRESENTS POTENTIAL FOR EMERGENCIES AND DISASTERS
- DISLOCATION AND DISPLACMENT

GDP LOSSES FROM HURRICANE IMPACTS 2004-2017

Year	Event	Country	Losses (US $ Millions)	%GDP
2004	Ivan	Grenada	889	200
2004	Ivan	Jamaica	575	8
2007	Dean	Jamaica	329.34	10
2007	Dean	St. Lucia	6.4	1.2
2010	Tomas	St. Lucia	110.89	14
2012	Sandy	Jamaica	107	0.8
2013	Trough	Dominica		
2013	Trough	St. Lucia	99.88	8.3
2013	Trough	St. Vincent		
2015	TS Erika	Dominica	483	96
2017	Maria	Dominica	1.313	225
2017	May Rains	Jamaica	>20	-

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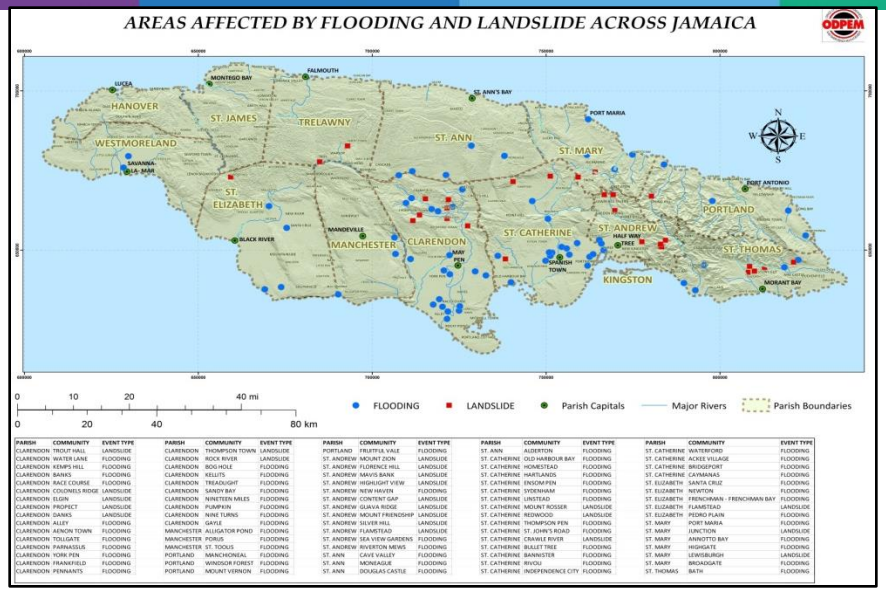
RIO MINHO WATERSHED - JAMAICA



