



Model National Recovery Framework

Enhancing Disaster Recovery among CDEMA Participating States: Final Version

14 September 2014

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Preface

The Caribbean has an unusually high vulnerability to disasters, which have the potential to curtail hard-won advances in social, economic, infrastructural development. Given this fact, it is incumbent on regional Governments and disaster management stakeholders to support effective disaster recovery planning, towards a rapid return to normalcy after the impact of an event. As the institution charged with safeguarding the region against these consequences, the Caribbean Disaster Emergency Response Agency (CDEMA) has embarked on the creation of a novel Model National Recovery Framework (MNRF) to guide disaster recovery in its Participating States. This Framework is to serve as the essential supporting structure to disaster recovery within CDEMA's domain, and contains the essential definitions, policies and supporting actions to facilitate effective and efficient recovery. It may be used to enhance existing recovery plans – given the wide scope of hazards and novel approach to measuring recovery presented – or may serve as a stand-alone guide. It is designed specifically for CDEMA Participating States, which typically have small economies that are vulnerable to a diverse range of hazards. Finally, this Framework is accompanied by an Adaptation Guide designed to assist with its adoption by individual Participating States.

Authorship and Acknowledgements

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Glossary

The following list defines acronyms used throughout this document.

Acronyms:

AG	Adaptation Guide
CCA	Climate Change Adaptation
CDEMA	Caribbean Disaster Emergency Management Agency (formerly CDERA)
CDERA	Caribbean Disaster Emergency Response Agency
CDM	Comprehensive Disaster Management
DRR	Disaster Risk Reduction
GIS	Geographical Information System/s
IPCC	Intergovernmental Panel on Climate Change
MNRF	Model National Recovery Framework
PS	Participating State
SIDS	Small Island Developing State
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme

1 Background

1.1 The Hazard-Prone Caribbean

The Caribbean is one of the most hazard prone regions on earth [Rasmussen, 2004] and the human misery that normally accompanies national disasters is intense. Therefore, the Caribbean is one place where the built environment (which includes buildings, transportation and utility networks, and coastal structures) should be constructed in a strong and durable manner. A relatively strong and durable built environment in Sint Martin resulted in significantly reduced recovery efforts following Hurricane Luis in 1995. [Gibbs, 1996]

Despite decades of conscientious planning, the general trend appears to be that the built environment is becoming more vulnerable to damage, principally due to sub-standard construction practises and inadequate maintenance. The latest United Nations Global Assessment Report on Disaster Risk Reduction [UN GAR, 2013] has determined that several Caribbean countries are predicted to suffer probable maximum losses of over 80% of their gross fixed capital formation (buildings, equipment and infrastructure) if impacted by a moderate earthquake, or hurricane (see Table 1).

Table 1: Description of UN Predicted Probable Maximum Losses (UN GAR, 2013)

Country	Hurricane Losses					Earthquake Losses				
	(% Gross fixed capital formation)					(% Gross fixed capital formation)				
	10-20%	20-40%	40-60%	60-80%	> 80%	10-20%	20-40%	40-60%	60-80%	> 80%
Antigua & Barbuda										
Bahamas, The						Data not available				
Barbados										
Belize						Data not available				
British Virgin Islands										
Dominica										
Grenada										
Jamaica										
Saint Lucia										
Saint Vincent & the Grenadines										
Trinidad & Tobago										

Despite our planners' best efforts, most of the Caribbean countries assessed have been weighed in the proverbial balance and have been found wanting; over 20% of losses require a very significant and expensive national recovery effort. However, the unfavourable UN assessment can either be the catalyst that spurs the Caribbean into meaningful action, or just another dire warning to be dismissed.

Given the Governments' critical role in the recovery process, meaningful political support for comprehensive disaster management is critical.

1.2 The 2000 Model Recovery Plan

Following the impact of Hurricane Lenny in 1999, and the ensuing infrastructural and environmental damage to a number of CDEMA Participating States, CDEMA (then CDERA) commissioned the development of a model national recovery plan. This project was carried out with the support of the CDEMA Coordinating Unit (CU) and the United Nations Development Programme, and provided a set of operational guidelines for disaster recovery in the Caribbean. However, over the last decade and a half, a number of new issues have emerged relevant to recovery planning, necessitating the creation of a new and updated framework for disaster recovery.

1.3 National Consultations

Three priority countries were highlighted for their advancement in the area of disaster recovery planning and management. These were: Jamaica, Saint Lucia and the Turks and Caicos Islands. However, in order to maximise the amount of valuable information gathered, the team consulted with a total of 7 Participating States, including: Jamaica, St. Lucia, the Turks and Caicos Islands, Montserrat, the British Virgin Islands, St. Kitts and Nevis and Anguilla. These consultations were facilitated through a combination of video conferences, on-line surveys and an in-depth review of their national recovery policies/frameworks. The findings of these national consultations set the foundation upon which this MNRF was developed. These findings gave rise to the following attributes of an effective recovery strategy:

- A clear definition of recovery;
- Recovery planning and management in phases;
- An effective organisational structure for recovery coordination;
- The use of data collection and sharing before and after a disaster;
- A clearly defined recovery period;
- A list of clear policy recommendations; and
- The consideration for "what-if" scenarios in the form of contingency planning.

1.4 Political Support

While political support for Comprehensive Disaster Management has been enunciated at the national and regional levels, the UN GAR 2013 forecasts suggests that enunciated political support is insufficient. What appears to be required is demonstrated political support evidenced by enabling

legislation, effective regulation and sufficient resources to carry out the recovery plans. Funding for recovery actions is normally at the discretion of the Ministers of Finance, who are influenced by the economic theories that they adopt.

There are two divergent theories on the economic impacts of natural disasters, each with compelling supporting arguments. One is that natural disasters have no effect on economic growth and that Governments should be risk-neutral, and the other is that natural disasters can setback economic growth, so Governments should play a more active role in mitigating potential damage. [Hochrainer, 2009]

While the former position may hold true for larger economies, the evidence for small economies is incontrovertible – major disasters have setback the national economies of small Caribbean states. [UN GAR, 2009] Figure 1 provides compelling evidence for both economic theories, and supports the position that smaller economies are negatively affected by natural hazards. The blue line represents the forecasted growth and the red line represents actual growth for large and small economies.

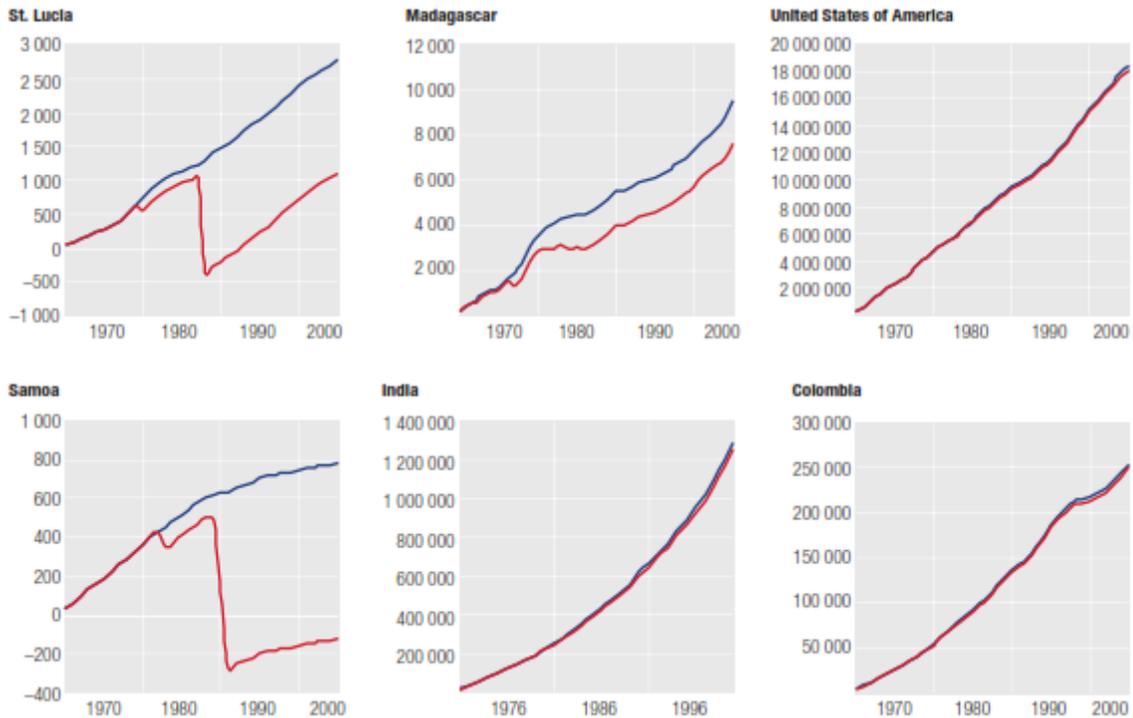


Figure 1: Impact of Disasters on the National Economy of Select Countries
(Source: UN GAR 2009)

Figure 1 clearly shows a significant difference in the impact of disasters on the growth of small national economies (Saint Lucia, Madagascar, Samoa), when compared to larger ones (United States of America, India, Colombia). For the small island states presented, a significant reduction in

economic productivity coincides with the impact of each major event. Some of the more economically significant hurricanes that have affected the Caribbean are provided in Table 2. Damage totalling over 60% of a country’s gross domestic product (GDP) is catastrophic.

Table 2: Damage from Hurricanes (Source World Bank and EM-DAT)

Country	Date	Hurricane	Damage (%GDP)
St Lucia	1988	Gilbert (Tropical Storm)	365
Grenada	2004	Ivan	212
Montserrat	1989	Hugo	200
St Kitts & Nevis	1998	Georges	140
Dominica	1979	David & Fredrick	101
Sint Maarten	1995	Luis	100
St Kitts and Nevis	1995	Luis	85
St Lucia	1980	Allen	66
Jamaica	1988	Gilbert	65
Antigua and Barbuda	1995	Luis	61

The damage to the Saint Lucia economy caused by the impact of Hurricane Allen in 1980 and Tropical Storm Gilbert in 1988 is highlighted in Table 2. The effect of these events on Saint Lucia’s forecasted economic growth is further illustrated in Figure 2 (red line).

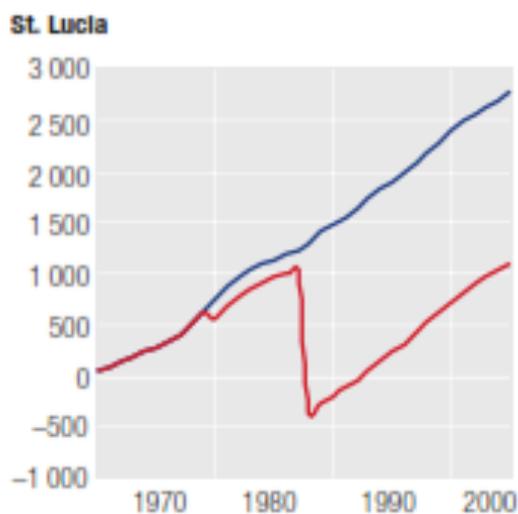


Figure 2: St Lucia's Forecast (blue) and Actual (red) Economic Growth Paths
(Source: UN GAR 2009)

The challenge presented to regional Governments and disaster management stakeholders, therefore, is: 1) to enable the expeditious return to the pre-disaster economic growth path following the impact of an event; and 2) to facilitate the creation of more resilient state based on lessons learned from the event.

2 Introduction

2.1 Comprehensive Disaster Management

The Comprehensive Disaster Management (CDM) approach divides disaster management into four distinct phases: *mitigation* and *preparedness* (occurring before the event), and *response* and *recovery* (occurring afterwards). However, in reality, disaster management is a fluid process where actions in each phase of the cycle must consider the whole. This Framework focuses on the recovery phase of the *CDM cycle*, while considering its interaction with the three remaining phases.

Following a national disaster, a country normally enters a period of recovery that can be defined as the restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors. [UNISDR]

Depending on the amount of sustained damage, recovery operations can either follow, or be concurrent with response operations. Response can be defined as the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety, and meet the basic subsistence needs of the people affected. [UNISDR]

With Comprehensive Disaster Management, the cost, duration and magnitude of the recovery efforts are determined by the policies and actions taken prior to the disaster event. The purpose of this model national recovery framework is to minimize the recovery effort. This is done by identifying the policies and principal actions necessary to minimize the socio-economic impacts of disasters in the Caribbean.

2.2 Measurement Indicator

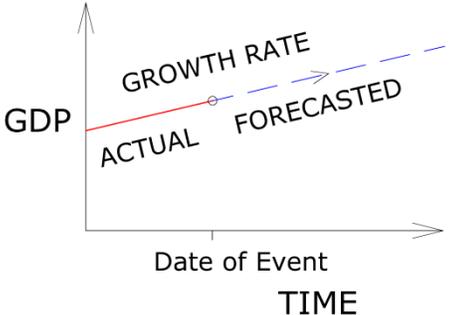
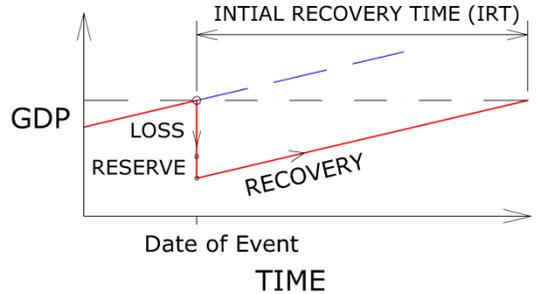
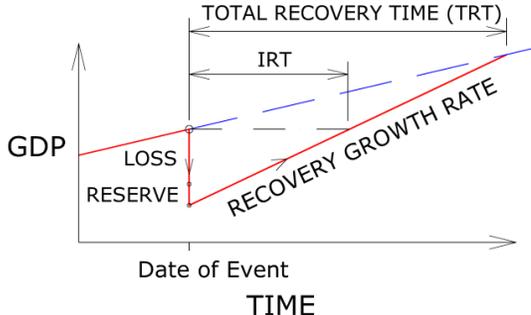
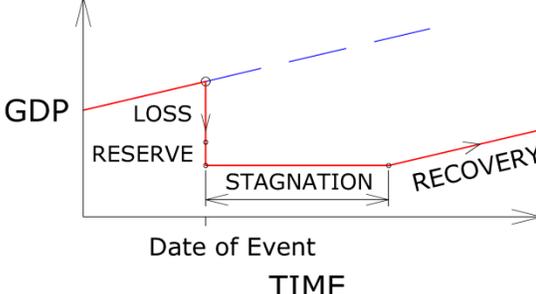
This model builds upon the work of previous national recovery plans. All of the national recovery strategies and plans reviewed contain relevant initiatives which, if implemented, should improve the resilience of the country. However, the principal omission appeared to be an accurate definition of the scope and duration of the formal recovery effort. Without a predefined end, recovery efforts can seem less efficient, less effective, less planned, and less likely to receive sustained funding.

