

**THE CARIBBEAN DISASTER EMERGENCY MANAGEMENT  
AGENCY (CDEMA)**

Building #1, Manor Lodge Complex  
Lodge Hill, St. Michael  
Barbados

Tel. no. (246) 425-0386; Fax no. (246) 425- 8854  
E-mail: [cdera@caribsurf.com](mailto:cdera@caribsurf.com); Website: [www.cdera.org](http://www.cdera.org)

**THE REGIONAL DISASTER RISK MANAGEMENT FOR  
SUSTAINABLE TOURISM IN THE CARIBBEAN PROJECT**  
[THE REGIONAL PUBLIC GOOD]

[ATN/OC-10085-RG]

**Disaster Risk Management Strategy and Plan of Action for the  
Tourism Sector in the Caribbean**

**Part I**  
**DISASTER RISK MANAGEMENT STRATEGY**  
December 2009





## **Foreword**

The Caribbean Disaster Emergency Management Agency (CDEMA) with the support of the Inter-American Development Bank (IDB) and in collaboration with the Caribbean Tourism Organization (CTO); CARICOM Regional Organization for Standards and Quality (CROSQ); and the University of the West Indies (UWI) is implementing The Regional DRM for Sustainable Tourism in the Caribbean Project over the period January 2007 to June 2010. The project is a forty-two (42) month initiative designed to contribute to the reduction of the vulnerability of the Tourism sector in the Caribbean to natural hazards through the development of a Regional Public Good (RPG) which is the Regional Disaster Risk Management (DRM) Framework for Tourism in the Caribbean. The initiative also encompasses the development of a Strategy and Plan of Action for Standards for Conducting Hazard Mapping, Vulnerability Assessment and Economic Valuation for Risk Assessment for the Tourism Sector in the Caribbean, as well as the institutional strengthening of the CTO, CDEMA, and their stakeholders in DRM for sustainable Tourism.

Under the DRM Framework, a Regional DRM Strategy and Plan of Action for the Tourism Sector was developed through the collective action of regional as well as national stakeholders in both the Tourism and disaster management sectors. Specifically, the Strategy addresses the elements of: mitigation, preparedness, response and recovery which include rehabilitation, and reconstruction. The Strategy and Plan of Action also supports the provisions of the Comprehensive Disaster Management (CDM) Framework as well as the Caribbean Regional Sustainable Tourism Policy which has been prepared by the CTO.

This document, Part I: The Disaster Risk Management Strategy for the Tourism Sector, developed by the team of Caribbean and Canadian consultants from le Groupe-conseil baastel, is aimed at regional stakeholders as well as key national stakeholders including Ministries of Tourism, Tourism Boards, and Ministries of Finance and planning agencies. The content of the Strategy is based on the results of the Regional Workshop in Trinidad & Tobago held on May 5<sup>th</sup> and 6<sup>th</sup>, 2009. It is also based on the feedback and advice received from Technical Advisory Committee at the meeting held following the Regional Workshop.

The Regional Workshop also provided key contributions to the development of the Plan of Action which is submitted separately as Part II. While the Regional DRM Strategy and Plan of Action for the Tourism Sector in the Caribbean has a regional focus, it is important to note that another key deliverable in this mandate is the “Guidance Tool” for the adoption and adaptation of the DRM Strategy at the national level, which has been submitted separately.

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Acknowledgements

*The team and consultants of Baastel wish to acknowledge and thank the many stakeholders who participated in the Strategy Development process. The valuable input and assistance provided in the development of this Draft and Final Strategy and Plan of Action by the various Tourism sector and disaster management stakeholders in the Caribbean region was greatly appreciated.*

*The Baastel team was comprised of Roberto Gonzalez, Evan Green, Carolyn Hayle, and Mareba Scott.*

## **Acronyms**

|         |                                                                        |
|---------|------------------------------------------------------------------------|
| BCP     | Business Continuity Plans                                              |
| BVI     | British Virgin Islands                                                 |
| CAER    | Community Awareness and Emergency Response                             |
| CARICOM | Caribbean Community and Common Market                                  |
| CBT     | Community-based Tourism                                                |
| CDB     | Caribbean Development Bank                                             |
| CDEMA   | Caribbean Disaster Emergency Management Agency                         |
| CDM     | Comprehensive Disaster Management                                      |
| CHTA    | Caribbean Hotel and Tourism Association                                |
| CROSQ   | CARICOM Regional Organization for Standards and Quality                |
| CRSTDP  | Caribbean Regional Sustainable Tourism Development Programme           |
| COTED   | Council for Trade and Economic Development                             |
| CTO     | Caribbean Tourism Organization                                         |
| DM      | Disaster Management                                                    |
| DRR     | Disaster Risk Reduction                                                |
| DRM     | Disaster Risk Management                                               |
| ERP     | Emergency Response Plans                                               |
| GHG     | Greenhouse Gas                                                         |
| HRVA    | Hazard, Risk, Vulnerability Assessment                                 |
| HVA     | Hazard Vulnerability Assessment                                        |
| IDB     | Inter-American Development Bank                                        |
| IPCC    | Inter-governmental Panel on Climate Change                             |
| ISDR    | International Strategy for Disaster Reduction                          |
| LFA     | Logical Framework                                                      |
| MoF     | Ministry of Finance                                                    |
| MOT     | Ministry of Tourism                                                    |
| NDC     | National Disaster Council                                              |
| NDMS    | National Disaster Management System                                    |
| NDO     | National Disaster Organization                                         |
| NEOC    | National Emergency Operations Centre                                   |
| NGOs    | Non-governmental Organizations                                         |
| NRPs    | National Response Plans                                                |
| NTO     | National Tourism Organization                                          |
| OAS     | Organization of American States                                        |
| PMF     | Performance Measurement Framework                                      |
| RBM     | Results-based Management                                               |
| RSO     | Regional Strategic Objectives                                          |
| RPG     | Regional Public Good                                                   |
| TCI     | Turks and Caicos Islands                                               |
| TEMC    | Tourism Emergency Management Committee                                 |
| TEOC    | Tourism Emergency Operation Centre                                     |
| UN      | United Nations                                                         |
| UNECLAC | United Nations Economic Commission for Latin America and the Caribbean |
| UNEP    | United Nations Environmental Programme                                 |
| UNFCCC  | United Nations Framework Convention on Climate Change                  |

|        |                                                              |
|--------|--------------------------------------------------------------|
| UNISDR | United Nations International Strategy for Disaster Reduction |
| UNWTO  | United Nations World Tourism Organization                    |
| USA    | United States of America                                     |
| UWI    | University of the West Indies                                |
| WMO    | World Metrological Organization                              |



## Glossary

### Climate change

(a) The Inter-governmental Panel on Climate Change (IPCC) defines climate change as: “a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forces or to persistent anthropogenic changes in the composition of the atmosphere or in land use”.

(b) The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”.

*Comment: Contingency planning results in organized and coordinated courses of action with clearly- identified institutional roles and resources, information processes, and operational arrangements for specific actors at times of need. Based on scenarios of possible emergency conditions or disaster events, it allows key actors to envision, anticipate and solve problems that can arise during crises. Contingency planning is an important part of overall preparedness. Contingency plans need to be regularly updated and exercised.*

(United Nations International Strategy for Disaster reduction - UNISDR 2009)

### Comprehensive Disaster Management (CDM)

CDM includes planning for all and responding to all hazards and threats (both natural and man-made) during all phases of the disaster cycle (mitigation, preparedness, response and recovery). It involves all levels of and sectors of society in an integrated management approach. It requires continuous engagement of political and other decision makers.

### Disaster

A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.

*Comment: Disasters are often described as a result of the combination of: the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease and other negative effects on human physical, mental and social well-being, together with damage to property, destruction of assets, loss of services, social and economic disruption and environmental degradation.*

(UNISDR 2009)

### Disaster Management (See Emergency Management below)

### Disaster risk management

The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

*Comment: This term is an extension of the more general term “risk management” to address the specific issue of disaster risks. Disaster risk management aims to avoid, lessen or transfer the adverse effects of hazards through activities and measures for prevention, mitigation and preparedness.*

(UNISDR 2009)

### **Disaster Risk Reduction (DRR)**

The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (Mitigation and Preparedness) the adverse impacts of hazards, within the broad context of sustainable development. DRR involves:

- Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;
- Knowledge development including education, training, research and information;
- Public commitment and institutional frameworks, including organizational, policy, 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 financial instruments;
- Early warning systems including forecasting, dissemination of warnings, Preparedness measures and reaction capacities

(International Strategy for Disaster Reduction - ISDR 2004)

The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

*Comment: A comprehensive approach to reduce disaster risks is set out in the United Nations-endorsed Hyogo Framework for Action, adopted in 2005, whose expected outcome is “The substantial reduction of disaster losses, in lives and the social, economic and environmental assets of communities and countries.”*

*The ISDR system provides a vehicle for cooperation among Governments, organisations and civil society actors to assist in the implementation of the Framework. Note that while the term “disaster reduction” is sometimes used, the term “disaster risk reduction” provides a better recognition of the ongoing nature of disaster risks and the ongoing potential to reduce these risks.*

(UNISDR 2009)

### **Emergency management**

The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps.

*Comment: A crisis or emergency is a threatening condition that requires urgent action. Effective emergency action can avoid the escalation of an event into a disaster. Emergency management involves plans and institutional arrangements to engage and guide the efforts of government, non-government, voluntary and private agencies in comprehensive and coordinated ways to respond to the entire spectrum of emergency needs. The expression “disaster management” is sometimes used instead of emergency management.*

(UNISDR 2009)

### **Hazard**

A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

*Comment: The hazards of concern to disaster risk reduction as stated in footnote 3 of the Hyogo Framework are “... hazards of natural origin and related environmental and technological hazards and risks.” Such hazards arise from a variety of geological, meteorological, hydrological, oceanic, biological, and technological sources, sometimes acting in combination. In technical settings, hazards are described quantitatively by the likely frequency of occurrence of different intensities for different areas, as determined from historical data or scientific analysis.*



(UNISDR 2009)

### **Hazard, Risk and Vulnerability Assessment (HRVA)**

A process to determine the level of risk given a vulnerability to a hazard. Synonymous with Risk Assessment defined below and widely referred to as HVA (Hazard Vulnerability Assessment) in the Caribbean region. HRVAs are undertaken at all levels with corresponding degrees of specificity.