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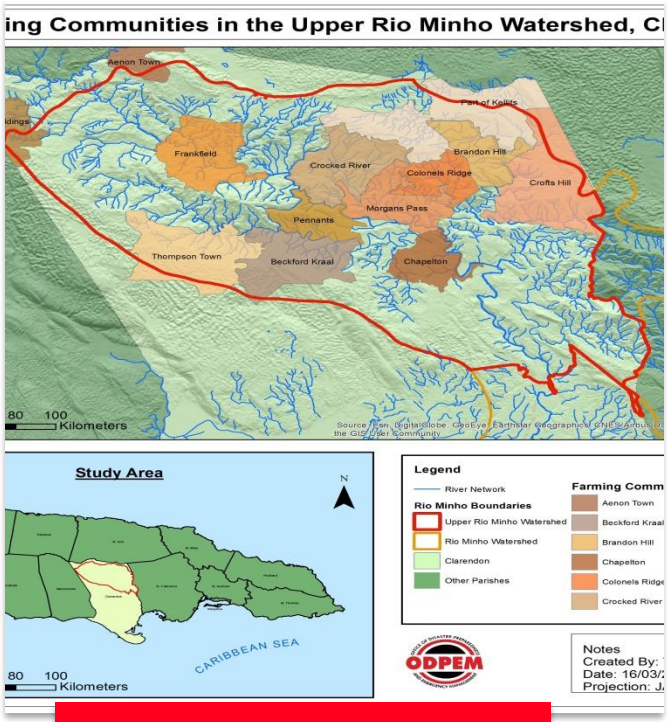
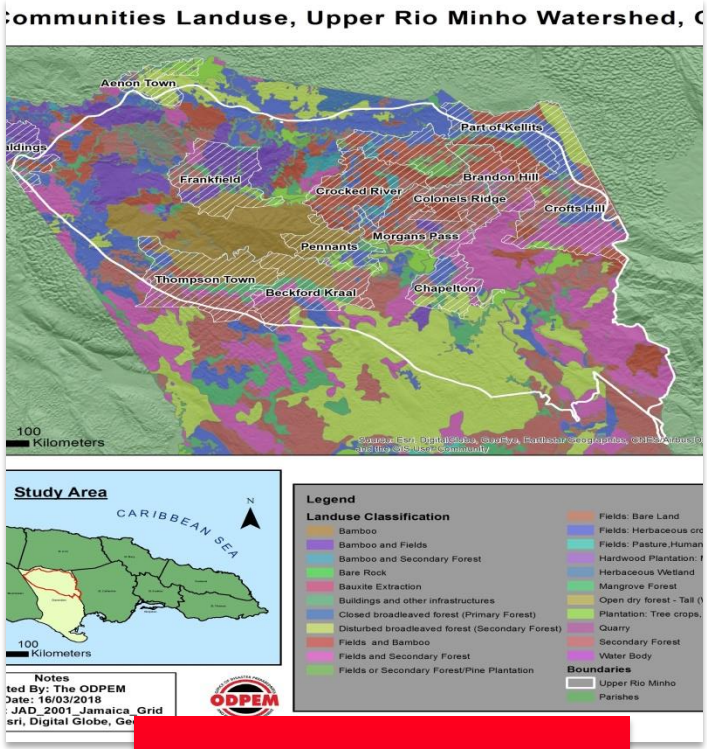
CREATING RISK? -



Farming Communities



Land Use

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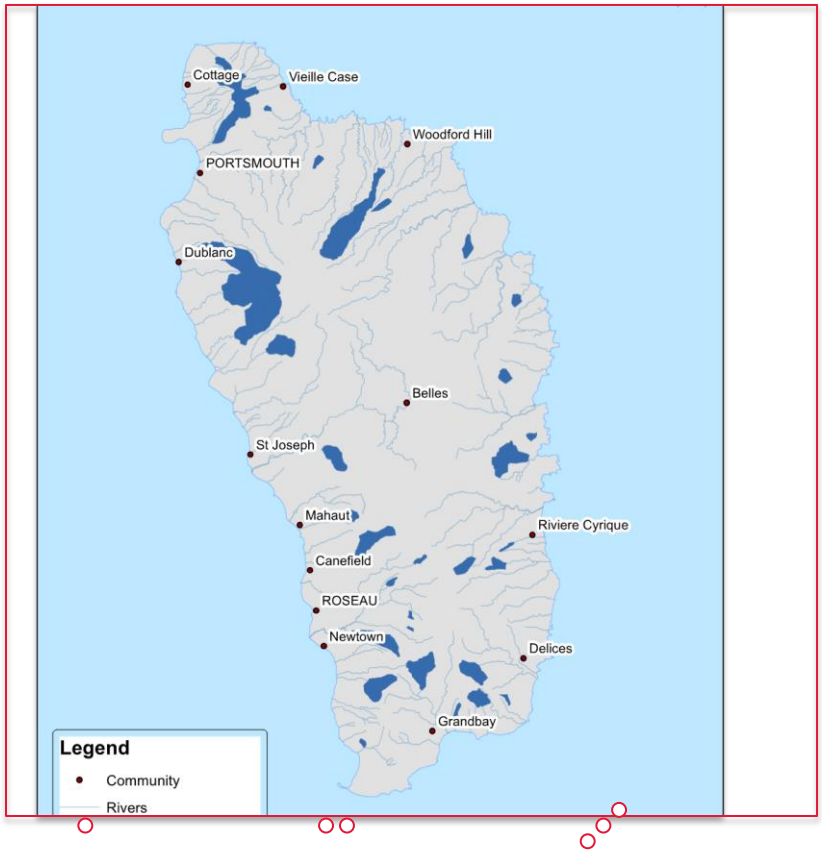
IMPACT OF FLOODING - JAMAICA