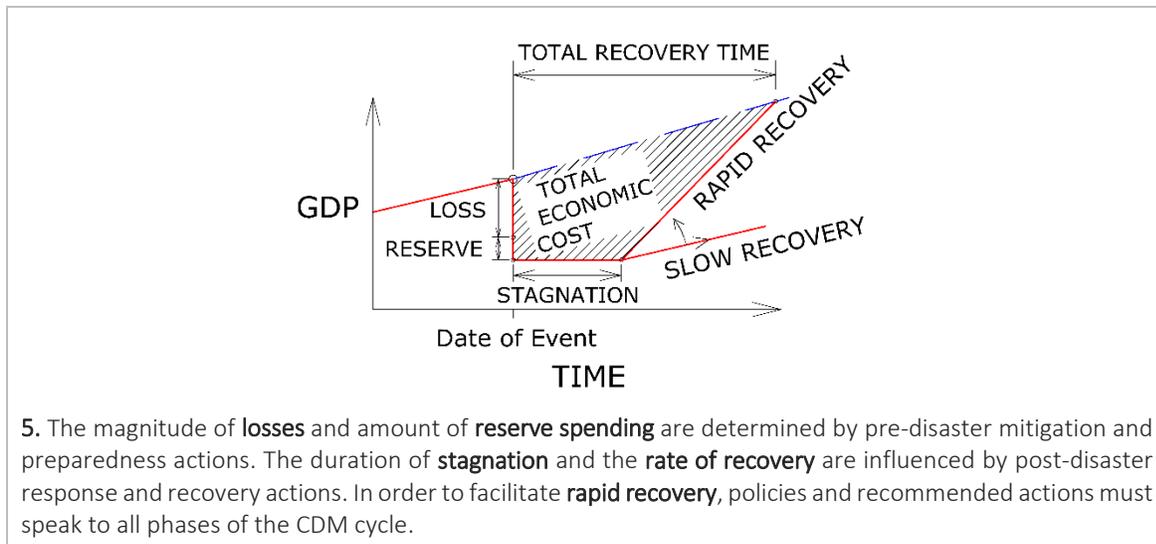
There are several socio-economic human development indicators that can be used to measure the progress and duration of the recovery effort. However, the most judicious means of doing so in the context of CDEMA's Participating States is the economy. Small states with relatively small economies normally have only one airport, one deep water port, one referral hospital, one major power generating plant, and one major highway. Therefore, when a country with a small economy is impacted by a major hazard, it tends to become a national disaster that affects the national economy.

There are diverse variables that make up the national economy. Resilient businesses can start to recover on the same day as the event, while less prepared businesses can remain closed for years

after the event. After the disaster event, there may be a period of stagnation during the emergency response activities. The rate of recovery can be slow or rapid depending on the availability of human and financial resources. The formal national recovery period ends once the national economy has achieved a reasonable pre-disaster forecasted level. These concepts are explained in Table 3.

Table 3: Recovery Time Concepts [Walbrent College, 2012]

 <p>1. Prior to the disaster event, the Central Bank would have forecasted an economic growth rate.</p>	 <p>2. The event results in losses of quantifiable damage plus reserve spending on emergency response operations. The Initial Recovery Time is measured from the date of the event to the date when the GDP has returned to the pre-disaster level.</p>
 <p>3. The Total Recovery Time is defined as the time from the impact of the disaster event until when the economy reaches the pre-disaster forecasted level.</p>	 <p>4. Economic Stagnation can occur if the magnitudes of the damage and/or the response operations delay the start of major recovery operations.</p>



2.3 Key Considerations

2.3.1 Disaster Risk Reduction

Disaster Risk Reduction (DRR) is a crucial element of the CDM approach, and can be described as any set of actions which seek to minimize vulnerabilities and disaster risks throughout a community or society [CDERA 2007]. To be truly effective, DRR must employ a holistic approach, making use of the following:

- Risk awareness and assessment including hazard and vulnerability/capacity analysis;
- Knowledge development including education, training, research and information;
- Public commitment including institutional strengthening, legislation and community action;
- Application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and the provision of financial instruments; and
- Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities

2.3.2 Climate Change

Global climate change is projected to have an adverse impact on the frequency and intensity of hydrometeorological hazards in the Caribbean. According to leading sources, the projected effects of climate change on the region in the coming decades include: sea level rise; increased land, air and sea temperatures; an increase in extreme storm events; El Niño Southern Oscillation-induced drought conditions; and a general change in the seasonal distribution of rainfall. [IPCC, 2007; Chase, 2008; McSweeney *et al.*, 2008; UNEP, 2008; Cashman *et al.*, 2010] The potential for this phenomenon to cause catastrophic damage to national economies requires adequate political and financial support for climate change adaptation programmes across the region.

2.3.3 Gender

Although gender relates to men, women, boys and girls, overlooking gender issues appears to have its greatest impact on females as their economic insecurity increases, and they experience a dramatic increase in their workload, deterioration in working conditions and a slow recovery from economic losses. [Enarson, 2000] This is particularly true for resource-poor nations where women may already be disadvantaged.

According to the United Nations Development Programme [UNDP, 2012], post-disaster challenges unique to women and girls in Small Island Developing States (SIDS) include: a typical higher level of poverty; extensive responsibilities in caring for children, younger siblings and elderly relatives; a lack of access to land and resources; and a disproportionately high vulnerability to violence, abuse and rape (including coerced transactional sex in exchange for food and other relief aid, which itself is a form of rape). Furthermore, disasters are known to destroy imperative social support networks for women and girls – principally due to the loss of adult male relatives – which further increases their vulnerability following disasters (Institute for Justice & Democracy in Haiti. [IJDH], 2010)

2.4 Principal Assumptions

Every plan is founded on assumptions which should be reasonable and verifiable. This framework assumes the following:

1. Most of the people who will be responsible for coordinating and implementing the recovery plans will not view it as their core function. Therefore, they may not attach critical importance to it. While the recovery operations are not expected to be executed flawlessly, an apathetic approach will exacerbate the situation. People will make mistakes, programmes will be run inefficiently, budgets will be exceeded, stakeholder needs will not be met, and stakeholders will complain.
2. The disaster will occur during economic challenges, where limited funds are available to adequately fund pre-disaster infrastructural maintenance and improvements, and post-disaster recovery operations.
3. Prior to the disaster, there will be minimal stores of imported supplies (fuel, food, raw and processed materials, and spare parts) due to the priority given to protecting foreign currency reserves.
4. Donor aid will be insufficient to directly fund economic recovery. Donor funds may meet some of the immediate food, shelter, and security needs, but not economic recovery.

This recovery framework is based on these assumptions being realised. To address these principal assumptions, the following actions should be considered.

- a) Policies and plans should be clear and robust enough to be followed in a depressingly negative environment.
- b) Redundancy and accountability should be built into all key executing positions.
- c) Priority should be given to important economic initiatives that result in high benefits.
- d) Minimum levels of stores should be identified and maintained.
- e) Diverse recovery funding sources should be identified.

3 Scope of Recovery

3.1 Phases of Recovery

Recovery can be divided into three distinct sub-phases (short-, medium- and long-term) based on the typical needs of affected communities following a disaster event. Such a phased approach to disaster recovery can help stakeholders to better define and meet needs throughout the recovery effort. Figure 3 gives a brief description of the sub-phases of recovery, as well as typical timelines.

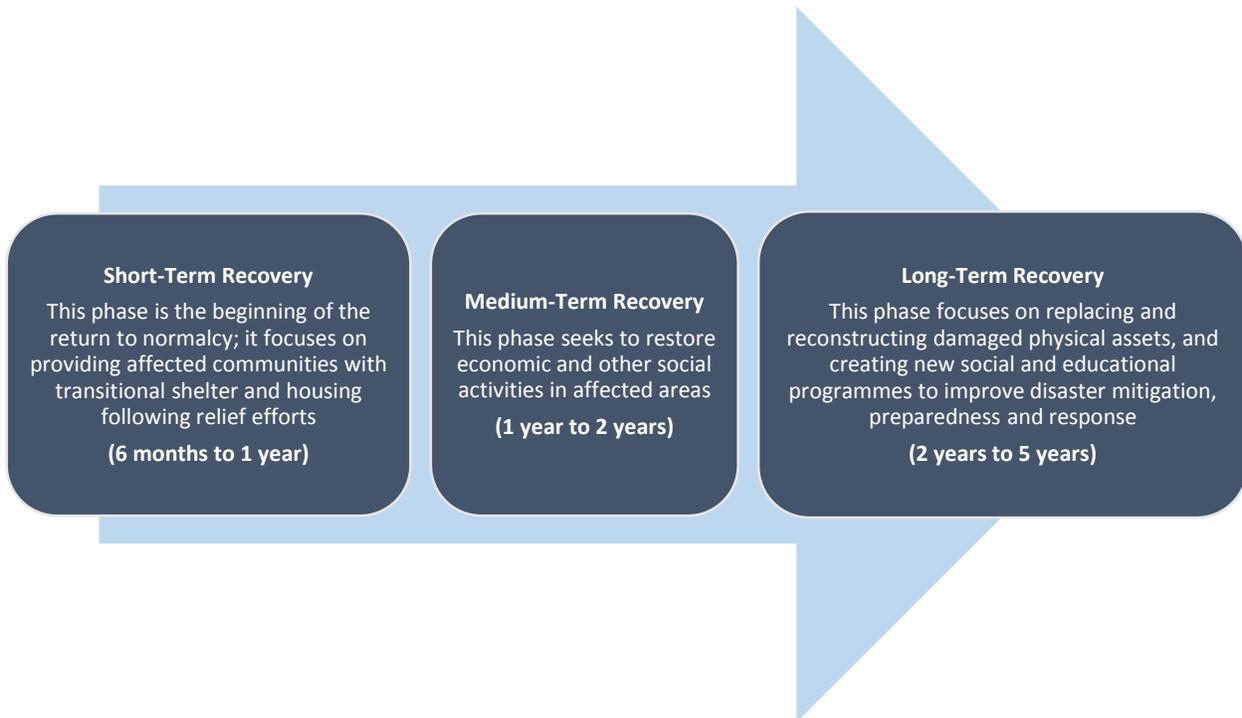


Figure 3: The Three Sub-Phases of Recovery

3.2 Economic Recovery

National social and infrastructural recovery is normally facilitated by national economic recovery. Typical major economic sectors in the Caribbean follow.

- Agriculture, Forestry & Fishing
- Manufacturing
- Financial services
- Tourism
- Professional services
- Construction services
- Natural resources (oil, mining)
- Air and sea ports

3.3 Supporting Social Services

Some sectors of the national economy are dependent on at least a partial recovery of infrastructure that supports normal social activities. Some critical economic recovery supporting social services (and their infrastructure) follow.

- Education (schools)
- Health (hospitals and clinics)
- Public transportation (buses and road networks)
- Fire, police, coast guard, and defence force emergency services (stations, vehicles, communications equipment)

3.4 Vulnerable Groups

While individual and community needs will vary, special attention should be paid to the following vulnerable groups (and locations) during the recovery process:

- Babies (nurseries)
- Children (schools)
- Elderly and infirm (geriatric care facilities)
- Single parents of small children
- Those made unemployed by the disaster
- Expatriate residents
- Tourists (hotels)
- Inmates of institutions (police stations and prisons)
- Physically and mentally challenged persons (psychiatric care wards and institutions)
- Undocumented migrants (informal settlements)
- Squatters (informal settlements)

3.5 National Corrections

The recovery phase represents an opportunity to reduce the likelihood that subsequent hazardous events will result in the same intensity of national trauma that requires a similar level of response. Critical aspects to be corrected include:

- Vulnerable (weak and high maintenance) parts of the built environment
- Weak management processes
- Ineffective government policies
- Ineffective community programmes

4 Key Recovery Needs

It is tempting to identify every recovery related action imaginable in order to pursue the goal of a fully comprehensive recovery plan. Such a plan is relevant if unlimited resources are available. However, when resources are limited, a country is forced to do what is important. If important tasks are not identified, then limited resources can be diverted to completing unimportant tasks that only serve to increase the duration of economic stagnation.

In order to identify the scope of important recovery tasks, it is useful to understand the principal needs which require a response.

4.1 Families' Needs

The needs of each family are most likely dependent on the condition of their shelter. Therefore, following a damage assessment of their properties, there are likely to be two categories of families.

1. Those who can safely occupy their houses, and are in a better position to assist others.
2. Those who cannot safely occupy their houses, and require temporary shelters.

Those who can safely occupy their houses have the following principal needs.