### **HRVA Tool**

A tool to assist in conducting a hazard vulnerability and risk assessment. There are a variety of tools available for the conduct of hazard, vulnerability and risk assessments at various levels. The most common focus is on the community level, where HRVAs are conducted in an all-hazard context to assist in determining the relative risks posed by a variety of hazards to which the community may be vulnerable.

### **Mitigation**

The lessening or limitation of the adverse impacts of hazards and related disasters.

*Comment: The adverse impacts of hazards often cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness. It should be noted that in climate change policy, “mitigation” is defined differently, being the term used for the reduction of greenhouse gas emissions that are the source of climate change.*

(UNISDR 2009)

### **Natural hazard**

Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

*Comment: Natural hazards are a sub-set of all hazards. The term is used to describe actual hazard events as well as the latent hazard conditions that may give rise to future events. Natural hazard events can be characterized by their magnitude or intensity, speed of onset, duration, and area of extent. For example, earthquakes have short durations and usually affect a relatively small region, whereas droughts are slow to develop and fade away and often affect large regions. In some cases hazards may be coupled, as in the flood caused by a hurricane or the tsunami that is created by an earthquake.*

(UNISDR 2009)

### **Preparedness**

The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

*Comment: Preparedness action is carried out within the context of disaster risk management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response through to sustained recovery. Preparedness is based on a sound analysis of disaster risks and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities. The related term “readiness” describes the ability to quickly and appropriately respond when required.*

(UNISDR 2009)

### **Prevention**

The outright avoidance of adverse impacts of hazards and related disasters.

*Comment: Prevention (i.e. disaster prevention) expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance. Examples include dams or embankments that eliminate flood risks, land-use regulations that do*



*not permit any settlement in high risk zones, and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake. Very often the complete avoidance of losses is not feasible and the task transforms to that of mitigation. Partly for this reason, the terms prevention and mitigation are sometimes used interchangeably in casual use.*  
(UNISDR 2009)

**Recovery**

The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

*Comment: The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended, and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programmes, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the “build back better” principle.*  
(UNISDR 2009)

**Resilience**

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

*Comment: Resilience means the ability to “resile from” or “spring back from” a shock. The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need.*  
(UNISDR 2009)

**Response**

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.

*Comment: Disaster response is predominantly focused on immediate and short-term needs and is sometimes called “disaster relief”. The division between this response stage and the subsequent recovery stage is not clear-cut. Some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage.*  
(UNISDR 2009)

**Retrofitting**

Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards.

*Comment: Retrofitting requires consideration of the design and function of the structure, the stresses that the structure may be subject to from particular hazards or hazard scenarios, and the practicality and costs of different retrofitting options. Examples of retrofitting include adding bracing to stiffen walls, reinforcing pillars, adding steel ties between walls and roofs, installing shutters on windows, and improving the protection of important facilities and equipment.*  
(UNISDR 2009)

**Risk**

The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions. Conventionally risk is expressed by the notation: Risk = Hazards x Vulnerability  
(ISDR 2004)

The combination of the probability of an event and its negative consequences.



*Comment: This definition closely follows the definition of the ISO/IEC Guide 73. The word “risk” has two distinctive connotations: in popular usage it usually placed on the concept of chance or possibility, such as in “the risk of an accident”; whereas in technical settings the emphasis is usually placed on the consequences, in terms of “potential losses” for some particular cause, place and period. It can be noted that people do not necessarily share the same perceptions of the significance and underlying causes of different risks.*

(UNISDR 2009)

#### **Risk assessment**

A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

*Comment: Risk assessments (and associated risk mapping) include: a review of the technical characteristics of hazards such as their location, intensity, frequency and probability; the analysis of exposure and vulnerability including the physical social, health, economic and environmental dimensions; and the evaluation of the effectiveness of prevailing and alternative coping capacities in respect to likely risk scenarios. This series of activities is sometimes known as a risk analysis process.*

(UNISDR 2009)

Also see HRVA above.

#### **Risk transfer**

The process of formally or informally shifting the financial consequences of particular risks from one party to another whereby a household, community, enterprise or state authority will obtain resources from the other party after a disaster occurs, in exchange for ongoing or compensatory social or financial benefits provided to that other party.

*Comment: Insurance is a well-known form of risk transfer, where coverage of a risk is obtained from an insurer in exchange for ongoing premiums paid to the insurer. Risk transfer can occur informally within family and community networks where there are reciprocal expectations of mutual aid by means of gifts or credit, as well as formally where governments, insurers, -lateral banks and other large risk-bearing entities establish mechanisms to help cope with losses in major events. Such mechanisms include insurance and re-insurance contracts, catastrophe bonds, contingent credit facilities and reserve funds, where the costs are covered by premiums, investor contributions, interest rates and past savings, respectively.*

(UNISDR 2009)

#### **Structural and non-structural measures**

Structural measures: Any physical construction to reduce or avoid possible impacts of hazards, or application of engineering techniques to achieve hazard- resistance and resilience in structures or systems;

Non-structural measures: Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness raising, training and education.

*Comment: Common structural measures for disaster risk reduction include dams, flood levies, ocean wave barriers, earthquake-resistant construction, and evacuation shelters. Common non-structural included building codes, land use planning laws and their enforcement, research and assessment, information resources, and public awareness programmes. Note that in civil and structural engineering, the term “structural” is used in a more restricted sense to mean just the load-bearing structure, with other parts such as wall cladding and interior fittings being termed non-structural.*

(UNISDR 2009)

#### **Tourism cluster**

Tourism Cluster refers to tourism establishments that are located in the same community. Being in the same geographical area, these tourism establishments share a common exposure to the same hazards. Being in the same community allows them to cooperate with themselves and with the community in all matters related to DRM.

**Tourism establishment or venue**

Tourism establishment or venue refers to a business, including its facilities and assets, whose primary function is to provide services and goods to tourists.  
(baastel)

**Vulnerability**

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

*Comment: There are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors. Examples may include poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management. Vulnerability varies significantly within a community and over time. This definition identifies vulnerability as a characteristic of the element of interest (community, system or asset) which is independent of its exposure. However, in common use the word is often used more broadly to include the element's exposure.*  
(UNISDR 2009)



## 1. Introduction

### 1.1 Importance of the Tourism Sector for the Caribbean

Tourism, as the world's largest industry, forms an integral part of the global trade and sustainable development agenda. The Caribbean, like many developing economies depend on tourism as its primary source of foreign exchange earnings and as its key engine for economic and entrepreneurial development, and poverty alleviation. The Caribbean is in fact the most tourism dependent region in the world.

Tourism is a long established phenomenon in the Caribbean, however, the emergence of mass tourism in the late 1950s and the advent of more affordable air travel by the early 1960s, brought the rapid expansion of tourism as a major economic activity in the region. Rapid expansion in the 1960s from new national governments that were or soon to be independent from the colonial powers, saw large investments in tourism facilities, infrastructure and the provision of attractive investment incentives. At this stage and many years onwards tourism remained a largely unplanned economic activity. Dr. Jean Holder (first Secretary General of the Caribbean Tourism Organization) in his reflections of governments' role in early tourism development in the Caribbean noted that tourism *"was not included in their economic planning processes. There was no manpower development plan for indigenous personnel; no physical zoning plan geared towards environmental protection; no research activity. They were, in fact, timid about supporting a sector that attracted criticism from a vocal, newly independent intelligentsia, and from some international development agencies, because of socio-cultural factors. In spite of significant changes and great improvements in these aspects during the 1970s and 1980s, even today Caribbean tourism suffers from this legacy of negative social perceptions and unplanned growth."*<sup>1</sup>

The preceding perspective of Caribbean tourism is further compounded by the fact that tourism was not and among some academics, is still not seen as an industry per se, but an amalgamation of several industries ranging from transportation to accommodation to events, which may not always all be exclusively for tourism purposes. It stands to reason therefore that given tourism's multi-sectoral and integrated nature, tourism must also be looked at in the context of other national socio-economic and environmental dimensions.

The issue of unplanned growth still holds true in 2009 and has great implications for the sustainable development of Caribbean tourism and the full implementation of this Strategic Plan for Disaster Risk Management in the Tourism Sector. The success of future initiatives in the tourism sector and by extension disaster risk management, must not only address the issue of inadequate planning but coordination and the integration of multiple sectors.

Despite the unplanned nature of early tourism development in the Caribbean and the developing constraints of small island development states (which characterizes most of the territories in the region), tourism grew rapidly and consistently in the Caribbean during the period 1970 to 2000. After the decline of 2001, cruise arrivals grew an average of 3.8 percent while overall tourist arrivals grew by 3.6 percent between 2002 and 2007 and by 2008 visitor expenditure was estimated to be US 27 billion (CTO, 2009). According to the CTO tourism in the region constitutes more than one third exports and directly employs more than one million workers. Today, the level of dependence on tourism of various countries in the

<sup>1</sup> Holder, J (1993) The Caribbean Tourism Organization in historical perspective. In D.J. Gayle & J.N. Goodrich (Eds), Tourism Marketing and Management in the Caribbean (pp. 20-27). London: Routledge.