IMPACT OF FLOODING

DOMINICA



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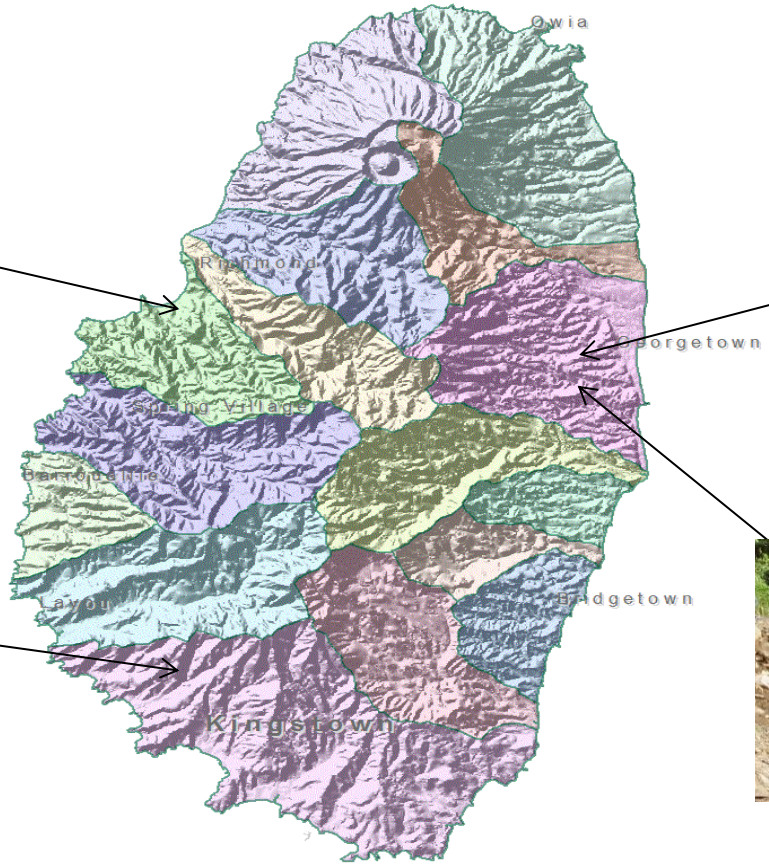
IMPACT OF MARIA ON DOMINICAN

IMPACT OF FLOODING - SVG

Chateaubelair

Georgetown



Buccament

Congo Valley

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ST. VINCENT AND THE GRENADINES

Figure 83: Evidence of landslides and land slippage along the Leeward Highway north of Dark View near N13.28751 W61.24955. Minor road at N13.29209 W61.23801 undermined and damaged.

ST. VINCENT AND GRENADINES

Significant debris flows along the river near Richmond. Recent landslides are also apparent in the photograph.

Observed landslide in the Rose Bank area that caused deaths. Note also the large sediment plume in the ocean from the large amount of silt transported through the community.

Inundated Vinlec substation along the Cumberland River near Spring Village

Silted reservoir in the upper portion of the Cumberland River watershed

Figure 12c: Areal photographs of impacted areas taken during the island fly-over.

ST. VINCENT AND THE GRENADINES

Examples of eroded slopes in the northeast of the island.