- Potable water to drink, cook, and wash
- Water to flush toilets
- Communications (mobile and land line)
- Electrical power for powering appliances
- Natural gas for cooking
- Banks (ATM) to access funds and loans
- Supermarkets to access food
- Hardware stores for building supplies and tools
- Clinic and pharmacy for medical care and medicines
- Property insurance claims for any damaged insured property
- National insurance unemployment benefits if the business is inoperable
- Employment for income

Those who cannot safely occupy their residences have the following additional principal needs.

- Temporary shelters near their damaged residence
- Food & water
- Clothing
- Cell phone with power to recharge the battery

4.2 Employers' Needs

People are normally employed in the private or public sectors, and each business or government service is either operational or non-operational following the national disaster. Each category of employer (public and private sector) has different recovery needs. The principal recovery needs for the operational businesses and government services follow.

- Operational utilities
- Fuel
- Maintenance equipment/supplies/spare parts
- Operational equipment/supplies/spare parts
- Input materials/supplies/stock
- Banking
- Insurance
- Operational ports
- Expedited port clearance
- Cleared roads

The additional principal recovery needs for the non-operational public sector businesses and government services follow.

- Rental space
- Building designers and contractors
- Expedited development planning approvals

5 Needs Assessment and Resource Allocation

5.1 Post-Disaster Needs Assessment

Resource allocation following the impact of a hazard must first and foremost be evidence-based. The recommended approach to assist affected states in the identification and prioritization of needs is the Post-Disaster Needs Assessment (PDNA) methodology.

The PDNA methodology is a government-led exercise supported of the EU, the UN system and the World Bank. It brings together national and international stakeholders to align recovery efforts in a coordinated way. It is chiefly concerned with the collection of information on economic damages and losses and the recovery priorities, as well as the human development needs of the affected population and its vulnerable groups. This information is vital for estimating both the overall cost and duration of recovery; therefore, PDNA is a crucial prerequisite to effective and efficient disaster recovery.

A PDNA should commence as soon as possible after the impact of a disaster, ideally within the first weeks. It is facilitated by an accurate and up-to-date Geographical Information System (GIS) database developed prior to the impact of an event. The information gathered during the PDNA process is into a single consolidated assessment report used as a basis for formulating a comprehensive recovery strategy, which should guide the design and implementation of recovery initiatives (UNDP n.d.).

PDNA is based on two methodologies (Global Facility for Disaster Reduction and Recovery 2012):

1. **DaLA (Damage and Losses Assessment)** – a quantitative estimation of damage and losses in economic flows and the impact on the overall performance of the economy
2. **HRNA (Human Recovery Needs Assessment)** – assessments that determine the requirements for the full resilient recovery of human development for affected populations, including the restoration of governance systems

5.2 Resource Sources

Resources are normally urgently required in order to meet the recovery needs. They can come from diverse sources, some of which are listed below:

- Government and private sector stores.
- Businesses' local and international lines of credit
- Government increasing the national debt ceiling in order to borrow additional funds.
- Government can access funds from the Caribbean Catastrophe Risk Insurance Facility (CCRIF) if they paid sufficient and relevant premiums.
- Funds can be accessed through Government and non-government organizations (Red Cross, OAS, USAID, UNDP, World Bank, CDB, DFID, CIDA)

- The private sector can provide emergency services (e.g. road clearing) without cost or at discounted rates.
- Citizens in the Diaspora can transfer funds to their relatives and friends in the affected country.
- People can assist their needy neighbours.
- Businesses can share resources.

Some of these items are facilitated by functioning air and sea ports, communications, transportation, and security systems. Key persons should be identified and trained in the procedures for directing and/or accessing the listed funds and other resources. It is further recommended that CDEMA Participating State Governments explore alternative funding and resource pooling mechanisms at the regional scale.

5.3 Recovery Rates Agreements

During a disaster, the best and worst aspects of human behaviour can be displayed. Some use their own resources and put themselves in harm's way in order to assist those in desperate need. Others see it as an opportunity for gross profit by exaggerating the cost of their goods and services.

To reduce the risk of overpaying for goods and services, discussions should be held with local materials suppliers and service providers prior to the event, in order to obtain their rates for performing relevant components of the recovery activities. This list should be updated annually.

During recovery, all payments to businesses should be made by check upon verification of a descriptive invoice.

5.4 Resource Sharing Agreements

With some countries predicted to suffer over 80% of gross fixed capital formation, it is likely that many businesses will be negatively impacted. However, it is also likely that if two or more businesses had a resource sharing agreement, that the disruption to the consumer, and by extension to the national economy, can be minimised.

For example, if a hotel had a resource sharing agreement with a nearby restaurant, then if a hurricane damaged the hotel's kitchen, the restaurant will give priority to feeding that hotel's guests. However, if the hurricane damaged the restaurant's kitchen, then the restaurant would be allowed to remain open by sharing the hotel's kitchen.

Resource sharing agreements can also be negotiated across states. For example, hotels in neighbouring states can agree to share human and material resources following a national disaster event.

6 Coordination

Effective and efficient recovery relies on a well-coordinated effort, and a clear definition of roles and responsibilities among key actors. These persons must possess the requisite powers and technical expertise to ensure the success of the recovery effort and a rapid return to a pre-disaster economic growth path, or better.

Furthermore, given that recovery is to result in a more resilient state better equipped to manage future events, actors must be knowledgeable of the principles of disaster risk reduction and climate change adaptation; as well as sensitive to gender-specific needs and the needs of vulnerable groups. In order to effectively identify and prioritize the needs of affected sectors and communities, actors must also be well versed in PDNA procedures.

Due to the potential for disasters to devastate Caribbean economies, and the importance of recovery in ensuring states remain viable, it is recommended that this effort be led from the level of Cabinet via a coordinating committee. The decisions of this committee should then be directed to an implementing body, which should execute all major tasks in conjunction with the private and public sector and external organisations. The following two bodies are therefore recommended to facilitate an expeditious recovery effort:

1. A **Recovery Coordinating Committee (RCC)** – which will direct and coordinate the overall the recovery effort from the level of Cabinet; and
2. A **National Recovery Task-Force (NRT)** – which will carry out major tasks in conjunction with national, regional and international partners

Figure 3 illustrates the recommended organisational structure and outlines the relationship between the RCC, NRT and other stakeholders.

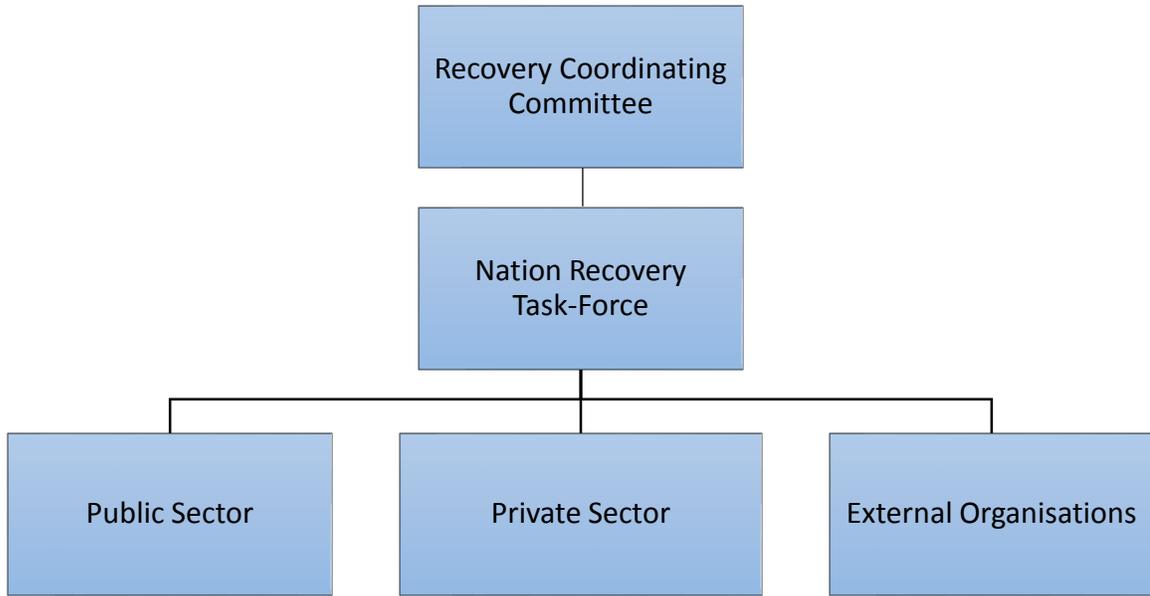


Figure 4: Recovery Organisational Structure showing Relationship between Bodies

It is anticipated that this structure will allow for transparency and accountability between bodies for the duration of the recovery effort. The make-up, roles and responsibilities of the RCC and NRT are outlined in Sections 6.1 and 6.2, respectively.

6.1 The Recovery Coordinating Committee

Despite its enunciated aspirations and commitments, a country can only do what it can afford to do. Throughout a Minister of Finances’ term in office, the Minister receives numerous requests for funding from other members of Cabinet, and must be convinced of the economic benefits before recommending the expenditure to parliament for approval. Because of this existing dynamic, as well as the critical nexus between recovery and availability and judicious allocation of financial resources, it is recommended that the RCC be chaired by the Minister of Finance of a country. It is also recommended that the Head of a National Disaster Office serve on the RCC as an advisor to members of Cabinet, due to their presumed in-depth knowledge of disaster management at the national scale. The Recovery Coordinating Committee should establish the National Recovery Task-Force and appoint a Chief Executive Officer to lead and be held accountable for its actions. The basic organisational structure of the RCC is given in Figure 4.

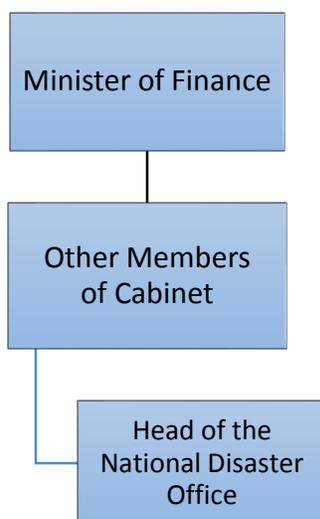


Figure 5: Organisational Structure of the Recovery Coordinating Committee

The role of the RCC is to direct the recovery effort. Its responsibilities are as follows:

- Hold a meeting immediately following the impact of a hazard to:
 1. Reach consensus on the prioritization of needs at the national level
 2. Establish the NRT
 3. Select suitably qualified persons to serve on the NRT; and
 4. Appoint a CEO of the NRT
- Prepare and issue requests for donor funds in conjunction with the NRT;
- Review and approve the recovery strategy, to be developed by the NRT;
- Approve the recommended recovery strategy of the NRT;
- Mobilise funds for use by the NRT;
- Manage the distribution of funds;
- Coordinate the overall recovery effort;
- Provide checks and balances on the NRT; and
- Periodically assess the recovery effort in conjunction with the NRT

6.2 The National Recovery Task-Force

The National Recovery Task-Force (NRT) is designed to execute all major tasks during the recovery effort. This body is to be comprised of: 1) the Permanent Secretaries of line Ministries; 2) representatives from the NDO, who should be well-versed in the execution of PDNA procedures; and 3) suitably qualified public and private sector professionals. The selection of public and private sector professionals will depend on the type and extent of the disaster, the magnitude of its effects, and the sectors affected. This group should include experts from all affected sectors, as well as persons knowledgeable of the social aspects of recovery, specifically gender-mainstreaming and the care of vulnerable groups. Recommended public sector professionals for the NRT include the Chief Planner and the Chief Technical Officer at the Ministry of Works or Transport, or their equivalents.

Due to the characteristic shortage of qualified personnel within individual states, public and private sector professionals on the NRT should ideally draw from a pool of sector experts across the region. It is recommended that CDEMA identifies a list of regional sector experts who may be called upon to serve on an NRT in the event of a disaster. It is further recommended that CDEMA champions the development of personnel exchange agreements between its Participating States.

It is recommended that the NRT be audited by independent auditors every 6 months (alternating rapid and detailed audits). Key positions should have at least 2 persons who can competently perform their roles, wherever possible. Figure 5 shows the basic organisational structure of the NRT.

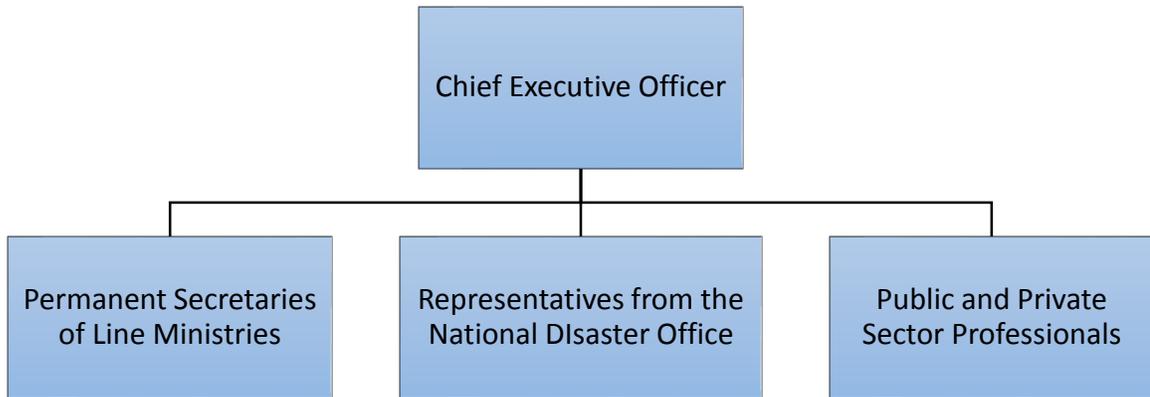


Figure 6: Organisational Structure of the National Recovery Task-Force

The role of the NRT is to execute all major tasks during the recovery process. Its responsibilities are as follows:

- Hold a meeting upon establishment to:
 1. Clarify individual roles and responsibilities;
 2. Discuss issues surrounding the collection of relevant data; and
 3. Assess the need for training in PDNA
- Carry out any necessary training sessions on PDNA;
- Collect and validate data necessary for the PDNA, including GIS-based data and information gathered through the DANA process;
- Carry out PDNA;
- Reach consensus on the prioritization of needs at the sector level;
- Formulate a recovery strategy based on the identification and prioritization of needs;
- Report on the recovery strategy to the RCC;
- Implement the recovery strategy following approval by the RCC;
- Report on the progress of the recovery effort to the RCC;
- Report to the RCC on the use of resources;
- Provide checks and balances on the RCC; and
- Periodically assess the recovery effort in conjunction with the RCC

More specifically, the responsibilities of individual groups on the NRT are given in Table 4.