Caribbean is quite evident, and is demonstrated in the table on the impact of visitor expenditure on some key economic indicators in five (5) selected Caribbean countries.

| Impact of Visitor Expenditure in Selected Caribbean Countries |                       |                         |                                 |              |
|---------------------------------------------------------------|-----------------------|-------------------------|---------------------------------|--------------|
| Country                                                       | GDP Normal Multiplier | % of Government Revenue | Balance of Payment % of Imports | % Employment |
| Anguilla                                                      | 0.8273                | 40.8                    | 19.2                            | 48.1         |
| Barbados                                                      | 0.8229                | 20.0                    | 16.4                            | 26.6         |
| British Virgin Islands                                        | 0.6135                | 9.3                     | 38.6                            | 50.9         |
| Jamaica                                                       | 0.7590                | 15.3                    | 10.7                            | 12.5         |
| St. Lucia                                                     | 0.6471                | 20.3                    | 18.4                            | 20.7         |

Source: CTO, 2009

Typically associated with a sun, sea and sun product, the Caribbean is the number one cruise destination in the world and receives the majority of its air arrivals from North America (United States of America - USA & Canada), the United Kingdom and Europe.

1.2 Characteristics of the Tourism Sector

1.2.1 Structure of the Caribbean Tourism Sector

Apart from the eight sub-sectors (identified below), which define the structure of tourism at the national level in the Caribbean, the chain of distribution for tourism services in the region can be international, regional, national, as well as, local. Marketing intermediaries at all levels help to link producers or manufactures with consumers. Tour operators will typically act as wholesalers to package accommodation, transportation and attractions. Other services such as food and beverage often involve no intermediary and are ‘sold’ by the retailer, the restaurant owner or roadside vendor in the community. The size of some territories in the Caribbean blurs the line of distinction between national and local. Larger countries like Jamaica and the islands of the Bahamas can distinguish between plans at the national and local level, where as for an island such as St. Eustatius, national and local would be one and the same.

The Caribbean Tourism Organization (CTO), with headquarters in Barbados and marketing operations in New York, London and Toronto, is the Caribbean’s tourism development agency and comprises membership of over 30 member governments and a myriad of private sector entities. These include the Caribbean Hotel and Tourism Association (CHTA), companies, organizations and persons providing products and services to the Caribbean Tourism industry. The body is primarily involved in the joint promotion and marketing of Caribbean tourist destinations in North America and Europe. Its purpose and vision is to increase significantly the inclusion of the Caribbean region in the set of destinations being considered by travellers. CTO envisions the global recognition of the Caribbean as a growing set of places and experiences that people feel compelled to enjoy in their lifetime. Its mission is to create and manage the partnerships necessary to increase the purchase of travel to and within the Caribbean that results in sustainable economic and social benefits for the Caribbean people.

Vincent Vanderpool-Wallace former Secretary General of the CTO believes that “all Tourism in the Caribbean should be community-based Tourism.” Community based-Tourism (CBT) is grounded in the



active participation and empowerment of local people in the tourism industry. CBT describes a process for tourism development and management and not a product. This fundamental principle of participation and empowerment in CBT also forms an integral component of a comprehensive Disaster Risk Management (DRM) Strategy for the Caribbean.

The Caribbean is also characterized by largely coastal tourism developments, which of course makes it more vulnerable to natural hazards, but at the same time provides an opportunity for tourism businesses that are in close geographic proximity to form “clusters”<sup>2</sup> to address inter alia the different phases of DRM (mitigation, preparedness, response and recovery). Tourism entities may compete in some respects but at the same time achieve economies of scale by cooperating in specific areas given the multi-disciplinary and integrated nature of the industry. Such tourism clusters will only have a positive effect if there is a significant amount of trust that creates a certain degree of social capital, which facilitates a community-based approach for planning and developing tourism and by extension DRM in the sector.

### **1.2.2 Sub-sectors**

CTO has defined the regional tourism industry by eight sub-sectors:

- (1) **The Accommodation sub-sector** forms part of the core tourism product. All tourists need some type of accommodation facility, whether a hotel, guesthouse, bed and breakfast establishment, villa, time-share or host home.
- (2) **The Food & Beverage** sub-sector is another key facet of the tourism product. One hundred percent of all tourists consume food and beverage during their stay and culinary tourism is a fast growing niche market in the Caribbean.
- (3) **The Transportation** sub-sector is also a core element of the tourism product. Tourism by definition involves the movement of people to destinations outside their normal place of abode. Transportation falls in one of three categories air, ground and sea.
- (4) **Attractions** are the last core component of the tourism product. The Caribbean’s tourist attractions are typically nature-based such as, waterfalls and parks, based on the built heritage for example, museums and historic sites or based on popular culture such as carnivals and music festivals.
- (5) **The Adventure Tourism** sub-sector is another expanding sector in tourism and caters for visitors desirous of active and recreational experiences. These types of activities are typically outdoors and require some type of interaction with nature.
- (6) **The Events and Conferences** sub-sector is dynamic, and requires the pulling together of all elements of the tourism industry to create the end result of an international conference, a carnival, a music festival such as a jazz festival or a sporting event such as a cricket test series.
- (7) **The Travel Trade** sub-sector comprises of tour operators, travel agents and destination management companies, which provide ground handling and ground tour operation services

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<sup>2</sup> This concept is discussed in further detail in section 4.2.2



- (8) **The Tourism Services** sub-sector involves persons working in diverse areas to better develop and manage the tourism industry as a whole. This sub-sector includes government agencies, industry or trade associations, marketing services, researchers, consultants, training institutions, Tourism educators and travel writers.

The Caribbean tourism sector structure can be visualized as a three-tier pyramid. The apex represents the regional level stakeholders. The middle tier represents the more numerous national level stakeholders. Individual tourist service venue/outlets are at the base of the pyramid as they are the most numerous elements and all have a local dimension. The local dimension is the basis for the community-based tourism concept. However, in terms of CDM there is also the fundamental truism that consequences of events causing incidents, emergencies or disasters all have a local dimension. This means that impacts of an event at a specific geographical location will affect the community in that area including tourism service venues or establishments within the area. Therefore, for purposes of resilience to events, there is an important connection between the tourism establishments and the communities in which they are located. Recognition of this importance is reflected in the “cluster” concept – a *cluster* being comprised of multiple tourism establishments that are physically located nearby to one another. “The members of the *cluster* can work cooperatively and collaboratively to assess, organize, combine and control their collective capabilities and resources to prepare for ... threats, and to respond to and recover from such critical events”.<sup>3</sup> Given the diversity in characteristics of CTO member states, the pyramid may be flatter in the smaller states as the ‘local’ and ‘national’ strata may be one and the same.



### 1.3 Rationale for a Regional Strategy for DRM in the Tourism Sector in the Caribbean

Given the critical importance of tourism to the sustainable development of Caribbean countries and the vulnerability of both the sector and the region to events induced by natural hazards, DRM is essential to the tourism sector. The pervasive nature of the industry means that DRM efforts are needed by all stakeholders at the individual venue, local, national and regional levels to reduce their individual and collective vulnerability to hazards and assure continued sustainable development following inevitable events.

#### 1.3.1 Vulnerability of the Caribbean Tourism Sector to Natural Hazards – Key Issues

The Caribbean region is prone to variety of destructive events caused by natural and man-made hazards. The sustainable development of countries in the region is adversely impacted by these events. Their vulnerability to hazards is further aggravated when these negatively impact on their core business such as tourism. Caribbean tourism’s vulnerability is further exacerbated by the openness of the region’s economy, the size of the individual countries in the region, geographic location, developments and human settlements being largely along the coast and a limited range of resources. Tourism is also very vulnerable

<sup>3</sup> OAS/CDERA Multi-Hazard Contingency Planning Manual for the Caribbean Tourism Sector. P.32



to international, regional and national shocks and disruptions caused by wars, financial crises, terrorism, strikes, and diseases outbreaks.

The United Nations World Tourism Organization (UNWTO) has described tourism as a vector and victim of climate change. Experts recognize that the environment including the climate is a tourism resource, and the industry is highly susceptible to the impact of climate change and increased warming.

Climate change and global warming has been attributed with causing an increase in storm surges, coastal erosion, coral bleaching, sea level rise and more severe weather patterns- hotter periods, droughts, increased rainfall and increased intensities of hurricanes and the concomitant flooding, mudslides and sadly loss of life and livelihoods. There have been too many acute examples of this across the Caribbean in recent history and consequently the need for this DRM Strategy and Plan of Action for the Tourism Sector in the Caribbean is further justified.

The Davis Declaration advocates, while recognizing the role of tourism in poverty alleviation, that “*there is a need to urgently adopt a range of policies which encourages truly sustainable Tourism that reflects a quadruple bottom line of environmental, social, economic and **climate** responsiveness*”. The pressure is now on for the industry to “*rapidly respond to climate change within the evolving United Nations (UN) framework and progressively reduce its Greenhouse Gas (GHG) emissions if it is to grow in a sustainable manner.*” While the Caribbean is considered a miniscule contributor to GHG emissions it has been and will be significantly impacted by global warming. The Caribbean region has been identified by the UNWTO, the United Nations Environmental Programme (UNEP) and the World Meteorological Organization (WMO) as a climate change vulnerability hotspot. Climate change adaptation and mitigation for the tourism industry is therefore critically important for sustainable development in the Caribbean.

When the tourism industry is negatively impacted by natural hazards the domino effect for the region is a decline in agriculture, manufacturing, transportation, financial services and a whole host of services in the economy that are vital linkages to the tourism industry. The sustainability of the Caribbean tourism sector therefore equates to the sustainability of the Caribbean and securing the economic, social, cultural and environmental assets of the region.

The Caribbean and in particular the wider Caribbean is comprised of both island states and landmass territories. By that very description of the makeup of the Caribbean it is evident that natural hazard experienced in the Caribbean region are also varied. The most common of these hazards are hurricane, earthquake, volcanic, flood and drought. The region also suffers periodically from storm surges and landslides.