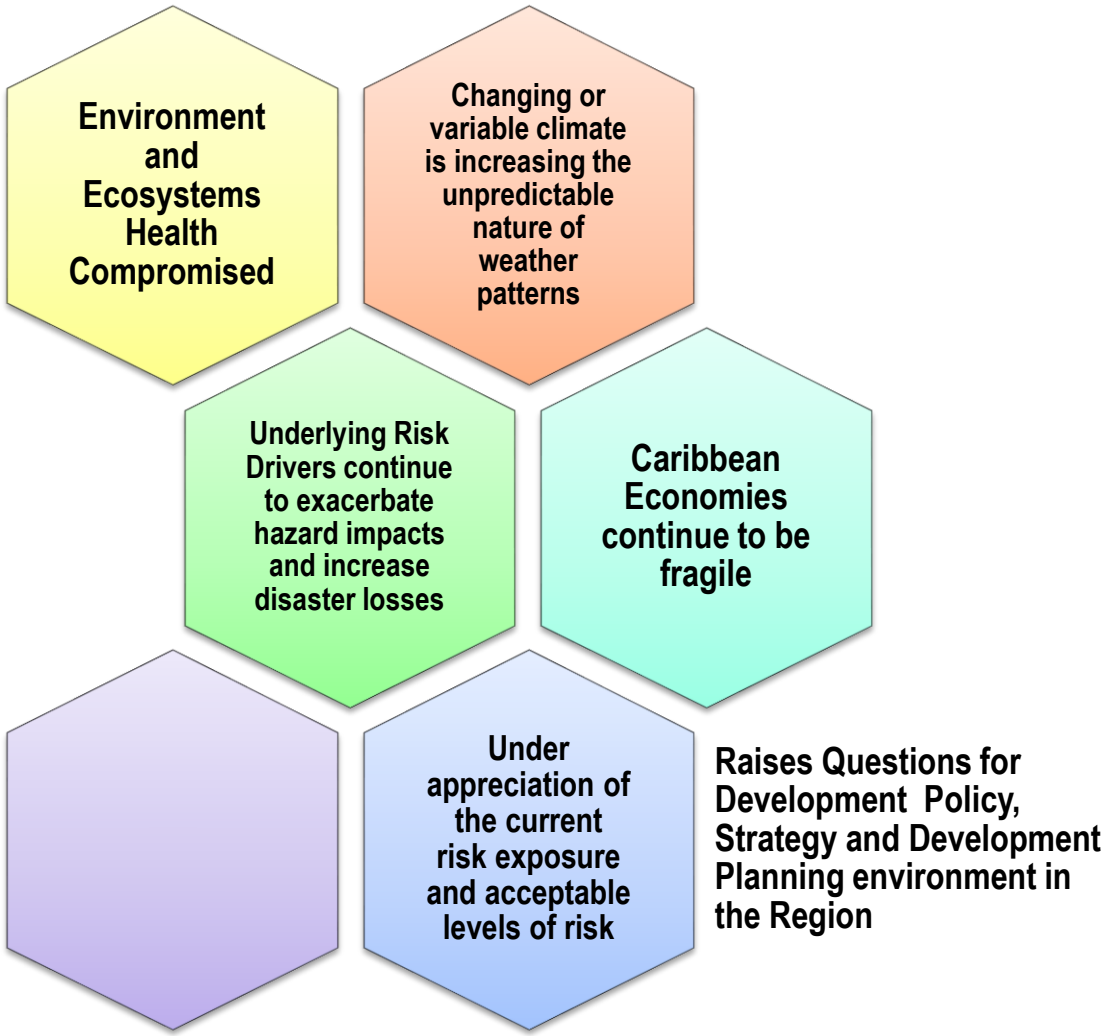
Partial failure of road support along the Windward Highway near Orange Hill cause by overland flow undermining the abutments.

Heavily damaged bridge on the Windward Highway at the community of Fancy.

A second damaged bridge at the community of Fancy.

Figure 12b: Areal photographs of impacted areas taken during the island fly-over.

LESSONS RECONFIRMED



IMPACT OF THE STATE OF FOREST ON RESILIENCE EFFORTS

- Caribbean Forest have been cleared or degraded historically
- Some reprieve with the abandonment of agriculture lands
- Forest loss degradation are compromising its role to provide ecosystem services
- IPCC Scenarios suggest significant impact on forest species in Dominica
- Storms and Hurricanes also reduces the quality of the forest

FOREST MANAGEMENT ARRANGEMENTS (SELECTED STATES)

Countries	National Forest Policy	Forest with Management Plan	Forest with Management Arrangements	Trend in Forrest Cover between (2005-2010)
DOMINICA	Yes (1949)	No	Yes	Decreasing
JAMAICA	Yes (2001)	Yes	Yes	Decreasing
St. Vincent and the Grenadines	No	No	Yes	Decreasing
St. Lucia	Yes (2008)	No	Yes	Decreasing
Grenada	Yes (1999)	No	Yes	No Change

CURRENT CHALLENGES IN FOREST MANAGEMENT

- Dominica
  - Laws and policies are outdated
  - No national land use policy or plan in place
  - The Kalinago (indigenous community) has little forest stand remaining given the extensive agricultural use
  - Forestry Dept. does not have the authority to protect or manage forest in this area.
- Grenada
  - Policies appear adequate but strategic management plans need updating to reflect emerging issues of a changing climate with a special empahsis on inland forest and wetland ecosystems

CURRENT CHALLENGES IN FOREST MANAGEMENT

- St. Vincent and the Grenadines
  - Government in process of developing forest policy to address climate change impacts and to address the role forest plays in the country.