Table 4: Responsibilities of individual groups on the NRT

NRT Group	Responsibilities
CEO	<ul style="list-style-type: none"> – Lead the NRT and delegate tasks to its members – Submit deliverables to the RCC – Interface with the public on the progress of the recovery effort, as necessary
Permanent Secretaries of line Ministries	<ul style="list-style-type: none"> – Highlight the needs of their respective Ministry in the formulation of the recovery strategy – Give an account of needs to the RCC, as requested – Liaise with their respective Ministers on the RCC
Representatives from the NDO	<ul style="list-style-type: none"> – Provide recommendations for the formulation of the recovery strategy in keeping with the principles of Comprehensive Disaster Management; key considerations should be disaster risk reduction, climate change adaptation and gender-mainstreaming – Liaise with the Head of the NDO on the RCC
Public and private sector professionals	<ul style="list-style-type: none"> – Provide sector-specific guidance on the identification and prioritization of needs and the allocation of resources – Give an account of needs to the RCC, as requested

6.3 Meetings and Periodic Assessment

The NRT should meet at least once per month throughout the following processes:

- PDNA training;
- Data collection and validation;
- Execution of the PDNA; and
- Formulation of the recovery strategy

Following approval of the recovery strategy by the RCC, the NRT and RCC should meet on a quarterly basis to evaluate the progress of the recovery effort. At these meetings, the NRT should report to the RCC on the progress of the recovery effort in individual sectors. Reports on the use and allocation of resources should also be submitted.

7 Recovery Policies

7.1 Rationale

To keep the focus on important and relevant actions while developing recovery policies, attention should be given to the following main questions concerning economic recovery. The economic recovery graph is reproduced in Figure 6 below for convenience.

- a) What can be done to reduce the immediate losses?
- b) What can be done to reduce the amount of reserve spending?
- c) What can be done to shorten the stagnation time?
- d) What can be done to increase the economic growth rate?

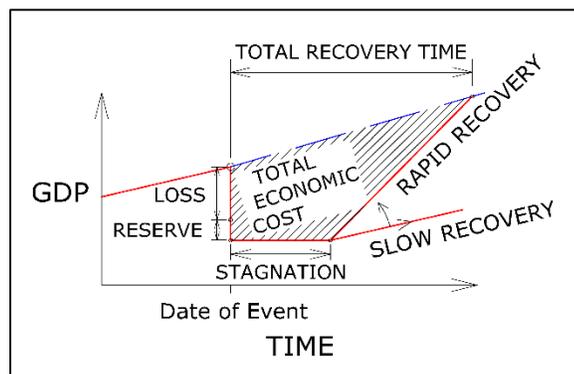


Figure 7: Economic Recovery Graph

Pursuing economic recovery automatically includes pursuing important socio-economic and environmental issues. It should be emphasised that a strong economy can provide the resources to pursue every imaginable recovery issue regardless of its importance. However, a weak and fragile economy may not even be able to provide the resources for critically important initiatives.

7.2 Policy Statements

Governments of CDEMA Participating States must support disaster recovery policies which facilitate effective and efficient recovery in the aftermath of a disaster. Policies should acknowledge Government's role in planning, preparing for, managing and monitoring the recovery effort. The following policy statements should be adhered to:

1. Prior to the impact of an event, Government will promote, fund and facilitate disaster risk reduction and climate change adaptation programmes in all sectors and at the community, regional and national levels.
2. Government will support the training of public and private sector professionals in PDNA, in conjunction with CDEMA, the UN, the EU and the World Bank.

3. Government will support the collection of data in a standard GIS format and encourage sharing of data among agencies, towards a successful PDNA programme.
4. Government will set appropriate rebuilding standards and provide sufficient resources to ensure that they are adequately enforced.
5. Government will encourage the negotiation of resource sharing agreements within the private sector, with appropriate incentives where necessary.
6. Government will maintain a list of material suppliers' and service providers' costs for foreseen recovery activities, and will update this list annually.
7. Government regards managing the recovery from disasters as one of its primary responsibilities, and will manage the recovery through a Coordinating Committee.
8. Government will take the lead in securing sufficient resources to provide immediate food, shelter, and security to its residents and visitors.
9. Government will facilitate the expeditious resumption of utilities and road networks services.
10. Government will facilitate the expeditious resumption of public and private sector employers, and supporting banking, insurance, and government services.
11. Government will provide sufficient funds to reopen air and sea ports, and expedite the clearance of aid and business supplies and personnel.
12. Government will create an enabling environment to further diversify the national economy.
13. Government will create an enabling environment to reduce the cost of doing business.
14. Governments will promote personnel sharing initiatives between states to facilitate effective and efficient recovery.
15. Government will first use local and regional personnel, who will be supplemented by extra-regional personnel if necessary.

It is to be stressed that the above policy statements must be supported by appropriate legislation in order to be maximally effective. These are shown in a matrix (Table 5) that addresses the main 4 economic questions presented in Section 7.1 above.

Table 5: Table of Recommended Government Policies

Government Policies	Reduce Losses	Reduce Reserve Spending	Shorten Stagnation Time	Increase Economic Growth Rate
1. Prior to the impact of an event, Government will promote, fund and facilitate disaster risk reduction and climate change adaptation programmes in all sectors and at the community, regional and national levels.	Yes	Yes	-	-
2. Government will support the training of public and private sector professionals in PDNA, in conjunction with CDEMA, the UN, the EU and the World Bank.	-	-	Yes	Yes
3. Government will support the collection of data in a standard GIS format and encourage sharing of data among agencies, towards a successful PDNA programme.	-	-	Yes	Yes
4. Government will set appropriate rebuilding standards and provide sufficient resources to ensure that they are adequately enforced.	Yes	Yes	Yes	-
5. Government will encourage the negotiation of resource sharing agreements within the private sector, with appropriate incentives where necessary.	Yes	Yes	Yes	-
6. Government will maintain a list of material suppliers' and service providers' costs for foreseen recovery activities, and will update this list annually.	-	Yes	Yes	-

7. Government regards managing the recovery from disasters as one of its primary responsibilities, and will manage the recovery through a Coordinating Committee.	-	Yes	Yes	-
8. Government will take the lead in securing sufficient resources to provide immediate food, shelter, and security to its residents and visitors.	-	Yes	Yes	-
9. Government will facilitate the expeditious resumption of utilities and road networks services.	-	Yes	Yes	-
10. Government will facilitate the expeditious resumption of public and private sector employers, and supporting banking, insurance, and government services.	-	Yes	Yes	-
11. Government will provide sufficient funds to reopen air and sea ports, and expedite the clearance of aid and business supplies and personnel.	-	Yes	Yes	Yes
12. Government will create an enabling environment to further diversify the national economy.	-	-	-	Yes
13. Government will create an enabling environment to reduce the cost of doing business.	-	-	-	Yes
14. Governments will promote personnel sharing initiatives between states to facilitate effective and efficient recovery.	-	-	Yes	Yes
15. Government will first use local and regional personnel, who will be supplemented by extra-regional personnel if necessary.	Yes	Yes	Yes	Yes

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Annex 1: Scope of Hazards

Natural Hazards

Recovery means that there are hazard impacts that people must recover from. The hazards can be local or national, with varying magnitudes, resulting in varying amounts of damage. The natural hazards that can impact the Caribbean follow.

- Hurricanes
- Earthquakes
- Floods
- Drought
- Torrential rainfall
- Landslides
- Waves
- Tsunamis
- Volcanic eruption
- Subsidence

Climate Change

The effects of climate change are predicted to result in an increased frequency and magnitude of meteorologically based hazards [3]. It is estimated that the cost of climate change in the Caribbean is in the order of 1% GDP annually [ECLAC, 2010].

Man-made Hazards

There are man-made hazards that result in significant recovery operations at a national level. Some low-magnitude hazards that may initially cause minor damage in a localised area can result in significant national disruption (e.g. island-wide power outages caused by minor localised incidents). Some major man-made hazards that can impact the Caribbean follow.

- Commercial aircraft crashing
- Cruise ship sinking
- Fires
- Explosions
- Power outage
- Chemical spills
- Industrial accidents
- Building collapses
- Major traffic accidents
- Water supply disruption

Progressive Weakening Factors

The built environment is vulnerable to decay, which can be mitigated by maintenance activities. If the maintenance activities are not properly performed, then the rate of decay can significantly weaken vulnerable elements of the built environment, to the point where catastrophic losses can be realised with natural hazards of less than expected magnitudes.

Based on the current quality of construction in the Caribbean, the average annual maintenance cost of buildings is approximately 3% of the construction cost [Audit Commission, 2003]. Constructing safe and durable buildings reduces this to approximately 0.3% of the construction cost, [Audit Commission, 2003] and essentially eliminates any climate change based maintenance requirements.

Natural Progressive Weakening Factors

Natural progressive weakening hazards, and their impacts that are commonly observed in the Caribbean follow:

- Insects (termites and ants) can weaken timber members.
- Moisture can result in the biological degradation of timber and other organic building materials.
- Ultraviolet rays can damage protective paints, sealants, binders, and plastics.
- Heat can affect the strengthening of concrete, and the connections in structural members susceptible to thermal expansion and contraction.
- Tree roots can damage building foundations and walls.
- The marine and coastal saline environments can corrode metals (roof covering, window and door frames, steel reinforcement, and connections).
- High sulphate soils can damage concrete.
- Earth tremors can weaken buildings.

Man-made Progressive Weakening Factors

Man-made progressive weakening hazards can also weaken the built environment, making building components that were designed to a specific magnitude, vulnerable to failure during natural hazards of significantly lower magnitude. Some man-made progressive weakening factors, and their likely impacts that are commonly observed in the Caribbean, follow.

- Heavy traffic can deteriorate a road's waterproof wearing course so that the road's base and sub-base are eroded (washed away) during floods and waves.
- Leaking water pipes, and blocked waste-water, electrical, and communications conduits can result in a weakening of the structure during rectification work to clear blockages.
- Poor construction practices can result in a weak and high-maintenance building.

Logistical Challenges

Logistical challenges can be hazardous to, and disrupt immediate recovery efforts, which can extend the duration of economic stagnation and/or reduce the rate of economic growth. They include the following.

- Inefficient traffic flows that result in gridlock.
- Under-designed roads and drainage facilities that result in impassable roads.
- Under-designed communications and electrical towers and systems.
- Inefficient power networks resulting in power outages and frequent spikes.
- Inadequate storage capacity (food, fuel, medical) resulting in lack.

- Inadequate spare parts for critical equipment (ambulances, fire engines, medical equipment, etc.) resulting in a reduced response.
- Low water pressures.
- Sewage spills.
- Hazardous waste spills.
- Hazardous dump dispersal (e.g. asbestos refuse being dispersed during high winds).
- Poor land-use planning (e.g. allowing incompatible uses).

National Debt Hazard

The 2007-2008 global financial crisis has significantly increased the vulnerability of many Caribbean economies to disasters. Six Caribbean countries fall within the ranks of the top ten most heavily indebted middle income countries in the world, and 14 Caribbean countries are among the top 30 most indebted emerging market countries in the world.[CCMF, 2012]

Government funding of important recovery operations that can mitigate the damage from other hazards can be put at risk from the priority given to servicing the national debt. The gross debt as a percentage of GDP of Caribbean countries is provided in Table 4. When the gross debt of Caribbean countries exceeds the threshold of 55% of GDP, growth tends to switch from positive to negative [IMF, 2012]. Countries with such fragile economies are highlighted in red.

Table A1: 2013 Gross National Debt of Caribbean Countries as a Percentage of GDP [IMF 2014]

Country	2013 Gross National Debt (% GDP)
Antigua & Barbuda	92.2
Barbados	92.0
Belize	75.5
Dominica	74.9
Dominican Republic	33.8
Grenada	115.0
Guyana	63.9
Haiti	21.3
Jamaica	138.9
St Kitts & Nevis	137.0
St Lucia	79.8
St Vincent & the Grenadines	76.4
The Bahamas	51.2
Suriname	29.2
Trinidad & Tobago	30.6

Cumulative Impacts

Based on the seasonal nature of hydrometeorological hazard impacts in the Caribbean region, a key consideration for recovery planning is how best to manage cumulative impacts. The PDNA process provides sufficient guidance on the collection of relevant information on recovery needs, and the formulation of an effective recovery strategy. In order to adequately account for and address the needs arising from individual events, it is recommended that the PDNA process be carried out following each distinct event. In order to avoid issues with limited numbers of personnel, it is recommended that training in PDNA be offered periodically to disaster management stakeholders across CDEMA's 18 Participating States.

Annex 2: Recovery Action Plans

The Government-led action plans required to carry out each of the policies are provided below:

1. Prior to the impact of an event, Government will promote, fund and facilitate disaster risk reduction and climate change adaptation programmes in all sectors and at the community, regional and national levels.