It is reasonable to say that DRM in the tourism sector also faces these challenges above. In addition, the sector plays a significant role after the occurrence of an event or disaster, and how response and recovery ensue is critical. The tourism sector is expected to rebound quickly from an event or disaster and, at the same time, communicate to the world that the destination is open for business. The purpose of this is also to create revenue to help with the recovery process.

In determining the likely impacts of hazards, the complex and related reactions from the societal, environmental and economic elements are as important as understanding the event itself. Approaching DRM requires a new way of thinking for the Caribbean. It requires a new *modus operandi* as well. The Caribbean has experienced challenges in terms of collaboration – both within countries and across territories. Planning for events and disasters and more particularly ensuring quick recovery from an event or disaster requires high levels of cooperation and trust.



An integrated and proactive approach to disaster risk reduction in the Caribbean will necessitate countries developing strategies that combat all the main challenges as identified in the IDB Action Plan for Latin America and the Caribbean.<sup>4</sup> These areas include:

*(1) Reducing the Vulnerability of the Poor*

The literature on disaster risk reduction repeatedly underscores poverty as a dimension of vulnerability. A worrisome observation from a 2008 World Bank Report<sup>5</sup> highlights the fact that since 2000, poverty levels fell in most countries in Latin America but not in the Caribbean. Increasing migrant populations within the Caribbean further exacerbated vulnerability issues and highlighted the disparity between nationals and non-nationals. The Turks and Caicos Islands (TCI)<sup>6</sup>, demonstrate these issues. According to a 2008 United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) report, the experience of Hurricane Ike and Tropical Storm Hanna in TCI in 2008 demonstrated that, “*The islands which experienced the worst devastation also had the highest proportion of poverty, Grand Turk with 32.8% poor and South Caicos, 45.2%. Middle Caicos, although having a higher percentage (61.4%) of the poor, did not result in a higher percentage of devastation to its households, as would have been expected. The extent of damage may be attributed to it having been more impacted by flooding from Tropical Storm Hanna than by Hurricane Ike*”.<sup>7</sup>

There were also observable vulnerability issues that emerged in UNECLAC’s assessment of Saint Lucia in the aftermath of Hurricane Dean in 2007. The districts most severely affected were sub-urban Castries (rural), Anse La Raye, Vieux Fort, Dennery and Micoud which share a number of characteristics that increase the susceptibility of persons in those districts to the impact of natural hazards. Among them are their dependence on agriculture and fishing as the main source of income, the low lying coastal nature of their settlements, and the rivers which run through, making these districts prone to flooding. The government acknowledged that the rural population faces greater challenges than their urban counterparts, particularly as it relates to access to social services and the generation of economic opportunity<sup>8</sup>.

*(2) Building a culture of prevention*

While there are increasing efforts by institutions and national governments to disseminate risk information, these have typically focused on hurricanes. Prevention strategies must still be reinforced through the planning initiatives of the economy’s various sectors, for multiple-hazards and at all levels in society.

Recent studies<sup>9</sup> have found that in some countries, disaster and emergency preparedness and response planning (in the tourism sector and beyond) is inadequate. In the Tourism sector in particular, there has been a demonstrative need for both models and guidance for planning - in the form of high quality and

<sup>4</sup> Inter-American Development Bank, 2000. Facing the Challenge of Natural Disaster in Latin America and the Caribbean: An IDB Action Plan

<sup>5</sup> <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/0,,contentMDK:21858173~pagePK:146736~piPK:146830~theSitePK:258554,00.html>

<sup>6</sup> One of the countries used in the baseline study for this RPG project and one of the pilot countries for this Strategy and Plan of Action

<sup>7</sup> United Nations Economic Commission for Latin America and the Caribbean (2008). Turks and Caicos Islands : macro Socio-Economic Assessment of the Damage and Losses Caused by Tropical Storm Hanna and Hurricane Ike

<sup>8</sup> United Nations Economic Commission for Latin America and the Caribbean (2007). St. Lucia : Macro Socio-Economic Assessment of the Damage and Losses Caused by Hurricane Dean

<sup>9</sup> Le Groupe-conseil baastel ltee. Establishment of a Monitoring and Evaluation Framework through the Collection of Baseline Data for the Regional Disaster Risk Management for Sustainable Tourism in the Caribbean Project, *Report on Baseline Data Collection Findings*, 2007.



relevant example disaster and emergency preparedness and response plans and guidelines that they can follow. In addition, challenges in the sector with regards to having tourism establishments adequately prepare were also noted. There are no comprehensive and fully active systems for monitoring the level of preparedness and response capacity of tourism establishments.

Prevention must also be re-enforced during post-disaster recovery to reduce the severity of future impacts. The IDB notes that reconstruction efforts have often failed to adopt measures to reduce future risk. In the aftermath of a disaster, the pressure to restore services and economic activities has often led to poor quality reconstruction. Infrastructure is frequently rebuilt in the previous hazard-prone location. In addition, hazard-resistant building techniques, most of whose cost represents less than 10 percent of the total cost of new construction, are not adopted.<sup>10</sup>

Caribbean countries face many challenges in terms of building a culture of prevention. Apart from the issue of poverty and its attendant ills, there are issues of poor development planning and the related problems of environmental and natural resource management, and law enforcement. There is a need to have enhanced synergy between issues related to climate change, the environment and DRM policymaking and planning.

### *(3) Building National Systems for Disaster Preparedness and Response*

The IDB Action Plan for Latin America and Caribbean drew attention to the fact that with a few notable exceptions, the region has not pursued policies that reflect an understanding of its vulnerabilities and that identify actions to redress them. Land-use planning and building codes are still generally inadequate or poorly enforced in most of the hazard-prone areas in the region. The issue of enforcement is one reinforced by various studies and the tourism sector is noted in this area. Indeed, some studies<sup>11</sup> have found that the tourism sector in particular is facing challenges in controlling development and ensuring adherence to land use policies and building codes adequately. In TCI for example, *“although the islands have not recently suffered a devastating disaster, the rapid growth in tourism and expanding population, suggest that close attention needs to be paid to disaster preparedness, mitigation, response and recovery. Because disaster preparedness has not kept pace with development, the islands are now exposed to some of the threats outlined in the introduction. A major disaster not only threatens lives, but also could fatally undermine the key economic drives of a country.”*<sup>12</sup>

Incentives to encourage the private sector and households to adopt preventive measures rarely accompany those regulations that do exist. Infrastructure policies have directed far too few resources to basic maintenance, reducing resistance to natural hazards. Due to their weakness and instability, political and institutional systems have had little success in implementing effective public policies. In some municipalities in the region, regulations adopted to ensure better standards for residential development have even had adverse effects, by excluding the poor from the legal land markets and inhibiting the investment necessary to consolidate and improve the safety of neighbourhoods<sup>13</sup>. Some notable systems/strategies for building national systems have been identified in the previous point (above) on building a culture of prevention.

<sup>10</sup> Inter-American Development Bank, 2000. Facing the Challenge of Natural Disaster in Latin America and the Caribbean: An IDB Action Plan

<sup>11</sup> Le Groupe-conseil baastel ltee. Establishment of a Monitoring and Evaluation Framework through the Collection of Baseline Data for the Regional Disaster Risk Management for Sustainable Tourism in the Caribbean Project, *Report on Baseline Data Collection Findings*, 2007.

<sup>12</sup> TCI National Disaster Plan, DDME, Ministry of Home Affairs, 2005. p.5

<sup>13</sup> Inter-American Development Bank, 2000. Facing the Challenge of Natural Disaster in Latin America and the Caribbean: An IDB Action Plan



Other challenges noted included a lack of comprehensive capacity building for disaster and emergency preparedness and response. In the tourism sector in particular, further training for these aspects was found wanting in some countries, according to some studies undertaken<sup>14</sup>.

*(4) Providing Risk Information for Decision Making*

A major challenge for the Caribbean has been the wide dissemination of risk information at the community levels and in particular amongst vulnerable groups in society. Geographic dispersion compounds this situation in multiple island states e.g. Bahamas, TCI and in islands with relatively large land masses e.g. Dominican Republic, Guyana have posed challenges in the past. Cuba's success with hurricane evacuation and its low loss of life record, demonstrates that geographic dispersion challenges are not insurmountable. The commitment to saving human lives is first priority in the Cuban strategy. Primarily, this is achieved through education from an early age about the dangers associated with hurricanes and how to prepare and act in the event of one; a reliable early warning system that disseminates information leading up to a hurricane, but also during and after; and early evacuation. This last activity is critical, as hazard assessment specialists point to the refusal to evacuate as a major cause of death in hurricane situations. Indeed, refusal to evacuate partly explains why Florida suffered more loss of life than Cuba in recent hurricanes, including Charley, when four people died in Cuba, while 27 perished in Florida. According to an Oxfam report entitled *Weathering the Storm: Lessons in Risk Reduction in Cuba*, "Cuba's success in saving lives through timely evacuation when a hurricane strikes is a model of effective, government-driven disaster preparedness."<sup>15</sup> (Meddic Review, 2004)

Linked to this issue as well is the need to further the use of hazard vulnerability and risk assessments and to integrate them into decision making. This was a challenge noted in some countries in the region<sup>16</sup>.

*(5) Involving the Private Sector*

An estimated 50% of the properties damaged by the disasters in TCI in 2008 were either uninsured or underinsured and in many cases houses were built from personal savings rather than mortgage financing<sup>17</sup>. Creative and flexible partnership with private financial institutions would therefore be a critical prevention issue.