RECOMMENDED STRATEGIES

- Jamaica found to be the only state so far that is applying a structured forest management processes. Efforts appear planned, adaptive/proactive including prospective approaches to the management of risks.
- All the other states seem more at a business as usual state or at best reactive.

RECOMMENDED STRATEGIES

- Hillside Management
- Conduct periodic Hazard and Risk Assessment in the Sub-Sector
- Institute Rainfall run off management
- Incorporate Watershed Management and Flood Risk Management into land use and land management plans
- Analyze, Plan and implement re-afforestation actions to improve watershed performance during hurricane and flood situations
- Improve institutional capacity to protect and manage public and private forests

THE CONTEXT FOR REGIONAL REFLECTION

- Findings of the CDM Strategy 2007-2012 Review that identified Physical and Environmental Planning as a major gap in efforts to achieving Risk Resilience
- Outcomes of the HFA and suggested focus of the SDF pointed to weaknesses in the efforts to tackle the underlying drivers of risk

COMPREHENSIVE DISASTER MANAGEMENT

What is CDM?

- CDM is the management of all hazards through the disaster management cycle by - *public and private sectors, all segments of civil society and the general population*
- CDM involves **risk reduction & management** and **integration of vulnerability assessment** into the development planning process

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ADVANCING CDM IMPLIMENTATION AT THE NATIONAL LEVEL

REACTIVE

PROACTIVE

- Focus evolved from principally concerned with response to events to one based on disaster risk reduction through greater attention to mitigation, preparedness and recovery
- This paradigm shift in our approach to risk management necessitates more proactive and strategic planning to galvanize the necessary support by decision makers, encourage sector mainstreaming of CDM, enhance knowledge management on CDM and strengthen community resilience

THE CDM STRATEGY 2014-2024

Regional Goal: Safer more resilient and sustainable Caribbean States

Institutional Strengthening

- DM Organizations (national and regional) Strengthened for Supporting and monitoring the advancement of DRM
- CDM Integrated into policy, strategy, legislation
- Development Partner Programming aligned
- Strengthened Coordination for preparedness, response and recovery
- Adequate resourcing of CDM Programming

Knowledge Management

- Regional Network for Risk Informed Decision Making
- Integrated System for fact based decision making at all levels
- Incorporation of Community and Sector Knowledge in Risk Assessments
- Education and Training materials, standardized, improved and applied

Sector Integration

- Strategic Disaster Risk Management Programming for Priority Sectors
- Hazard Information integrated into development planning and programming for priority sectors
- Incentive programs developed and applied for the promotion of risk reduction/CCA in infrastructure investment

Community Resilience

- Standards for safe communities developed and applied
- Community Based Disaster Management Capacity built/strengthened
- Community EWS integrated, improved and expanded
- Community Livelihoods safeguarded

Gender

Climate Change

Information Communication Technology

Environmental Sustainability

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ADVANCING CDM IMPLIMENTATION

Recommended key tools for CDM implementation, mainstreaming and institutionalization

NATIONAL CDM POLICY FRAMEWORK	NATIONAL CDM STRATEGY	LEGISLATIVE FRAMEWORK	MULTI YEAR PROGRAMMING	MONITORING EVALUATION AND REPORTING
• Long term policy framework for implementing CDM	• National Plan of Action to implement the Policy	• Prescribed actions to be followed by the society to ensure that there is compliance with the principles of sound management of risks	• A road map for countries to implement the principles of CDM and monitor its achievements	• Measurement of Progress being made towards expected results and documenting lessons for future enhancement of the national programming

MODEL COMPREHENSIVE DISASTER MANAGEMENT POLICY

VISION	• Sustainable Development through Safer and Resilient Communities
POLICY GOALS	• To promote sustainable development through the reduction of disaster risks and vulnerability of society to natural and man-made hazards. • To integrate CDM into all aspects of development and at all levels of everyday activity by the entire society
POLICY OBJECTIVE	• To strengthen national and community level capacity for adaptation, management, and coordinated response to natural and technological hazards, and the effects of climate change

THANK YOU

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