Pre-disaster Actions

- Identify vulnerable sectors, communities and regions within a state and their specific disaster vulnerabilities, i.e. floods, hurricanes, volcanic activity.
- Promote, fund and facilitate disaster risk reduction projects, particular in vulnerable areas.
- Promote, fund and facilitate climate change adaptation projects for hydrometeorological hazards.

2. Government will support the training of public and private sector professionals in PDNA, in conjunction with CDEMA, the UN, the EU and the World Bank.

Pre-disaster Actions

- Promote and fund training in PDNA for public and private sector professionals.
- Direct the NDO to nominate a minimum of three persons, including the Head, to be trained in PDNA.

Post-disaster Actions

- Facilitate the review of PDNA procedures following an event, and update these based on lessons learned.

3. Government will support the collection of data in a standard GIS format and encourage sharing of data among agencies, towards a successful PDNA programme.

Pre-disaster Actions

- Place the management of GIS data under the purview of a single Government body, who
- Promote the collection of geographical data in a standard GIS format; this should include detailed information on physical assets, land-use and demographics in order to provide a reliable database for recovery activities.

- Direct the appropriate body to update GIS databases with information gathered from disaster risk reduction and climate change adaptation projects.

Post-disaster Actions

- Direct the appropriate body to update GIS databases with all relevant changes brought about by a disaster.

4. Government will set appropriate rebuilding standards and provide sufficient resources to ensure that they are adequately enforced.

Pre-disaster Actions

Improve new buildings

- Audit a sample of the development planning authority's approved applications.
- Audit the building inspector's site visits.
- Audit building contractor's methods on residential and commercial construction sites.
- Train planners, building inspectors, designers, and construction supervisors in current design and construction methods.
- Carry out supplementary audits every 6 months for two years in order to assess the sustainability of the training. Provide supplementary training where necessary.
- Increase the number of building inspectors as required, or outsource some of the inspections to the local professional engineering body.

Strengthen existing vulnerable buildings

- Carry out a Probabilistic Risk Assessment
- Audit a sample of residential, commercial, public, industrial, and recreational buildings.
- Identify critical and common weaknesses.
- Provide businesses and homeowners with economical building strengthening methods.
- Train building contractors and their supervisors in the building strengthening methods.
- Allow businesses and homeowners to claim a tax deduction for improving the strength and durability of their buildings.
- Facilitate a reduction in home insurance premiums for homeowners improving the strength and durability of their houses.
- Improve the houses of poor vulnerable groups.

Post-disaster Actions

- Carry out Damage Assessments and Needs Assessment with 3 iterations (initial reconnaissance, rapid assessment, detailed assessment)
- Analyse damage reports and assign resources to needs.
- Inform the National Coordinating Committee of the results and request additional resources where necessary.

5. Government will encourage the negotiation of resource sharing agreements within the private sector, with appropriate incentives where necessary.

Pre-disaster Actions

- Based on the results of the risk assessment, identify the vulnerable private sector goods and services.
- Prepare legal templates for resource sharing agreements and upload them on the official Internet site.
- Explain the purpose and benefits of the agreements on the local television and radio stations and in the print and Internet based media, and encourage their use.
- Make a resource sharing agreement (between private sector businesses) for critical and vulnerable functions a pre-condition for tendering on government contracts.

6. Government will maintain a list of material suppliers' and service providers' costs for foreseen recovery activities, and will update this list annually.

Pre-disaster Actions

- Based on the results of the risk assessment, identify the vulnerable public sector goods and services.
- Direct each government department to invite qualified private sector businesses to negotiate special disaster rates in order that critical national recovery functions can be implemented.

Post-disaster Actions

- All payments for goods and services will be made by duplicate check upon verification of a descriptive invoice.
- The National Recovery Department will be audited annually.

7. Government regards managing the recovery from disasters as one of its primary responsibilities, and will manage the recovery through a Coordinating Committee.

Pre-disaster Actions

- Set-up a National Coordinating Committee (NCC) of parliamentarians chaired by the Minister of Finance.
- The NCC determines enabling government policies to reduce economic losses, reserve spending, and stagnation and increase economic growth.
- Set-up a National Recovery Department (NRD) within the Ministry of Finance and led by a Chief Executive Officer.

- The NRC implements the NCC government policies.

8. Government will take the lead in securing sufficient resources to provide immediate food, shelter, and security to its residents and visitors.

Pre-disaster Actions

- Improve the design standards for all new buildings and infrastructure.
- Inform local design professionals, and list the new standards on the official Internet website.
- Facilitate the economical strengthening of private sector existing buildings and infrastructure by allowing tax deductions and duty free imports on materials used to strengthen buildings.
- Strengthen existing public buildings and infrastructure.
- Design attractive, economical and durable temporary shelters using building materials that can later be reused in permanent shelters.
- Drain flood prone agricultural lands, and plant sturdy trees around the perimeter of wind-vulnerable crops as wind barriers.
- Maintain a fresh store of seeds for mass replanting after flood or flood losses.

Post-disaster Actions

- Assess the damage to the built environment.
- Facilitate the economical repair of private sector buildings and infrastructure by allowing tax deductions and duty free imports on building repair materials.
- Repair damaged public buildings and infrastructure.
- Facilitate the expedited port clearance of critical imports.
- Assist the NDO with imports of building materials for and temporary shelters.

9. Government will facilitate the expeditious resumption of utilities and road networks services.

Pre-disaster Actions

- Improve the design standards for all new utilities.
- All new utility pipes to be installed underground where possible.
- Inform utility companies of new standards.
- Facilitate the economical strengthening/protecting of existing utilities by allowing tax deductions and duty free imports on materials used to strengthen utilities' infrastructure.

Post-disaster Actions

- Assess the damage to utilities.

- Facilitate the economical repair of utilities by allowing tax deductions and duty free imports on repair materials.
- Facilitate the expedited port clearance of critical imports.

10. Government will facilitate the expeditious resumption of public and private sector employers, and supporting banking, insurance, and government services.

- Same actions for improving buildings and resource sharing agreements.

11. Government will provide sufficient funds to reopen air and sea ports, and expedite the clearance of aid and business supplies and personnel.

Pre-disaster Actions

- Same actions for improving buildings and resource sharing agreements.
- Set-up a fast track process, and identify the information to be supplied for expeditious port clearance.
- Provide the process and information requirements to the public via downloadable forms at the official Internet web-site.
- Encourage businesses to pre-register and provide any information for pre-approval.

Post-disaster Actions

- Receive the supplementary information (list of materials) from pre-registered businesses and expedite port clearance of their materials.

12. Government will create an enabling environment to further diversify the national economy.

- Pursue double taxation agreements with trading partners.

13. Government will create an enabling environment to reduce the cost of doing business.

- Reduce the time, cost and quality of government regulatory services.
- Provide all regulations and application forms on an official Internet web-site.
- Allow payments to government to be dropped off, posted, or deposited in a bank account, to avoid standing in long lines.

14. Governments will promote personnel sharing initiatives between states to facilitate effective and efficient recovery.

Pre-disaster Actions

- Enact personnel sharing arrangements with Governments of other states with the support of CDEMA.
- Compile a database of regional sector experts with the support of CDEMA and other Governments.

Post-disaster Actions

- Mobilise personnel across CDEMA's Participating States as needed.

15. Government will first use local and regional professional personnel, who will be supplemented by extra-regional professional personnel if necessary.

- Regulate professional services by setting national standards for various categories of professionals.
- Enforce standards by registering professionals.

Annex 3: Guidance on Recovery Execution

Steps 1 to 9 below present a systematic guide to effective disaster recovery following the impact of an event, based on the concepts and principles described herein. It outlines necessary recovery activities from the impact of a hazard until the implementation of a recovery strategy and its periodic evaluation. These steps assume the adoption of the MNRF at the national level and the formulation of a country-specific National Recovery Framework (NRF).

Step 1: Assemble the Recovery Coordinating Committee

Immediately following the impact of an event, the Recovery Coordinating Committee (RCC) should assemble at a preliminary meeting. This committee is to be led by the Minister of Finance and is to include all members of Cabinet and the Head of the National Disaster Office. The RCC must reach a consensus on the prioritization of needs at the national level. This first meeting will form the basis for Steps 2 and 3 below. See Section 9 of this MNRF (or the equivalent in your NRF) for a clear definition of the roles and responsibilities of the RCC.

Step 2: Establish a National Recovery Task-Force

At its first meeting, the RCC must establish a National Recovery Task-Force (NRT) to execute all tasks related to the recovery effort. The NRT will essentially serve as a secretariat to implement the recovery activities approved by the RCC. The NRT should be comprised of the following persons:

- Permanent Secretaries of line Ministries;
- Representative from the National Disaster Office (NDO), who should be trained Post Disaster Needs Assessment; and
- Suitably qualified public and private sector professionals

See Section 9 of the plan for recommended public and private sector professionals.

Public sector professionals should include the representatives from the following departments:

- Finance;
- Planning and development;
- Transport, works and drainage;
- Environment and natural resources management;
- Tourism; and
- Agriculture, fisheries and forestry

Private sector professionals should include experts in the following sectors:

- Engineering;
- Public health; and
- Social science

The NRT members will submit their progress reports to the CEO who will audit performance activities, and identify any resources required to improve the efficiency and effectiveness of the implementation plans.

Step 3: Appoint a Chief Executive Officer of the National Recovery Task-Force

Once the NRT has been established, the RCC will appoint a suitably qualified Chief Executive Officer (CEO) from the NRT to lead and be accountable for its actions. This CEO should be contracted for one year, with the option of annual renewal based on performance. The CEO will attend the RCC meetings as necessary. It is recommended that the CEO should have a minimum 10 years of experience in managing projects with durations exceeding one year.

Step 4: Review the National Recovery Framework

Following the appointment of a CEO, the NRF should be reviewed by the NRT in the context of the disaster being addressed. Special consideration should be given to the following:

- The scope of the disaster;
- The economic and social sectors which have been most severely impacted by the event;
- The extent of physical and infrastructural damage caused by the event;
- The contribution of climate change to the occurrence of the event, in the case of hydrometeorological disasters;
- The consideration for the gender-specific needs of those affected; and
- The consideration for disaster risk reduction and building back better

Step 5: Carry out Post-Disaster Needs Assessment

Following thorough review of the NRF, Post-Disaster Needs Assessment should be carried out in keeping with established guidelines. A point worth noting here is that in order for PDNA to be effective, it must be preceded by a thorough and accurate Damage Analysis and Needs Assessment (DANA) process. The collection and sharing of relevant socio-economic data prior to the impact of an event – including demographics and public and private asset information in affected areas – is also paramount. PDNA guidance and support may be sought from CDEMA, the UN, EU and World Bank.

Step 6: Formulate a Recovery Strategy

Based on the results of the PDNA, the NRT will develop a recovery strategy outlining priority action plans for the short, medium and long-term, as well as the identified sources of funding.

Step 7: Approve Recovery Strategy

Following formulation of the recovery strategy at the level of the NRT, this is to be submitted to and approved by the RCC, under the leadership of the Minister of Finance. Key considerations for the approval of the recovery strategy include the following:

- Clear identification of needs by sector;
- Easy-to-follow calculations of funding needs by sector; and
- Provision of data to support funding requests

Step 8: Mobilise Resources and Implement

Once the RCC has approved the recovery strategy and the funds have been obtained, the RCC will provide the NRT with the necessary resources to implement the approved strategy.

Step 9: Periodically Assess Recovery Effort

The RCC and NRT will periodically assess the recovery effort to ensure that activities within the Recovery Strategy are both effective and efficient. Section 9.3 of this MNRF discusses periodic assessment of the progress of the recovery effort.

Annex 4: Case Studies

The following case studies are examples of the need for a recovery strategy and the relationship between disaster risk reduction and the scope/cost of recovery. Our MNRF was developed with the following cases in mind:

1 Attributes of an Effective Recovery Strategy

1.1 The Event: Hurricane Ike (2008), the Turks and Caicos Islands

On September 6 and 7, 2009 Hurricane Ike, a Category 4 system with sustained winds of 135 mph impacted the Turks and Caicos Islands. The event occurred one week following the passage of Tropical Storm Hanna. As Hanna had already deluged the islands with heavy rain, there was widespread damage, destruction, dislocation and interruption of governmental, commercial, economic and social services.

Hurricane Ike had the following impact on the Turks and Caicos Islands:

- Damage and losses of US\$ 216.6 million
- 31% of the population or 10,270 persons affected;
- 2% of the population or 825 persons severely affected;
- 25.8% of GDP;
- 96.2% of tourism GDP;
- 40.6% of exports of goods and services;
- 54.4% of gross domestic investment;
- 35% of consumption; and
- 350.6% of public external debt

1.2 Steps towards an Effective Recovery Strategy

The following year, in 2009, a Recovery Plan was established. It was intended to provide a cohesive management framework for the recovery process. It outlined the Goal, Objectives, Guiding Principles, Key Action Areas and Priority projects for the ongoing recovery effort. The integration of the emerging issues of gender, climate change adaptation and disaster risk reduction in the recovery process was demonstrated in the following Guiding Principles (Government of TCI, 2009):

1. National ownership of the recovery process by active participation by all sectors in the planning, implementation and monitoring of the recovery effort
2. The recovery process will be based on international best practice as it relates to accountability, transparency, gender awareness and sensitivity
3. Risk reduction and sustainable development strategies will be the foundation of the recovery process
4. The recovery effort will promote a sound quality of life and well-being for the people of the Turks and Caicos Islands

5. The TCI will contribute to its own recovery by providing financial, material and human resources within the limits of its capacity

The recovery period was estimated as follows:

- Short-term recovery – 1 year following the event
- Medium-term recovery – 3 years following the event
- Long-term recovery - 5 years following the event

The primary responsibility for the management of recovery tasks and activities rested with the Recovery Task Force. However, the Task Force relied on ministries, departments and agencies in the public sector to accept direct responsibility for the implementation of projects and programmes within their mandates and scope of work. The Recovery Task Force was chaired by the Permanent Secretary of Finance who then reported directly to Cabinet. For the duration of recovery the Task Force members divided their time between the duties of the RTF and their substantive duties. Cabinet also established a “fast-track” approval mechanism for all matters relating to the RTF. The RTF meetings were held weekly and more often when required. Sub committees were also set up as needed.