Apart from financing mechanisms to spread disaster risk and provide regulatory incentives, the private sector must also see their role in increasing the consciousness level of disaster risk reduction of the national population (by sharing the burden of responsibility with the public sector). The private sector also play a critical role in providing supporting goods and services pre- and post-disaster, including critical support for water, energy, telecommunications, engineering services and other technical support. In the tourism sector in particular, the linkages between the various tourism establishments and the host community are critical and there is a strong need for coordinated and harmonized disaster and emergency preparedness and

<sup>14</sup> Le Groupe-conseil baastel ltee. Establishment of a Monitoring and Evaluation Framework through the Collection of Baseline Data for the Regional Disaster Risk Management for Sustainable Tourism in the Caribbean Project, *Report on Baseline Data Collection Findings*, 2007.

<sup>15</sup> [http://www.medicc.org/publications/medicc\\_review/1004/pages/top\\_story.html](http://www.medicc.org/publications/medicc_review/1004/pages/top_story.html)

<sup>16</sup> Le Groupe-conseil baastel ltee. Establishment of a Monitoring and Evaluation Framework through the Collection of Baseline Data for the Regional Disaster Risk Management for Sustainable Tourism in the Caribbean Project, *Report on Baseline Data Collection Findings*, 2007.

<sup>17</sup> United Nations Economic Commission for Latin America and the Caribbean (2008). Turks and Caicos Islands : macro Socio-Economic Assessment of the Damage and Losses Caused by Tropical Storm Hanna and Hurricane Ike



response planning between this business and the host community. In some cases, these linkages have been found wanting<sup>18</sup>.

Case studies from Central America and the Caribbean (Haiti and the Dominica Republic) demonstrated that the private sector will and can help communities mitigate disasters. The key characteristics that drove the initiatives were that each of the communities had: multiple hazards, a history of disasters, committed local leadership, committed Non-governmental organizations (NGOs) and well-established businesses. This initiative was not nearly as successful in cases where one or more of these elements were missing. The key lessons learned were that the private sector will get involved if it is clear that results will benefit them; and, local leaders, who are supportive, can motivate others to participate<sup>19</sup>. Government therefore must provide a support framework to maximize the potential contribution of the private sector to disaster risk management.

#### *(6) Fostering Leadership and Cooperation in the Region*

The region's pattern of development and, more specifically, the persistence of widespread poverty, rapid and uncontrolled urbanization and environmental degradation have led to an increase in its vulnerability to natural hazards. Evidence suggests that the region's propensity to experience damage and its difficulties in recovering from disasters are growing<sup>20</sup>. (IDB, 2000)

The Caribbean region does not benefit from a common regional approach to DRM that is supported by all countries. However, the participating states of the Caribbean Disaster Emergency Management Agency (CDEMA) enjoy a considerable level of cooperation in DRM matters through their joint adherence to the Comprehensive Disaster Management (CDM) Strategy and Framework and is *de facto* the most widely accepted regional DRM approach. Participating states have benefited tremendously from resource material and training of resource persons as well as from sharing established mechanisms for support and communication protocols at the national and regional levels.

A proactive and comprehensive approach at the national level remains a challenge. The experiences of various case studies demonstrate that leadership and commitment at the highest political level go a long way in not only establishing a culture of prevention but improving organizational and institutional arrangements.

#### **1.3.2 Implications for a Regional DRM Tourism Strategy**

Given the critical importance of tourism to the sustainable development of Caribbean countries and the vulnerability of both the sector and the region to events induced by natural hazards, DRM is essential to the economic and physical resilience of both sector and the region. The pervasive nature of the industry means that DRM efforts are needed by all stakeholders at the individual venue, local, national and regional levels to reduce their individual and collective vulnerability to hazards and assure continued sustainable development following inevitable events.

<sup>18</sup> Le Groupe-conseil baastel ltee. Establishment of a Monitoring and Evaluation Framework through the Collection of Baseline Data for the Regional Disaster Risk Management for Sustainable Tourism in the Caribbean Project, *Report on Baseline Data Collection Findings, 2007*.

<sup>19</sup> International Strategy for Disaster Reduction (2008). Private Sector Activities in Disaster Risk Reduction. Good Practices and Lessons Learned

<sup>7, 20</sup> Inter-American Development Bank, 2000. Facing the Challenge of Natural Disaster in Latin America and the Caribbean: An IDB Action Plan



The tourism sector in the Caribbean has been increasingly proactive in mainstreaming DRM in many areas of the industry and the benefits of collective efforts, including economies of scale, are self-evident. However, to fully exploit the benefits of collective and collaborative efforts, overarching common DRM objectives to guide stakeholders' efforts are needed. The Regional DRM Strategy and Plan of Action for the Tourism Sector in the Caribbean provide the blueprint for concerted action. The Strategy is in part based on the need to address existing gaps and challenges to DRM in the tourism sector in the region, as well as on some relevant best practices in DRM in the tourism sector from the Caribbean and elsewhere<sup>21</sup>.

It would be unreasonable to expect that the Regional DRM Strategy for the Tourism Sector be the *panacea* for all the DRM challenges identified by the IDB Action Plan and other sources. Notwithstanding what actions countries may be undertaking or planning to address these challenges, the Strategy could and should, where possible, contribute to such efforts. In particular, the strategy focuses on and aims to address several of the themes discussed above, including, but not limited to:

- Integration of response and recovery planning within the sector itself, with the host community and within the national context (i.e. integration of the sector with national DRM planning);
- Emphasis on understanding and assessing risk to the sector from the regional to the individual establishment and integrating hazard, risk and vulnerability information into decision making;
- Building capacity in the sector for disaster and emergency preparedness and response planning both through application of training programmes and provision of high-quality guides and models
- Consideration of incentive programmes (and financial instruments) for enhancing mitigation, preparedness, response and recovery planning.

The Regional Strategy and Action Plan focus on many other themes and areas, all of which are discussed in the sections below.

#### 1.4 Purpose and Intended Use of the Strategy and Plan of Action

*The **Purpose of the** Regional DRM Strategy for the Tourism Sector is to reduce the vulnerability of the Tourism sector to natural hazards through integrating/ mainstreaming comprehensive disaster management.*

The Strategy and Plan of Action provides guidance to Caribbean tourism stakeholders for their DRM efforts in terms of focus for collective measures and actions. Implementation of a Regional DRM Strategy and Plan of Action for the Tourism Sector requires the concerted effort of tourism stakeholders at all levels – regional, national, local and individual. Thus, the Regional Strategy and Plan of Action is the overall sectoral framework for the development of linked National DRM Strategies and Plans of Action for the tourism sector. Therefore the Regional Strategy rests on a fundamental premise:

**Premise:**

*Caribbean countries are willing to develop their own National DRM Strategies and Plans of Action for the Tourism sector, linked to the Regional Strategy and Plan of Action.*

<sup>21</sup> These are briefly presented at Annex II.



The Strategy identifies DRM Regional Strategic Objectives (RSOs) and key activities for the Caribbean Tourism sector. The Plan of Action details those measures that can be undertaken by Tourism stakeholders at the regional and national levels to meet the RSOs. To fully attain the RSOs, measures are required to be undertaken by stakeholders who are bound by national parameters. Therefore, to be a fully effective instrument, the Regional Strategy and Plan of Action are dependent on National DRM Strategies and Plans of Action for the Tourism sector.

The Regional Strategy and Plan of Action also serve as a model for the development for National DRM Strategies and Plans of Action.

1.5 Vision, Goal and Regional Strategic Objectives

Extensive broad regional consultations, framed by the boundaries of the key policies of the IDB and CTO, the Enhanced CDM Strategy and Framework and the selection of hazards of regional importance, led to the formulation of the Regional Strategy’s Vision and Goal:

|                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Vision</b>                                                                                                                                                                                                                                                                                                               |
| A sustainable Caribbean Tourism sector with an enhanced resilience to consequences of regional events caused by natural hazards.                                                                                                                                                                                            |
| <b>Goal</b>                                                                                                                                                                                                                                                                                                                 |
| To build a culture of natural hazard risk reduction within the Caribbean Tourism sector to minimize potential deaths, injuries, loss of property, livelihoods, economic activity and damage to the environment caused by natural hazards through strengthening capacity for mitigation, preparedness, response and recovery |

The RSOs for the Strategy are presented below – broken down by the four phases of DRM (mitigation, preparedness, response and recovery). Their selection is contextualized in Section 2 and they are discussed in detail at Section 3.

|                     |                                                                                                                                                                                                      |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mitigation</b>   | 1. To promote the availability and use of natural hazard risk information in the tourism sector.                                                                                                     |
|                     | 2. To promote adherence to land use planning regulations and building codes in the development of new tourism infrastructure and retrofitting of older infrastructure not built to an approved code. |
|                     | 3. To foster national consideration of protective structural works to minimize damage from natural hazards to key environmental and other assets.                                                    |
|                     | 4. To promote mitigation, including risk transfer, as economically viable measures in the tourism sector.                                                                                            |
| <b>Preparedness</b> | 5. To enhance tourism sector contingency planning and capacity building to minimize the loss of life and injury to tourists, tourism                                                                 |

|                 |                                                                                                                                                                      |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | sector workers and property damage with an emphasis on tourist accommodation facilities.                                                                             |
|                 | 6. To promote individual and family preparedness amongst employees of the tourism sector.                                                                            |
|                 | 7. To foster tourism clusters and their integration into their communities' contingency planning.                                                                    |
| <b>Response</b> | 8. To enhance the development of emergency response/disaster plans (and related capacity to execute plans) in the tourism sector (and other key supporting sectors). |
|                 | 9. To promote the integration of tourism facilities' response with that of their respective communities (and countries).                                             |
|                 | 10. To promote the integration of tourism sector requirements into preparedness and National Response Plans (NRPs).                                                  |
| <b>Recovery</b> | 11. To enhance Business Continuity Planning in the tourism sector.                                                                                                   |
|                 | 12. To promote the establishment of national guidelines for restoration and reconstruction to ensure the immediate re-establishment of tourism economic activities.  |



2. Strategy Context

2.1 CDM in the Caribbean

The most widely used strategy in the Caribbean for DRM is the Enhanced CDM Strategy and Framework<sup>22</sup>. CDM is based on the ISDR philosophy. Historically, the focus of emergency and disaster practitioners has been on reactive measures taken after an event and planning for their implementation prior to the event. The present trend – as exemplified by the CDM in the Caribbean – is to enhance and supplement these reactive measures with more proactive pre-event activities aimed at reducing the impact of potential hazards and plan for effective recovery of their consequences. CDM is also characterized by the recognition of the need to mainstream DRM into all sectors of society.

