The Role of Forest in Building Resilient Caribbean Communities

Presented by
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Executive Director, CDEMA
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
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 Climate sensitive hazards on these states and further examine measures towards broader community and state level 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 DISPLACEMENT
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Country</th>
<th>Losses (US $ Millions)</th>
<th>%GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Ivan</td>
<td>Grenada</td>
<td>889</td>
<td>200</td>
</tr>
<tr>
<td>2004</td>
<td>Ivan</td>
<td>Jamaica</td>
<td>575</td>
<td>8</td>
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<tr>
<td>2007</td>
<td>Dean</td>
<td>Jamaica</td>
<td>329.34</td>
<td>10</td>
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<tr>
<td>2007</td>
<td>Dean</td>
<td>St. Lucia</td>
<td>6.4</td>
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<tr>
<td>2010</td>
<td>Tomas</td>
<td>St. Lucia</td>
<td>110.89</td>
<td>14</td>
</tr>
<tr>
<td>2012</td>
<td>Sandy</td>
<td>Jamaica</td>
<td>107</td>
<td>0.8</td>
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<tr>
<td>2013</td>
<td>Trough</td>
<td>Dominica</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Trough</td>
<td>St. Lucia</td>
<td>99.88</td>
<td>8.3</td>
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<tr>
<td>2013</td>
<td>Trough</td>
<td>St. Vincent</td>
<td></td>
<td></td>
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<tr>
<td>2015</td>
<td>TS Erika</td>
<td>Dominica</td>
<td>483</td>
<td>96</td>
</tr>
<tr>
<td>2017</td>
<td>Maria</td>
<td>Dominica</td>
<td>1.313</td>
<td>225</td>
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<tr>
<td>2017</td>
<td>May Rains</td>
<td>Jamaica</td>
<td>&gt;20</td>
<td>-</td>
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</table>
IMPACT OF FLOODING - JAMAICA
IMPACT OF MARIA ON DOMINICAN
IMPACT OF FLOODING - SVG

Chateaubelair

Georgetown

Buccament

Congo Valley
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.
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.
Figure 12b: Areal photographs of impacted areas taken during the island fly-over.
Disaster loss reduction and development of a culture of safety

LESSONS RECONFIRMED

Environment and Ecosystems
Health Compromised

Changing or variable climate is increasing the unpredictable nature of weather patterns

Underlying Risk Drivers continue to exacerbate hazard impacts and increase disaster losses

Caribbean Economies continue to be fragile

Under appreciation of the current risk exposure and acceptable levels of risk

Raises Questions for Development Policy, Strategy and Development Planning environment in the Region
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)

<table>
<thead>
<tr>
<th>Countries</th>
<th>National Forest Policy</th>
<th>Forest with Management Plan</th>
<th>Forest with Management Arrangements</th>
<th>Trend in Forrest Cover between (2005-2010)</th>
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<tbody>
<tr>
<td>DOMINICA</td>
<td>Yes (1949)</td>
<td>No</td>
<td>Yes</td>
<td>Decreasing</td>
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<tr>
<td>JAMAICA</td>
<td>Yes (2001)</td>
<td>Yes</td>
<td>Yes</td>
<td>Decreasing</td>
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<tr>
<td>St. Vincent and the Grenadines</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Decreasing</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>Yes (2008)</td>
<td>No</td>
<td>Yes</td>
<td>Decreasing</td>
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<tr>
<td>Grenada</td>
<td>Yes (1999)</td>
<td>No</td>
<td>Yes</td>
<td>No Change</td>
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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 emphasis 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
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
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.
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.
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 Change**

**Information Communication Technology**

**Environmental Sustainability**
Recommended key tools for CDM implementation, mainstreaming and institutionalization

- **NATIONAL CDM POLICY FRAMEWORK**
  - Long term policy framework for implementing CDM

- **NATIONAL CDM STRATEGY**
  - National Plan of Action to implement the Policy

- **LEGISLATIVE FRAMEWORK**
  - Prescribed actions to be followed by the society to ensure that there is compliance with the principles of sound management of risks

- **MULTI YEAR PROGRAMMING**
  - A road map for countries to implement the principles of CDM and monitor its achievements

- **MONITORING EVALUATION AND REPORTING**
  - 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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