In addition to the RTF, a Disaster Recovery Board was established to oversee the use of a five million pounds sterling Grant provided by the Government of the United Kingdom. This board was chaired by his Excellency the Governor. Guidelines for operations of the Board were laid out in a Memorandum of Understanding between the Government of TCI and the Government of the UK. The Board reviewed and considered the projects submitted by the RTF.

The RTF prioritized projects based on two ranks: 1) at the sectoral level, and 2) at the territorial level.

Sectoral Criteria:

1. Provides protection from the elements for workers and critical assets or equipment
2. Contributes to the quality of life and wellbeing
3. Reduces expenditure
4. Has linkages with other sectors
5. Contributes to vulnerability reduction

Territorial Criteria:

1. Restores critical infrastructure or capacity
2. Provides major economic and social benefit
3. Preserves or improves national security
4. Reduces vulnerability to hazards
5. Contributes to sustainable development
6. Satisfies a multi-island need
7. Restores or protects the natural environment

1.3 Results Obtained

The RTF successfully developed of a Recovery Strategy which may be used to guide recovery efforts in future disaster situations. Moreover, the establishment and execution of a Recovery Plan resulted in the successful execution of over 100 recovery projects, including (Robinson, 2010):

- Salt Cay Shelter;
- Canal;
- TCICC Auditorium;
- Old Airport Hanger;
- Medical Clinic; and
- The review and updating of building codes and the National Physical Development Plan to ensure that developments are planned and sustainable.

2 The Relationship between Disaster Risk Reduction and Recovery

2.1 The Event: Hurricane Luis (1995), St. Martin/Sint Maarten

The island of Sint Maarten and Saint Martin was struck by Hurricane Luis, a Category 4 system, from September 4 to 5 1994. Hurricane Luis had maximum sustained winds of up to 76 knots (140 kilometres per hour) and wind gusts of up to 185 kilometres per hour. The rainfall produced by Luis amounted to 231 millimetres. The winds of hurricane Luis directly impacted housing and other buildings in the island. Many houses of poor quality construction were destroyed completely; others lost their roofing and sustained damages to rain gutters and windows. Hotels, restaurants and other commercial buildings were similarly damaged and had to close for weeks. Government buildings and services were also affected and interrupted their activities. Basic services of water and electricity, as well as telecommunications, were interrupted for considerable periods of time since the winds damaged buildings and power plants, equipment and poles and cables (ECLAC, 1995).

The impact of Hurricane Luis may be summarised as follows (Walbrent College, 2012):

Saint Martin (French)

- 2 deaths

Sint Maarten (Dutch)

- 7 deaths
- 60% houses damaged or destroyed
- 100% GDP losses
- US\$ 1.8 billion in losses

The amount of damage in the Dutch side, Sint Maarten was significantly more than in Saint Martin, although the French side of the island was closer to the centre of Luis than was the Dutch side (Gibbs, 2003). According to Engineer Tony Gibbs (2003), when he visited the shared island eight months after Luis had passed, the Dutch side still showed considerable evidence of the damage. However, this was not at all evident on the French side. That is, the recovery period for the Dutch side of the island appeared to be significantly longer than that of the French side.

2.2 Specific Action Taken: The Differing Regulatory Regimes

The clear differences in the amount of damage on the two sides of the same island was determined to be the result of the differing regulatory regimes which governed design and construction. On the Dutch side the buildings were designed in accordance with a variety of standards, including those of the Netherlands. The checking authority was the government Public Works Department. However, on the French side, design and construction had to comply with the French "norms" and checked by the "bureaux de contrôle". The bureaux de contrôle are independent firms licensed by the state who check designs and also make site visits during construction (Gibbs, 2003).

2.3 Results Obtained

Simply put, the damage was substantially less on the French side due to superior construction, obtained through the checking processes of the engineering bureaux de contrôle. Several authors recommended that the approach described above be implemented on a wider scale as a method of reducing disaster risks and losses (Gibbs, 2003; Taylor, 2009; Basher, 2013).

The differences outlined by those familiar with construction on both sides of the border included (Gibbs, 2003):

- Better attention to conceptual design on the French side;
- Greater consistency and uniformity of standards of design for earthquakes and hurricanes on the French side;
- The involvement of a check consultant on the French side.



Adaptation Guide

Enhancing Disaster Recovery among CDEMA Participating States: Final Version

14 September 2014

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Preface

This document is intended to provide guidance to CDEMA Participating States on the adaptation and practical implementation of the Model National Recovery Framework (MNRF). The most effective use of this Guide is in conjunction with the MNRF to develop a Country-specific Recovery Framework given the unique characteristics of that PS. Members of Cabinet and National Disaster Offices, as well as all other government agencies with primary responsibility for recovery, are encouraged to familiarise themselves with the steps to adapting the MNRF outlined in this document, as well as the Recovery Action Plans found in Annex 2 of the MNRF.

The MNRF, accompanied by this Guide, may be used to enhance existing national recovery plans prior to the impact of an event, given the wide scope of hazards and novel approach to measuring recovery presented.

Authorship and Acknowledgements

The following key persons must be acknowledged for their significant input in the development of the Model National Recovery Framework:

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- Gayle Drakes, Education and Training Specialist, CDEMA, Barbados
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- Patricia Lewis, Parish Disaster Coordinator, ODPEM, Jamaica
- Pauline Browne, ODPEM, Jamaica
- Paula Brown, Transport Planner, Ministry of Transport, Works and Housing, Jamaica
- Marina Young, Director, Rural Agricultural Development Authority, Ministry of Agriculture & Lands, Jamaica
- Billy Darroux, Director, Disaster Management Coordination Agency, Montserrat
- Dawn French, Director, National Emergency Management Organisation (NEMO), Saint Lucia
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- Rikardia Pardo, Hazard Mitigation Officer, DDME, the Turks and Caicos Islands,
- Carl Herbert, National Disaster Coordinator, National Emergency Management Agency, St. Kitts and Nevis
- Melissa Meade, Director, Disaster Management, Anguilla
- Sharleen DaBreo, Director, Department of Disaster Management, the British Virgin Islands

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Step by Step Guide to Adapting the MNRF at the National Level

The following provides guidance to governments who wish to adapt the Model National Recovery Framework to their specific countries. The Framework can be used to enhance existing national recovery plans, or it can be an opportunity to create new plans given the wider scope of hazards presented in the Framework that can affect the national economy. The methods outlined in this Guide are relevant for both options.

The Model National Recovery Framework contains the following essential elements:

1. A scope of hazards that can affect the national economy;
2. A scope of critical recovery needs to be addressed;
3. Essential policies and action plans that can enable Governments to effectively and efficiently respond to the needs of affected communities; and
4. A management structure to coordinate and implement the recovery plans. (Annex 3 of the MNRF gives guidance on the execution of effective recovery activities following the impact of an event).

It is expected that after a country follows the steps in this Adaption Guide, the Model National Recovery Framework should have been converted into “[Country] Recovery Framework”. The steps follow.

Step 1: Formulate and Adopt a National Recovery Policy

In order to facilitate full adoption of the MNRF at the country level, a national policy on disaster recovery must be formulated and adopted. This policy should be incorporated into the work programmes of all government agencies which have primary responsibility for recovery (see Section 6.2 of the MNRF). Guidance and support on this initiative can be sought from CDEMA. Reference is made to the CDM Model National Policy Adaptation Guide, which highlights the following as essential principles for effective disaster management policy:

- A participatory process;
- National determination of clear goal;
- Agreement on ways to set priorities;
- An implementation arrangement with clear task distribution;
- Effective monitoring mechanisms;
- Devolution of decision making power to where potential contributions for sustainability are greatest; and
- Stakeholder participation at all levels

Furthermore, the CDM Model National Policy Adaptation Guide lists the following eight essential steps towards implementation of an effective disaster management policy:

1. Issue identification
2. Policy analysis
3. Policy instrument development
1. Consultation (which must occur throughout)
4. Coordination
5. Decision
6. Implementation
7. Evaluation

The above must be incorporated into the formulation and adoption of a National Recovery Policy. Further guidance on this initiative may be sought from CDEMA.

Step 2: Review Background, Introduction and Scope of Recovery Sections of the MNRF

Sections 1, 2 and 3 of the MNRF set a critical backdrop for its adoption at the national level. While some of the items listed in the scope of the hazards and recovery operations may not be relevant to a specific country, they may be relevant to a neighbouring state with whom that country may be called upon to assist. Therefore, items should not be removed. However, any identified missing items should be included.

Step 3: Critically Review the Principal Assumptions.

Section 2.4 of the MNRF identifies the principal assumptions made to formulate the policies, coordination structure and action plans presented therein. Any nationally relevant and important assumptions not captured by this list should be added.

Step 4: Critically Review the Key Recovery Needs.

Section 4 of the MNRF identifies the key needs for families who are both able and unable to safely occupy their houses, and public and private sector employers who are both able and unable to safely resume their operations. The list of needs should be reviewed for completeness.

Step 5: Critically Review Potential Recovery Resources

Sections 5.2 to 5.4 of the MNRF identify a list of potential resources that may be available to the affected country. It also includes some initiatives that can reduce the cost of some recovery operations and the economic impact of the disaster event. The list should be reviewed for completeness, and any other initiatives that can significantly reduce the time, cost and/or effort of recovery operations should be included.

Step 6: Critically Review the Proposed Coordination Strategy

Section 6 of the MNRF proposes a management structure to efficiently and effectively coordinate and implement the essential recovery activities. Given the critical importance of recovery operations to the benefit of the national economy, they should be properly managed. The management strategy should be reviewed with a view to improving its efficiency and effectiveness in a specific national setting. Guidance on the execution of recovery activities in keeping with the proposed management structure is provided in Annex 3 of the MNRF.

Step 7: Critically Review the Proposed Recovery Policies

Section 7 of the MNRF identifies essential policies that can adequately respond to the identified needs. The policies should be reviewed with a view to improving the efficiency and effectiveness of addressing the recovery needs.

Step 8: Critically Review Recovery Action Plans

Annex 2 of the MNRF identifies action plans arising out of the coordinating policies that can adequately respond to the identified needs. The action plans should be reviewed with a view to improving the efficiency and effectiveness of addressing the recovery needs.

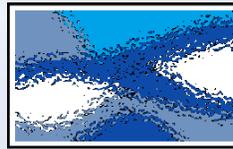
Step 9: Finalise a National Recovery Framework based on the MNRF

Following steps 1 to 8 above, a National Recovery Framework (NRF) should be finalised, which is to serve as the official guiding document for disaster recovery within a CDEMA Participating State. This process must obtain sufficient support at the level of Cabinet in order to become maximally effective. The NRF should be structured based on the MNRF, following the steps outlined in this Guide. Further guidance on the formulation of a NRF may be sought from CDEMA.

Step 10: Secure Government Approval and Adoption

It can take years before an idea becomes actionable government policy. Further to the CDEMA CDM Policy Adaptation Guide referenced above, an efficient method of actionable policy formulation follows.

1. A draft policy is defined and defended by experts under scrutiny by stakeholders;
2. The draft policy is amended and re-reviewed by stakeholders;
3. A final draft of the policy is prepared for cabinet and parliamentary approval; and
4. The approved policy is implemented cautiously, with the understanding that further amendments may be required in order to address any unforeseen implementation challenges.



**Husein
Environment
& Water**

“Engineering a Sustainable Future”

**Comprehensive Disaster Management
Harmonized Implementation
Programme: Phase 1**
Report of the Regional Consultation

15 July 2014

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Authorship and Acknowledgements

This document is authored by Mr. Grenville W. Phillips II, Ms. Ana L. D. Millington and Mr. Christopher H. Lashley for Husein Environment & Water Inc. The advice and support of Mr. Ramon E. Husein is acknowledged.

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Glossary

The following defines acronyms used throughout this document.

Acronyms:

AG	Adaptation Guide
CC	Climate Change
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
DEM	Department of Emergency Management
DfID	Department for International Development
DM	Disaster Management
DRR	Disaster Risk Reduction
HE&W	Husein Environment & Water Inc.
MNRF	Model National Recovery Framework
NDO	National Disaster Office
NEMA	National Emergency Management Agency
NEMO	National Emergency Management Organization
NEOC	National Emergency Operations Centre
NODS	National Office of Disaster Services
NRC	National Recovery Committee
PS	Participating States (Member of CDEMA)
RCC	Recovery Coordinating Committee

1 Introduction

1.1 Purpose

As a hazard prone region, there are multiple threats to regional sustainable development. Emphasis has therefore been placed on national recovery planning as a pro-active approach to risk reduction within Comprehensive Disaster Management (CDM) in the Caribbean region. As such, the Caribbean Disaster Management Agency (CDEMA) is seeking to strengthen Comprehensive Disaster Management (CDM) programme implementation at the national level through the development of a Model National Recovery Framework. Husein Environment & Water Inc. was contracted as the 'Regional Resource Person' to carry out Phase 1 of this CDM Harmonized Implementation Programme (HIP) through the development of a new Model National Recovery Framework (MNRF) and an Adaptation Guide (AG). The MNRF will guide disaster recovery among CDEMA PS with the aid of an AG to allow individual states to tailor the MNRF to their specific needs.

The CDEMA in collaboration with Husein Environment & Water Inc. convened a Regional Consultation meeting at Radisson Hotel, Barbados on 7 July 2014. During this meeting, representatives from several Caribbean territories were able to attend. The purpose of this meeting was to create a forum for representatives from across the region to review the technical content, raise issues and provide feedback on improvements of the second draft of the MNRF and the first draft of the AG (before submission of a final draft of both documents for review by regional stakeholders).