2.1.1 Contextualizing the phases of CDM

CDEMA defines CDM as including attention to all phases: prevention, mitigation, preparedness, response, recovery and rehabilitation. CDM effectively refers to Comprehensive DRM in keeping with the stakeholder view that the term should reflect the global trend for increased focus on risk management and disaster loss reduction. For the sake of simplicity, this strategy will consistently refer to the CDM cycle comprising of four phases:

- Mitigation (which includes ‘prevention’);
- Preparedness (which includes ‘detection’);
- Response (which includes ‘warning’); and,
- Recovery (which includes ‘rehabilitation’ and ‘reconstruction’).

2.1.2 Contributing to the Enhanced CDM Strategy and Framework

The Enhanced CDM Strategy and Framework guides DRM in the Caribbean. The Regional Strategy and Plan of Action contributes to many key areas of the CDM Strategy and Framework. In particular, in relation to one of its Outcomes – Outcome 3 – at its related Outputs:

CDM Outcome 3

DRM has been mainstreamed at national levels and incorporated into key sectors of national economies (including Tourism, health agriculture and nutrition)

Outputs

- 3.1 CDM is recognized as the roadmap for building resilience and Decision-makers in the public and private sectors understand and take action on DRM
- 3.2 DRM capacity enhanced for lead sector agencies, National and regional insurance entities, and financial institutions

<sup>22</sup> Of the CTO member States, sixteen (CDERA Participating States) share a common approach to DRM through the application of the CDM Strategy and Framework.

- 3.3 Hazard information and DRM is integrated into sectoral policies, laws, development planning and operations, and decision-making in Tourism, health, agriculture
- 3.4 Prevention, Mitigation, Preparedness, Response, Recovery and Rehabilitation Procedures developed and Implemented in Tourism, health, agriculture

As the RSOs clearly demonstrate, the Strategy and Plan of Action will be making significant contributions in these areas. Contributions will in fact be made to a variety of areas under the CDM Strategy and Framework<sup>23</sup>.

## 2.2 Policy Context of the Strategy

The development of the Strategy has been guided and informed by a number of key regional and international documents and policies. The content of the Strategy endeavours to build on areas of commonalities related to the understanding of DRM and apply them to the Tourism sector in the Caribbean.

### ➤ ISDR Living with Risk

DRM is multi-dimensional, multidisciplinary and multi-sectoral field. Although there is a general acceptance of concepts and notions related to DRM, not surprisingly, specific field idiosyncrasies as well as cultural biases tend to result in varying understanding and usage of DRM terms and notions. The development of this Strategy is built upon the DRM philosophy, and understanding of key concepts and terms as detailed in the ISDR publication “Living with Risk” and the 2009 UNISDR Terminology on Disaster Risk Reduction.

### ➤ Caribbean Sustainable Tourism Policy Framework

The Strategy derives its tourism related concepts, such as the sector structure, from the Caribbean Sustainable Tourism Policy Framework. The Policy Framework also recognizes the importance of disaster risk reduction for its continued sustainable development and includes as one of its developmental goals:

**Goal 6: Manage the health, safety and security issues that impact on the sustainability of Tourism.**

Of particular relevance are two of the goal’s policy objectives:

- Enhance communication and coordination mechanisms related to health, safety, security and multi-hazard risk management.
- Integrate multi-hazard risk management into the Tourism sector to reduce the vulnerability of the sector to natural and man-made hazards.

### ➤ IDB DRM Policy

The purpose of the IDB DRM Policy is “To guide the Bank’s efforts to assist its borrowers in reducing risks

<sup>23</sup> The Plan of Action goes into some further detail about contributions to be made from the Strategy and Plan of Action to the CDM Strategy and Framework.



emanating from natural hazards and in managing disasters, in order to support the attainment of their social and economic development goals...’<sup>24</sup> This policy is broad in that it clearly addresses pre- and post-event aspects. Clear reference is made to mitigation, preparedness and recovery. No direct mention is made of response but it is implied in the purpose by the use of the term “managing disasters”. This policy specifically defines areas of coverage and exclusion. For example, hazards excluded from the policy are:

- Prevention and mitigation of disasters caused by social and political violence;
- The prevention of technological hazards;
- Epidemics and pandemics - covered by the Bank’s Public Health Policy;
- Risk management related to the Bank’s personnel and installations (which is covered in the Bank’s Business Continuity Plan); and,
- Financial emergencies which are treated through the Bank’s Emergency Lending Guidelines.

In short, the Regional DRM Strategy for the Tourism Sector in the Caribbean, informed by the IDB DRM Policy and adhering to the ISDR’s *Living with Risk*, aims to guide CTO membership in furthering the objectives of the Caribbean Sustainable Tourism Policy Framework (Goal 6) and also contributes to the Enhanced CDM Strategy and Framework.

## 2.3 Scope of the DRM Strategy for the Tourism Sector in the Caribbean

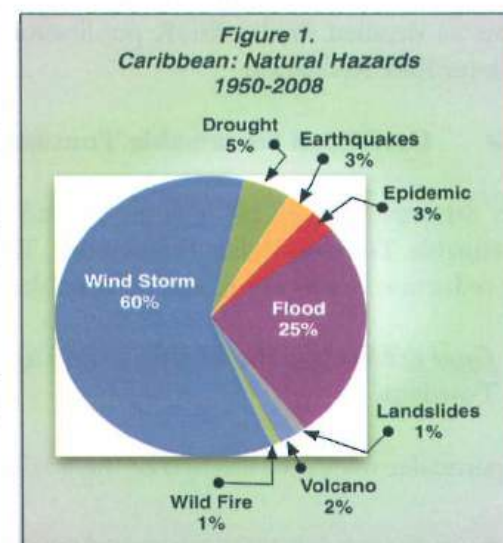
### 2.3.1 Hazards in the Caribbean

Not all countries in the region are susceptible to be affected to the same degree by the variety of common natural hazard. Although different studies form varied conclusions based on utilization of different methodologies, criteria and benchmarks, the importance of these relative vulnerability studies is that they agree that different countries in the Caribbean have different levels of exposure and vulnerability to the common hazards (including hurricanes, earthquakes, floods, volcanoes and droughts).

Figure 1 on the right shows the relative importance of the natural hazard phenomena of a total of 399 events registered for the period 1950-2008.<sup>25</sup>

### 2.3.2 Hazards in focus for the Strategy

Although the focus of the strategy is natural hazards, particularly those categorized as low frequency/high consequences, it does not follow that all other hazards are excluded from consideration. In terms of hazard, the Regional Strategy and Plan of Action are scoped to those caused by natural phenomena and to their potential consequences within the Caribbean region.



<sup>24</sup> Inter-American Development Bank, *Draft DRM Policy*, December 21, 2005. p. 2

<sup>25</sup> Adapted from EM-DAT: Emergency Events Database. Centre for Research on the Epidemiology of Disasters (CRED). Université Catholique de Louvain. Internet resource: [www.emdat.be](http://www.emdat.be)



The focus of the Strategy and Plan of Action is on regional natural hazards potentially resulting in low frequency/high consequences events. Specifically, the hazards of regional strategic relevance and are therefore included are:

| Regional Natural Hazards in Focus |                                                                                                                                        |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Source                            | Phenomena                                                                                                                              |
| Hydrometeorological               | <ul style="list-style-type: none"><li>▪ Hurricanes</li><li>▪ Storm surges</li><li>▪ Wind storms</li><li>▪ Floods</li></ul>             |
| Geological                        | <ul style="list-style-type: none"><li>▪ Volcanic activity</li><li>▪ Earthquakes</li><li>▪ Mass movements</li><li>▪ Tsunamis*</li></ul> |
| Biological                        | <ul style="list-style-type: none"><li>▪ Epidemic outbreaks, including Pandemics</li></ul>                                              |

Legend: \* including those originating outside of the Caribbean region.

This hazard selection for the Regional Strategy and Plan of Action does not imply that all other hazards are excluded from consideration in this mandate. Rather, it lists the hazards of *regional interest* only. Countries will supplement and modify the hazard list above in the development of National DRM Strategies for the Tourism sector to reflect hazards of *national interest*. Individual tourism establishments’, *focus of interest* in terms of hazards are not limited to those of regional or national interest. In other words, local emergency response plans are also concerned with “high frequency/low impact” events including man-made events

Notwithstanding the high level of concern with terrorism and its potential impact on tourism due to recent international incidents, this hazard is not addressed by the Strategy. Given the importance and the nature this hazard as well as the involvement of different key stakeholders, other regional instruments rather than this Strategy and Plan of Action would be more appropriate.

2.4 Principles of Cooperation for DRM in the Tourism Sector

Clearly effective DRM cannot be undertaken by the tourism sector in a vacuum. It is undertaken within the overall societal context and forms part, albeit an important part, of the regional and national DRM efforts.

2.4.1 Tourism is part of the Community

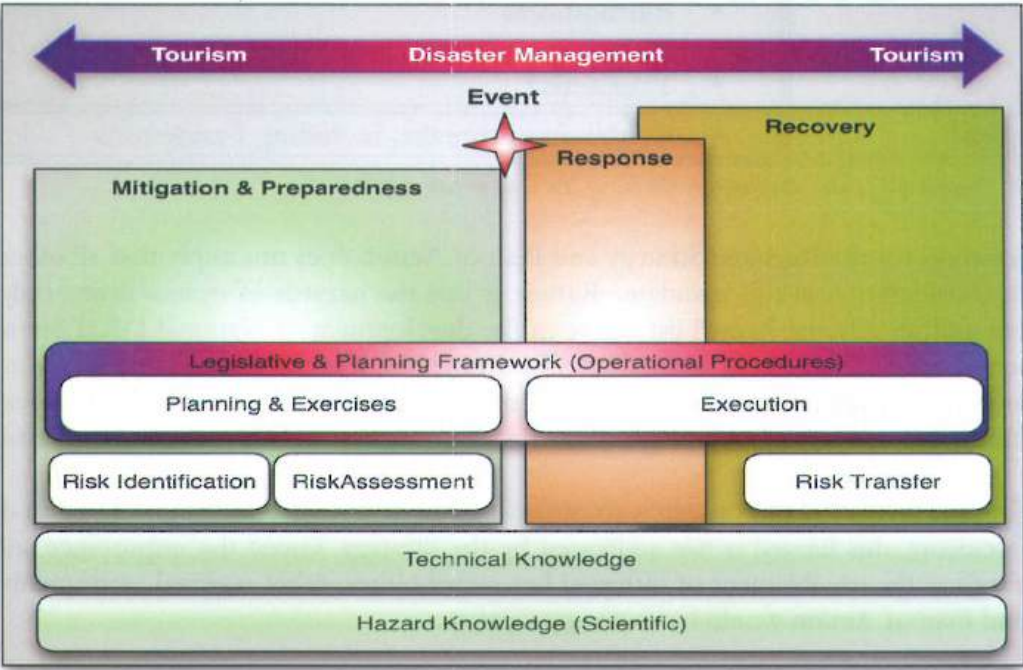
Tourism provides employment and a source of income to the community but it is also dependent on the community for its own operations. This symbiotic relationship is reflected in the movement to CBT. The community is a source for employees, goods, and essential services. The resilience or vulnerability of the tourism venue is very much linked with that of the community. When an event occurs, the consequences are not limited to the tourism venues but impact the whole of the community. The venue’s ability to weather the event and recover from it is also linked to the community’s ability to do so. It is therefore in the interest of tourism venues to participate in and promote community preparedness efforts.



2.4.2 Tourism and Disaster Management – Two Separate but Interlinked Communities

In DRM, tourism and Disaster Management (DM) communities both work towards the same objectives. The DM community is focused more on the general societal needs while the tourism community is focused more on the sector’s needs. Although the focus of their efforts may differ, their efforts overlap. Even within the context of the DRM in the tourism sector, there is interplay between both communities with a varying balance of weight depending on activities. For example, in mitigation, the onus, or weight, is much more on the tourism sector as it best knows its vulnerabilities; but in response, the weight is more on the National Disaster Organization (NDO), as it has the legal mandate for disaster response and normally coordinates the national system, structure and machinery to do so. Figure 2 depicts below some keys aspects of the concept of mutual support and relative weight between both communities in DRM.

Figure 2. Tourism and DM Communities’ Relative Interface in DRM Cycle



2.4.3 Integration

Linkages between both communities are necessary at all levels. At the local community level, the local emergency/ disaster coordinator should be part of the tourism cluster emergency committee just as the chair of the former should be part of the community emergency management community. At the national level, the linkages are made in some countries through the Tourism Emergency Management Committee (TEMC) and the Ministry of Tourism. Also in most cases the Ministry of Tourism is part of, or is represented, at the highest national DRM decision-making body along with the organization responsible for disaster management. Frequently, these last two exchange liaison officers to keep each other informed. An example of coordination among the tourism organizations for mitigation and preparedness is depicted at Figure 3 in Section 2.5 below.



## **2.5 A Model Institutional Framework for the Strategy and Plan of Action**

Implementation of a DRM Strategy and Plan of Action in the Caribbean Tourism Sector is facilitated by a sectoral institutional framework that is compatible with and enhances the regional disaster management institutional framework. A Model Institutional Framework for the Tourism Sector in the Caribbean countries, based on a 2006 framework established by the Ministry of Tourism (MOT) in Barbados, is suggested in the Multi-Hazard Contingency Planning Manual for the Caribbean Tourism Sector.<sup>26</sup>

### **2.5.1 Regional Level Context**

Relationships between agencies within the Caribbean form the backdrop environment for the Strategy and Plan of Action. CARICOM sits at the heart of the regional political structure. It is through this body that all geo-political issues are discussed. These issues have impacts at the national level but do not necessarily command equal attention depending on the nation and the issues. There are other issues that have significant Caribbean-wide significance and all governments will weigh in on them, albeit, sovereignty is sacrosanct. All courtesies are extended however to regional bodies of which there is a plethora. In matters of CDM and in particular in the event of a disaster, CDEMA would take the lead and keep the CARICOM Secretary General abreast of the event and its consequences for the region. CARICOM has significant international clout and can get quick responses to and from the international community. With respect to tourism, CDEMA liaises with the Secretary General of CTO<sup>27</sup> or his/her designee. CTO is instrumental in ensuring that the outside world knows that the Caribbean tourism industry is always ready for business.

### **2.5.2 National level Context**

#### **2.5.2.1 National Disaster Management System (NDMS)**

Caribbean countries have more or less defined and robust NDMS. These may vary from one country to another but in general they share common features such as:

- A legislative and regulatory framework – Responsibility and authority for all matters related to DRM rests with the Prime Minister and the Cabinet.
- A National Disaster Council (NDC) – Responsible for DRM at the highest government level. The NDC is supported by a coordination secretariat usually provided by the Department responsible for Disaster Management. NDCs work through specified functional or sectoral committees. These are usually headed by a Ministry and also include other public and private sector representation, including the Tourism sector.
- An NDO – Comprising elements at the national level (a disaster management department), emergency services, police, fire, volunteers and local community coordinators. The NDO will vary from country to country depending on their particular characteristics and needs. However, in all cases, the NDOs are the response mechanism to an event.
- A National Emergency Operations Centre (NEOC) - A survivable facility with appropriate communications, activated in anticipation of or after an event to facilitate the coordination of the NDO on behalf of and in support of the government.

<sup>26</sup> A publication of the OAS/CDERA Project for Tourism Disaster Planning Enhancement in the Caribbean.

<sup>27</sup> It is important to note that CTO represents 32 countries and CARICOM represents 14, while CDERA has 16 Participating States. There are therefore issues related to memberships and country inclusion/exclusion that should be considered, but which are likely beyond the purview of this Strategy per se.

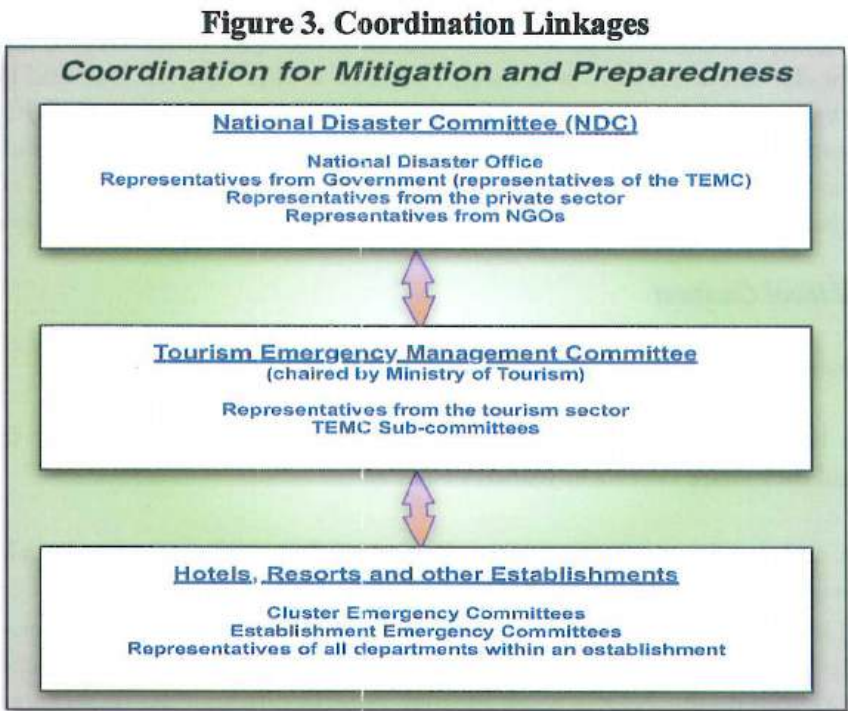


2.5.2.2 Tourism Sector

The tourism sector is an integral part of the national planning committees that handle disasters. The Minister of Tourism who also heads the committee responsible for tourism issues usually represents tourism at the NDC. Tourism usually has well-developed networks that cascades to the grassroots levels and that are part of the planning process.

In the robust model proposed by the Multi-Hazard Contingency Planning Manual, the establishment of a TEMC, headed by the Minister responsible for Tourism, is recommended.<sup>28</sup> This structure would operate during times of normalcy and coordinate mitigation and preparedness efforts.

Figure 3 below depicts the national coordination linkages. The model also suggests that a Tourism Emergency Operation Centre (TEOC) be established to coordinate Tourism Response and Recovery activities.



Source: Adapted from the Multi-Hazard Contingency Planning Manual

A key element of this Strategy is to ensure that countries closely examine and determine how to best integrate and adapt the Model Institutional Framework suggested in the Multi-Hazard Contingency Planning Manual.

<sup>28</sup> Functions and responsibilities of the TEMC are detailed at *ibid.* p. 21

3. Regional Strategic Objectives

This section presents the Strategic Objectives of the Regional Strategy, which are presented in accordance with the phase of the DRM cycle for which they are most relevant: mitigation, preparedness, response, or recovery. For each phase, a definition is presented, followed by some key aspects of the phase that help to set the context. The RSOs for the phase are then presented and key needed activities for their achievement are listed for both the regional and national levels. They form the basis of the Regional Plan of Action. A Framework Diagram of the RSOs and key Draft Activities is presented in Annex I. Activities undertaken at the regional level are insufficient by themselves to attain RSOs and complementary and supporting activities are needed at the national level. These are identified and should form part of National Strategies and Plans of Action.