1.2 Categories of Participants

This Regional Consultation Meeting was attended by:

- The Project Facilitators – Members of CDEMA
- The Consultants – Members of the Husein Environment & Water Inc. team
- The Country Representatives – Representatives from different sectors in each island
- Donors – Department for International Development (DfID)

The list of all attendees in each category can be viewed in **Annex 1**.

1.3 Agenda

This Regional Consultation Meeting commenced with an opening ceremony followed by the presentation and discussion of the second draft of the Model National Recovery Framework and the first draft of the Adaptation Guide. The participants were then split into three groups to discuss the recommended policies, adaptation guide and emerging issues of gender, climate change and disaster risk reduction. The complete agenda can be viewed in **Annex 2**.

2 Results

2.1 Comments and Discussion on MNRF and Adaptation Guide

Following the presentations of the MNRF and the Adaptation Guide, diverse comments, queries and suggestions from the delegates were posed. The delegates' feedback and the consultants' responses are collated in **Annex 3**. Salient divergent issues are analysed in **Section 3**.

2.2 Working Group Outputs

The main key issues raised in the question segment of the presentations became the basis for the working group discussions. The groups were separated into three working groups; two focusing on the MNRF and one focusing on the AG with each group focusing on one of the emerging issues. The following summarizes the outputs from these working groups.

The main outcomes of the working groups can be summarized below.

- The needs of both men and women must be considered in the action plans.
- The National Disaster Office (NDO) should have a role in the recovery process.
- Climate change issues should be considered when rebuilding.

The presentations from each working group can be viewed in **Annex 4**.

3 Analysis

3.1 Start of the recovery phase

The comprehensive disaster management circular model gives the impression that the recovery phase begins once the response phase ends. While priority should be given to emergency response activities immediately following a national disaster event, recovery activities can also commence at this time. Many business owners actually commence recovery actions the day after the all clear is given, especially those businesses with non-resident clients.

3.2 The definition of response and recovery

The MNRF used the UNISDR definitions for response and recovery. Where response and recovery activities intersected, the MNRF identified recovery activities that could facilitate response activities. For example, facilitating the importation of emergency shelters for the NDO (Section 11.5.2).

3.3 Financial resources

Unlike the emergency response activities, funding for recovery activities are prioritized and allocated by the government. The Minister of Finance must normally approve government spending. Therefore, it is beneficial for the Minister of Finance to play a leading role in coordinating recovery.

3.4 The Role of the National Disaster Office

The NDO is critical in coordinating the emergency response activities. However, the longer term recovery operations and policies are designed to improve the economic growth rate, and minimize disaster losses. This falls outside of the normal NDO activities.

3.5 Leadership and Coordination

It is important that government departments be involved in leading the recovery's implementation. It is proposed that the implementation department consist of permanent secretaries who are managed by a chief executive officer who reports to Cabinet.

4 Recommendations

4.1 Model National Recovery Framework

1. A separate definitions section should be provided in the MNRF.
2. The main section of the document should be limited to around 10 pages, with details being annexed to the document.
3. Consideration should be given to consolidating some of the items into a comprehensive policy statement.
4. Define the roles of the various organizations within the organizational structure
5. Address treatment for cumulative hazards and give government officials' perspective into how they will be handled
6. Revise the data collection and assessment methodology
7. Change the disaster cycle diagram to pull out recovery, showing the different phases

4.2 Adaptation Guide

1. Modify phrasing as this document should trigger the thought process

Annex 1: Regional Consultation Participants

Table 1 provides a list of the categories of participants at the workshop identified in Section 1.

Table 1: Categories of Participants

Project Facilitators		
Name	Job Title	Organization
Mr. Ronald Jackson	Executive Director	CDEMA
Ms. Elizabeth Riley	Deputy Executive Director	CDEMA
Ms. Joanne Persad	Programme Manager, Response and Recovery	CDEMA
Mr. Robert Harewood	Programme Officer, Response and Recovery	CDEMA
Retired General Earl Arthurs	Emergency Operations Specialist	CDEMA
Consultants		
Name	Role on Project	Organization
Mr. Grenville Phillips II	Lead Consultant	Husein Environment & Water Inc.
Mr. Christopher Lashley	Director of Projects	Husein Environment & Water Inc.
Mr. Ramon Husein	Engineering Consultant	Husein Environment & Water Inc.
Ms. Ana Millington	Junior Consultant	Husein Environment & Water Inc.
Country Representatives		
Country	Name	Title
Antigua & Barbuda	Mr. Fillmore Mullin	Director, National Office of Disaster Services
Bahamas	Mr. Lawrence Bethel	Operations/Training Officer, National Emergency Management Agency
Barbados	Ms. Judy Thomas	Director, Department of Emergency Management
Barbados	Ms. Greta Walker	Assistant Chief Technical Officer, National Housing Corporation
Belize	Mr. Clifford Martinez Jr.	District Agriculture Coordinator, NEMO & DANA Chair (Orange Walk District)
Belize	Ms. Fay Garnett	District Agricultural Coordinator, Ministry of Natural Resources & Agriculture & DANA Chair (Cayo District)
British Virgin Islands (Tortola)	Ms. Sheniah Armstrong	Preparedness Planning Manager, Department of Disaster Management
Dominica	Mr. Steve Joseph	Programme Officer, Office of Disaster Management
Dominica	Mr. Andrew Darroux	District Development Officer (ag.), Department of Local Government & Community Development

CDM Harmonized Implementation Programme: Phase 1 – Report of the Regional Consultation

Grenada	Ms. Yolande Newton	Project Officer, Ministry of Economic Development & Planning
Grenada	Ms. Shari Joseph	Policy Analyst, Ministry of Finance
Guyana	Colonel Francis Abraham	Deputy Director General, Civil Defense Commission
Guyana	Ms. Akilah Dorris	Community Monitoring & Development Officer, Ministry of Local Government & Regional Government
Haiti	Mr. Jean Max Gabriel	Chargé de Mission, Ministry of Planning and Cooperation
Haiti	Mr. Moise Fils Jean Pierre	Central Coordinator, Civil Protection Department
Saint Kitts & Nevis (Saint Kitts)	Mr. Cromwell Williams	Director, Public Works Department
Saint Kitts & Nevis (Nevis)	Ms. Kimberley Evelyn	Architect, Public Works Department
Saint Lucia	Ms. Andrina Abraham	Research Officer, Department of Planning & National Development
Saint Lucia	Ms. Skeeta Gibbs	Economist, Department of Planning & National Development
Saint Vincent & The Grenadines	Mr. Anthony Bowman	Chief Technical Officer, Ministry of Housing & Physical Planning
Saint Vincent & The Grenadines	Ms. Michelle Forbes	Deputy Director, National Emergency Management Organization
Trinidad & Tobago	Ms. Denise Anderson	Regional Coordinator, Office of Disaster Preparedness & Management
Turks & Caicos Islands	Dr. Virginia Clerveaux	Director, Department of Disaster Management & Emergency
Turks & Caicos Islands	Mr. Dainer Lightbourne	Director, Department of Planning

Annex 2: Regional Consultation Agenda

COMPREHENSIVE DISASTER MANAGEMENT HARMONIZED IMPLEMENTATION PROGRAMME: PHASE 1 – REGIONAL CONSULTATION

Venue: Radisson Hotel, Bridgetown, Barbados, 7 July, 2014.



CARIBBEAN DISASTER EMERGENCY MANAGEMENT AGENCY ANNOTATED AGENDA – FINAL

*Comprehensive Disaster Management Harmonized Implementation Programme – Phase 1:
Regional Consultation*

Date	7 June, 2014	Place	To be Determined (TBD)
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Time	#	Agenda Item	Resource Person(s)
09:00-09:05	1.0	WELCOME AND OPENNING REMARKS <i>Opening remarks will be made by HE&W.</i>	Ramon Husein
09:05-09:15	2.0	CDEMA PRESENTATION <i>The background to the project/consultancy will be presented, including the conditions which gave rise to the need for a new regional disaster recovery framework.</i>	Joanne Persad Robert Harewood

Time	#	Agenda Item	Resource Person(s)
09:15-10:30	3.0	<p>PRESENTATION OF MODEL NATIONAL RECOVERY FRAMEWORK (SECOND DRAFT)</p> <p><i>The Second Draft of the Model National Recovery Framework (MNRF) will be presented, highlighting changes made since the First Draft and emerging issues: climate change, disaster risk reduction and gender.</i></p>	Grenville Phillips Ramon Husein
10:30-10:40	4.0	<p>BREAK</p> <p><i>The consultation will adjourn for a ten-minute break.</i></p>	NA
10:40-11:00	5.0	<p>PRESENTATION OF ADAPTATION GUIDE</p> <p><i>The First Draft of the Adaptation Guide (AG) will be presented, highlighting the step-wise approach employed and hypothetical examples of its application.</i></p>	Christopher Lashley
11:00-12:30	6.0	<p>QUESTION AND ANSWER SEGMENT</p> <p><i>The floor will be open to questions from attendees, to be posed primarily to HE&W Inc., but also to the CDEMA CU and National Disaster Coordinators. Key anticipated outcomes include:</i></p> <ul style="list-style-type: none"> • <i>Clarity on the incorporation of climate change adaptation and disaster risk reduction</i> • <i>Clarity on the consideration of gender in the plan, as well as other vulnerable groups</i> • <i>Clarity on the specifics of disaster recovery in individual Participating States</i> • <i>Clarity on the application of World Bank damage and loss assessment methodologies (past examples; successes and challenges)</i> <p><i>The hope is to respond to fundamental questions at this stage, to allow the following Working Groups to effectively highlight/address key issues.</i></p>	Grenville Phillips II Ramon Husein Christopher Lashley
12:30-13:30	7.0	<p>LUNCH</p> <p><i>The consultation will adjourn for an hour's lunch.</i></p>	NA

Time	#	Agenda Item	Resource Person(s)
13:30- 14:30	8.0	<p>WORKING GROUPS</p> <p><i>The Consultation will be divided into 3 working groups: 2 focusing on the MNRF and one on the AG. The breakdown of these groups will be determined ahead of the Consultation in consultation with the CDEMA CU. The aim of these sessions is to scrutinise the draft deliverables in a setting where attendees are able to pose one-on-one questions to consultants. This is expected to better highlight key concerns and allow for more productive discussion, than with the presentation approach.</i></p> <p><i>The objectives of the Working Groups are to:</i></p> <ul style="list-style-type: none"> • <i>Reach consensus on the approach;</i> • <i>Receive feedback on the specifics of the approach;</i> • <i>Discuss policy recommendations for disaster management and recovery at the regional and national levels;</i> • <i>Discuss damage and loss assessment methodologies, past successes and failures; and</i> • <i>Receive general recommendations from disaster stakeholders</i> <p><i>Working group sessions will then be followed by group presentations, where members of the groups will present key findings to the floor for discussion.</i></p>	<p>Grenville Phillips II – MNRF Group</p> <p>Ramon Husein – MNRF Group</p> <p>Christopher Lashley – AG Group</p>
14:30- 15:00	9.0	<p>GROUP PRESENTATIONS</p> <p><i>Presentations will be made by working groups based on the outcomes of the sessions. Anticipated outcomes include:</i></p> <ul style="list-style-type: none"> • <i>Information sharing;</i> • <i>Lessons learned; and</i> • <i>Recommendations for further development of the MNRF and AG</i> 	TBD

Time	#	Agenda Item	Resource Person(s)
15:00-15:30	10.0	<p>KEY ISSUES</p> <p><i>Attendees are invited to raise key issues with the Second Draft of the MNRF and Draft AG. These will be discussed on the floor.</i></p> <p><i>Any other matters of importance will be tabled under this Agenda Item</i></p>	Grenville Phillips II Ramon Husein Christopher Lashley
15:30- 16:00	11.0	<p>WRAP-UP AND NEXT STEPS</p> <p><i>Closing remarks will be made by the CDEMA CU and HE&W Inc.</i></p> <p><i>A series of next steps will be presented based on previous work and the outcomes of the Regional Consultation.</i></p>	Grenville Phillips II/ Christopher Lashley

DOCUMENT LIST:

- Regional Consultation Guide (including an agenda and the areas of focus for each consultant)
- Second Draft of Model National Recovery Framework
- Draft Adaptation Guide

HE&W ATTENDEES:

- Mr. Grenville Phillips II – Lead Consultant
- Mr. Ramon Husein – Consultant
- Mr. Christopher Lashley – Project Manager and Consultant
- Ms. Ana Millington – Junior Consultant

Annex 3: Comments and Discussion

Table 2 provides a list of the comments and questions posed following the presentations of the MNRF and AG corresponding to Section 2.1.

Table 2: Comments and Questions on MNRF and AG

Participants' Questions and Comments	HE&W's Responses
Mr. Fillmore Mullin, Director, NODS, Antigua & Barbuda	
As part of the list, he did not recall any arrangements made for people with special needs.	Strengthening the houses and institutions housing those with special needs is the recommended strategy. (Section 11.1.1)
In the list of what must be done to fix a broken country after impact, something must be there to list the things the government is expected to provide to facilitate recovery.	The recommended policies include lists of government actions to be taken both before and after a disaster event. (Section 11)
A guide as to when the time frame will be implemented	The only time frames are before and after the disaster event. Governments can only do what they have the resources to do. However, one aim of the framework is to move recovery actions higher on Government's agenda.
As it pertains to Section 7 in MNRF - when it comes to individual homes, assessment practices, those who are renting fall into the business category as they are not in a house or have no house	Agreed. However, the occupying family's needs do not change.
Increase the list of vulnerable groups	Agreed. Any identified group will be included in the final document.

More importance of the role of the NEOC (RCC?) after the NDO is finished	The Recovery Coordinating Committee (RCC) should direct a strategy for reducing disaster losses and reserve spending and increasing the post-disaster rate of economic recovery. The RCC works concurrently with the NDO who is principally concerned with preparing and implementing an emergency disaster response.
Consider a model to address how to recover a single community	This is a national recovery framework, but much of it is applicable to a community.
AG – recovery is not clear-cut within a prescribed time frame	The only time frames are before and after the disaster event. One aim of the framework is to move recovery actions higher on Government’s agenda.
Is there any consideration at the regional level for sub-regional recovery?	This is recognized in the adaptation guide where the scope of hazards should not be reduced. Consideration will be given for resource sharing agreements across states.
Is there any indication of the steps to changing behavior?	The policies reward responsible behavior.
Mr. Clifford Martinez Jr., District Agriculture Coordinator, NEMO, Belize	
Some of the parameters are clearly to determine recovery efforts	Agreed.
The importance of designing legislation, as it can hold people accountable	Agreed.
Before the talk about recovery, define the level of impact so as to know if and what level of recovery is needed	Agreed. The level of impact was defined as the effect on the national economy. (Section 10)
Ms. Elizabeth Riley, Deputy Executive Director, CDEMA	

<p>The framework document should be less pages so as not to discourage reading it. Pull out specific actions near the end of the document as annexes</p>	<p>Agreed. Will be done in the final document.</p>
<p>The terminology needs to be defined as there are some places where things flow into one another</p>	<p>Agreed. Will be done in the final document.</p>
<p>The document must give treatment into cumulative impacts and give government officials' perspective into how that will be handled</p>	<p>Agreed. To accommodate cumulative impacts, the strategy was in the pre-disaster strengthening of vulnerable properties, instead of post-disaster rebuilding of collapsed properties.</p>
<p>Appreciation of the approach into accountability of the institutional arrangement for recovery</p>	<p>Agreed.</p>
<p>How the dialogue of recovery is structured should be given thought. Sufficient guidance as to who sits at the table other than government. e.g. private sector</p>	<p>Agreed. Will be addressed in the final document.</p>
<p>A recommendation for the establishment of a catastrophic fund should be specifically put in and not just assume that there should be allocation of resources for a catastrophic fund.</p>	<p>Agreed. Will be addressed in the final document. However, given the high debt of many of the participating states, the funds should be inaccessible. Therefore, participating in the CCRIF for multiple hazards should be a priority.</p>
<p>Want to see something that triggers the thought process. Modify phrasing of the guidance e.g Step 1, give a context in terms of historical hazard impacts</p>	<p>Agreed. Will be addressed in the final document.</p>
<p>Who is really targeted to use this document? It should be pitched at a significantly high level, narrowing it down at the opening section of the document</p>	<p>Agreed. It is pitched to policy makers. The 'narrowing down' will be addressed in the final document.</p>

Be prescriptive – can we be or should we be looking at principles as to how it should be approached. Put in examples.	Understood. This will be considered for the adaption guide.
Ms. Judy Thomas, Director, D.E.M, Barbados	
DM is being taught in the region and the question of terminology needs to be addressed. There should be compliance with what is being taught in the region.	Agreed. The UNISDR definitions were used.
Do not specifically name who should be on the board for enacting the framework rather state who needs it.	Agreed. Both the implementers and beneficiaries were included. (Sections 9 and 6)
The question of damage assessments should be under review as it is too long and doesn't meet political needs of any politicians	Agreed. It will be updated in the final document.
Get money from finance and get it into something they can see (results oriented)	Agreed. However, to ensure that the funding was sustained, the implementation agency was proposed to be a department of the Ministry of Finance.
Realistically give a methodology that gives economic assessment for getting more funding.	The damage assessment methodology is included in Section 8.4.
Let the line ministries take on long term recovery	Agreed. They are to be coordinated by Cabinet and implemented by the permanent secretaries. (Section 9)
The Ministry of Home Affairs is an integral part of the recovery process	Agreed.
Other statistics for victims are needed not GDP.	Agreed. The damage assessment surveys are outlined in Section 8.4.
Leave guidance to the disaster offices	Agreed that guidance for the emergency response should be from the NDOs. However, for the national economic recovery, guidance should come from Cabinet.

Wording of the document; mention existing structures so people don't think it is something new being suggested	The model framework being recommended is different than those reviewed.
Are you going to draw people from other offices to be on this committee (RCC)	The RCC is composed of Cabinet. The NRD is composed of permanent secretaries of the line ministries.
Retired General Earl Arthurs, CDEMA	
Care should be taken not to make one phase of the disaster cycle seem more important than the others.	Agreed.
Do not force government to make decisions and do not put board to override government. The best thing to do is to convince government through good public relations work (Show them how they can save and make money)	Agreed. The board is essentially the Cabinet, and the policies include increasing the rate of economic recovery, and reducing damage losses.
There are some conflicting results with St. Lucia in the tables.	Will examine and revise in the final document as necessary.
Why are there four parts if the recovery phase of the CDM? - the initial covers early/ emergency response	Recovery is separated into 4 phases for the sole reason of identifying recovery needs as stated in section 4.
Ms. Joanne Persad, CDEMA	
The macro-level perspective of recovery is critical for us to move forward with recovery planning	Agreed.
Tweak the disaster cycle diagram to just pull out recovery, not to lessen recovery, as focus on the four phases ties into the macro-level view the document has	Agreed. Will be amended in the final document.
As it pertains to the format of the document, a lot of what was spoken of can be consolidated into a recovery model policy statement to adapt later on by PS	Agreed. However, to reduce the complexity of the statement, it was split into 10 sub-policies.

DALA/PDNA is almost completely dependent on raw data collection of the country, which is not up to CDEMA. Revise the methodology of data collection and assessment	Agreed. Will be amended in the final document.
What is the role of various institutions, in particular the disaster office? These are fundamental issues that must come out in the MNRF	The NDO's role is limited to the response component of CDM.
Ms. Fay Garnett, District Agricultural Coordinator, Ministry of Natural Resources & Agriculture, Belize	
Government policy 5 – awareness; teach those in the community how to prepare themselves before help comes in the aftermath of a disaster	Agreed. However, that is normally part of the emergency response. Policies numbered 1 to 8 are designed to facilitate a shortened response.
In addressing food, shelter and security, something specific is needed for agriculture	Agreed. Will recommend vulnerability reduction initiatives in the final document.
AG – Have it like a toolkit they can take back and adopt to their own countries	Agreed. Will update in final document.
AG – think about building resilience so that the infrastructure should not fail but recovery can also take place	Agreed. That is the strategy in the framework.
Ms. Andrina Abraham, Research Officer, Dept. of Planning & National Development, Saint Lucia	
As it pertains to Section 9 and the organizational structure – concerned about allowing everything to go through line ministries because of the lack of coordination at present	Agreed. The implementation agency is comprised of permanent secretaries of the line ministries, and managed by a CEO who reports to Cabinet.
Promote GIS software for spatial data collection	Agreed. To be incorporated in section 8.4.
Colonel Francis Abraham, Deputy Director General, Civil Defense Commission, Guyana	
Need a clear understanding of terms (in disaster cycle). For himself, recovery starts at the end of the response phase.	Some entities start recovering as soon as the all-clear is given.

Recovery has to be government led	Agreed - the national recovery should be government led.
Government wants to spend money where it can be seen, therefore those that have not experienced a disaster in a while might not want to put money into all phases of the CDM	Agreed. That is why recovery is defined as economic recovery, which can be monitored objectively by local and international agencies.
Is there any consideration for the recovery of the agriculture sector?	Some recovery options will be included in the final document.
Ms. Michelle Forbes, Deputy Director, NEMO, Saint Vincent & The Grenadines	
Decision-making is taken away from persons involved in response. When there is a structure to deal with DM/ recovery and people can be held accountable, that is about development.	Agreed.
Ms. Akilah Dorris, Community Monitoring & Development Officer, Ministry of Local Government & Regional Government, Guyana	
Some of the detailed items in the MNRF can be transferred to the AG so that the framework remains more generic	Agreed. Will be addressed in the final document.
Mr. Robert Harewood, CDEMA	
Are you looking at recovery impacts for different types of hazards?	Yes. The recovery plan is robust enough to include all hazards.
Ms. Yolande Newton, Project Officer, Ministry of Economic Development & Planning, Grenada	
How do you separate the power of the committee from that of the Prime Minister in a recovery process?	The Minister of Finance chairs the RCC.
What forces (whoever the framework is geared towards) to actually use it?	The recovery effort is directed by the political leadership.
Ms. Fay Garnett, District Agricultural Coordinator, Ministry of Natural Resources & Agriculture, Belize	

Doesn't the framework also focus on education and early warning at the community level.	This is part of the emergency response.
Mr. Anthony Bowman, Chief Technical Officer, Ministry of Housing & Physical Planning, Saint Vincent & The Grenadines	
Were country specific emergency plans considered when preparing this second draft of the MNRF	Yes. The framework was developed by attempting to improve policies and action plans that have worked.

Annex 4: Outputs of Working Groups

Annex 4 provides the presentations from each working group as identified in Section 2.2.

Framework 1: Group I

Emerging Issue: Gender

- Gender specific means gender in true sense of the word.
- Understanding the concept/definition of gender vs sex is key to its mainstreaming and integration in the recovery process
- Asset distribution needs to focus on males and females in the recovery process
- Specific needs as it relates to specific roles are to be considered in disaster recovery
- Assessment form needs to capture information that includes both sexes
- Both sexes having equal access to resources and participation in the recovery process e.g. cash for work.
- Addressing the safety and security needs of the sexes (male, female, transgender).
- Services for special needs groups and disbursement of public aid to victims need to be addressed

The role of the National Disaster Office

- Engage in Early Preparedness and Initial Response to Recovery
- Work as advocates
- Not to miss out on the golden opportunity for mitigation and resilience building
- Facilitate the initial phase of the recovery
- Facilitate training for the members of the Recovery committee
- Manage an efficient data management system (e.g. spatial data)
- Assume a coordinating role
- Act as a coordinating/liaison agency to National Committee

Framework 2: Group 2

Emerging Issue: Disaster Risk Reduction

- Terminology to be aligned with UNISDR terminology (used by CDEMA). The revised CDM Pie Chart to be amended to reflect the quad chart (Mitigation, Preparation, Response, and Recovery Phases). The Recovery section is then to be sub-divided into 3 parts (Short Term Recovery, Medium Term Recovery, Long Term Recovery).
- The Initial Recovery stage is to be removed as the actions in this phase are similar to what is done in the Response Phase.
- The actions in the remaining 3 phases are to be further developed. For example, soliciting regional and international assistance during the appropriate phases (teams of skill personnel, funding, studies from regional tertiary institutions, etc.....) are to be listed.
- The UNISDR definition for recovery dictates that the process has to be driven by the government. In this regard, the proposed Recovery Coordinating Committee must be at a Cabinet Sub Committee level and the National Recovery Department must be comprised as necessitated by the type of disaster.
- The role and responsibilities of the Disaster Office and all the requisite stakeholders of the Recovery Coordinating Committee are to be defined.
- The MNRF identifies the Emerging Issues. However, the aspects of these issues must not only be listed, they must be related to the recovery process (land use planning, policy, legislation, spatial data and the need for statistics as a basis for decision-making and planning, community actions, etc.....).
- The MNRF assumes that recovery only happens after a “disaster”. However, it should be noted that in many instances recovery may take place without the declaration of a disaster. Therefore, there should be a clear definition of “disaster” in the document.
- Should emphasize that the MNRF is pitched at a macro/strategic level in the first instance.
- Flexibility - ensure that recovery plans, policies and practices are adaptable to meet the needs of any unforeseen circumstances or evolving recovery needs. The process should address situations at a community or sector level as well as national. It should be scalable so it can easily adapt to the event/environment/situation.
- Strengthened resilience to hazard impacts - this should be the core principle
- Participatory approach to recovery planning (idea here is that recovery is a joint responsibility of government, private sector, civil society etc)
- Recovery process is to be guided by priorities
- Recovery is a national responsibility led by Government and supported by internal and external partners
- Note that Social recovery should be given equivalent emphasis to economic recovery
- Recovery actions should be evidence based (ie. we should have a robust set of data which informs the actions taken)

- Pre-impact data will be required in the determination of what level of recovery a country may have achieved, and when “recovery” was completed.
- Should define what “government” specifically means in the document.
- Recovery priority setting is directly related to the level of impact and destruction
- The need for a clear policy statement (utilizing the priority items)

Adaptation Guide Working Group 3

Emerging Issue: Climate Change

Points on the Adaptation Guide

- Insertion of a sketch and diagram of the relative time sequence of assessment tools, eg PDNA and DANA...providing clarity for placement of country assessment tools and those of incoming humanitarian agencies
- Develop a quick reference guide for the Framework
- Subscribe to UNISDR definition of Recovery
- Establish a strong institutional National Recovery Framework
- Define time frame for assessments
- Explain the importance of forming the NRC
- Set the frequency of the NRC meeting as once a quarter
- Develop a NRC TOR
- Recommend that NRC Members are Representatives of key national sectors
- Recommend that NRC members comprise of Government agencies, NGOs, private sector, FBO, CBO
- Appoint a NRC Chairman and Deputy Chairman. These persons will be NDO stakeholders, who would serve as team leads
- Strongly advise that the NDO will serve as the secretariat
- Incorporate cross-cutting issues: climate change, gender and disaster risk reduction
- Recommend that following consultation that the amendments be made to the framework. This amendment process may result in changing regulation or introducing new legislative considerations, if needed.
- The amended framework is then forwarded to policy makers

Climate Change

- Topical issue of climate change facilitates:
 - funding
- Building back better - facilitating mitigation efforts and preparedness activities