3.1 Mitigation Specific Strategic Objectives

3.1.1 Mitigation

**Mitigation**

**The lessening or limitation of the adverse impacts of hazards and related disasters.**

*The adverse impacts of hazards often cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness. It should be noted that in climate change policy, “mitigation” is defined differently, being the term used for the reduction of greenhouse gas emissions that are the source of climate change (UNISDR 2009)*

Although mitigation strategies are implemented in the pre-event timeframe (as a phase runs concurrently with preparedness) they can also be implemented as part of the recovery process if applied after a disaster occurs. The difference is that pre-event mitigation is broader in scope as it tries to address a variety of potential hazards while mitigation implemented as part of recovery tends to be narrower in scope as it is focused on the hazard experienced. Mitigation measures are hazard specific as they may reduce the potential impact from a particular hazard but not necessarily from another.

Mitigation measures fall in two general categories: hard and soft. Hard mitigation measures are structural in nature and try to use technological solutions to reduce the impact of the hazard. Therefore, they are based on scientific knowledge of the hazard and on technology. Soft or non-structural measures include such things as legislation, regulations and land-use planning. These also are based on knowledge of the hazard but rather than rely on technology they strive to change behaviour.

Key elements of the Mitigation Phase are:

- Knowledge Development
- Risk Identification
- Risk Assessment
- Risk Transfer



### **3.1.2 Risk Identification and Assessment**

Effective pre-event activities for DRM are not possible without a solid knowledge foundation of the potential hazards and of vulnerabilities to them. An integral and essential element of DRM is the process of Risk Assessment<sup>29</sup>, which forms the foundation for mitigation<sup>30</sup> activities. The risk assessment process has as objective the identification and quantification of risks, by analyzing hazards and elements at risk and determining the respective impacts.<sup>31</sup> The process involves five (5) steps:

1. Definition of objectives and scope
2. Identification and analysis of hazards
3. Identification and analysis of vulnerable elements
4. Identification and analysis of risk
5. Representation of results

Risk identification and assessment is needed at both the macro level, national or regional for widespread phenomena, and micro level for site or hazard specific. Both rely on scientific knowledge of the hazards and technological knowledge for vulnerability assessment. The Regional DRM Strategy for the Tourism Sector is accompanied by a Standard for Conducting Hazard Mapping, Vulnerability Assessment and Economic Valuation for Risk Assessment for the Tourism Sector.

### **3.1.3 Risk Transfer**

Risk transfer in a strategy undertaken in pre-event phases aimed at reducing the risk of potential losses through mitigation actions and loss financing in recovery<sup>32</sup>. Risk transfer provides a safety net for financial losses suffered due to consequences of an event thus providing resources for rebuilding. In terms of private property, it is a mechanism for transferring the risk of damages to the insurance industry thereby reinforcing original investment decisions, whether right or wrong. In other words, risk transfer does not reduce the actual vulnerability of the asset insured. Risk transfer mechanisms should not be used to replace or discourage disaster risk initiatives such improving land use planning or enforcing building standards and regulations.

Risk transfer instruments available for potentially low loss levels could prevention funding such as:

- Prevention and Mitigations Funds
- Development Funds: Municipal, Social, Rural,
- Environmental
- Mitigation Loans
- Prevention Loans (e.g. through the IDB Disaster
- Prevention Sector Facility)
- International Aid

<sup>29</sup> Often referred to in disaster risk management literature as HRVA.

<sup>30</sup> Also for Preparedness

<sup>31</sup> CROSQ Draft Standard for Conducting Hazard Mapping, Vulnerability Assessment and Economic Valuation for Risk Assessment for the Tourism Sector, February 2009, p.6.

<sup>32</sup> IDB: Disaster Response to Recovery: Companion Paper to the IDB Disaster Risk Management Policy. Annex 2 p.19. The framework addresses both prevention funding and loss financing. Loss financing is addressed below in the section dealing with recovery

Risk transfer instruments available for potentially high loss levels could include:

- Disaster Insurance and Reinsurance
- Catastrophe (CAT) Bonds
- Weather Derivatives

3.1.4 Tourism Sector Regional Mitigation Strategic Objectives

Given the Goal for the Strategy and Plan of Action, the three key RSOs related to Mitigation are presented and discussed below:

**RSO 1:**  
To promote the availability and use of natural hazard risk information in the tourism sector.

Risk identification and assessment rely on, among other aspects, the application of a methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend. Standardized HRVA<sup>33</sup> process(es) and associated tool(s), which can be utilized for these purposes, could then also be adapted to the differing national contexts in which they would be applied at various levels. Further, risk information that emerges from application of such processes and tools could be integral for planning, decision making and programming.

Activities:

Key activities related to RSO 1 at the Regional level:

- R1.1 Develop a regional risk information system for the tourism sector
- R1.2 Development of a standard HRVA Tool in the tourism sector
- R1.3 Integrate risk information into regional tourism policies, plans and programmes
- R1.4 Incorporate risk identification into tourism curricula of tertiary education in the region

Key activities related to RSO 1 at the National level:

- N1.1 Promote National Adaptation and utilization of the HRVA Tool
- N1.2 Integrate risk information into national tourism policies, plans and programmes
- N1.3 Promote community level HRVA by conducting workshops
- N1.4 Promote tourism site level HRVA using results from community HRVA

**RSO 2:**  
To promote adherence to land use planning regulations and building codes in the development of new tourism infrastructure and retrofitting of older infrastructure not built to an approved code.

<sup>33</sup> Please see the Glossary for the definition of HRVA. There are a number of HRVA Tools available with varying degrees of complexity depending on the scope of the assessment. Ideally, a simple HRVA Tool to be used at the tourism establishment level would use information generated by a community level assessment, which in turn would use information from a country level assessment. Each of these assessments would use different HRVA tools.



The development and enforcement of land use planning regulations and building are national responsibilities. There are regional level efforts to promote and encourage countries to enhance development and enforcement of the regulations spearheaded by other sectors. These could be reinforced by the tourism sector at the regional level through measures aimed at motivating voluntary adherence at the venue level regardless of the robustness of national enforcement mechanism. Measures could also be taken to provide incentives to venues planning new construction in the form of marketing advantage and/or financial incentives. Collaboration at the regional level between the tourism and financial sectors in the form of positive reinforcement measures could be further enhanced through additional national level measures.

**Activities:**

Key activities related to RSO 2 at the Regional level:

- R2.1 Create an incentive programme for voluntary compliance of land-use planning policies and application of approved building codes
- R2.2 Development/adaptation of a Standard HRVA<sup>34</sup> Tool for tourism establishments.

Key activities related to RSO 2 at the National level:

- N2.1 Familiarize Tourism establishments with local land use planning policies.
- N2.2 Promulgate National acceptance of an incentive programme to promote voluntary adherence to land use planning regulations and approved building standards
- N2.3 Implement National public awareness programme aimed at Tourism sector and investors highlighting “safety”
- N2.4 Identify champion for national enforcement of land use planning and building regulations

**RSO 3:**

To foster national consideration of protective structural works to minimize damage from natural hazards to key environmental and other assets.

Environmental protective works would require collaboration at the national level between the tourism and environmental agencies. However, many countries in the Caribbean face similar vulnerabilities such as beach erosion. Although site specific studies would need to be fostered in the national context, the development of potential technical solutions for similar vulnerability could be fostered by regional level measures.

**Activities:**

Key activities related to RSO 3 at the Regional level:

- R3.1 Issue Regional hazard mapping standards
- R3.2 Undertake studies to identify potential mitigation measures for key tourism assets at risk (beach erosion etc.)

Key activities related to RSO 3 at the National level:

<sup>34</sup> Please see the Glossary for the definition of HRVA. There are a number of HRVA Tools available with varying degrees of complexity depending on the scope of the assessment. Ideally, a simple HRVA Tool to be used at the tourism establishment level would use information generated by a community level assessment, which in turn would use information from a country level assessment. Each of these assessments would use different HRVA tools.



- N3.1 Develop National inventory(ies) of “key tourism” assets
- N3.2 Undertake or complete National hazard mapping
- N3.3 Develop National mitigation programmes<sup>35</sup> for key tourism assets at risk
- N3.4 Implement National mitigation programmes for priority key tourism assets at risk

RSO 4.  
To promote Mitigation, including risk transfer, as economically viable measures in the Tourism sector.

Promoting mitigation will require compelling arguments demonstrating the cost benefits of investing in mitigation. Mitigation activities are site and hazard specific and therefore fall mainly within the national context. Nevertheless, regional measures can be undertaken to promote mitigation. The recent development at the regional level of techniques and standards for risk assessment is such a measure.

**Activities:**

Key activities related to RSO 4 at the Regional level:

- R 4.1 Development of appropriate regional financial instruments for managing disaster risk, such as a regional contingency fund or insurance for the tourism sector
- R 4.2 Compilation (and dissemination) of Best Practices for Mitigation in the Tourism Sector
- R 4.3 Incorporate DRM in tourism curricula at regional educational institutions.

Key activities related to RSO 4 at the National level:

- N4.1 Adaptation of the regional financial instruments for managing disaster risk, such as a contingency fund or insurance for the tourism sector

**3.2 Preparedness Specific Strategic Objectives**

**3.2.1 Preparedness**

**Preparedness**  
**The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.**

*Preparedness action is carried out within the context of disaster risk management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response through to sustained recovery. Preparedness is based on a sound analysis of disaster risks and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities. The related term “readiness” describes the ability to quickly and appropriately respond when required.(UNISDR 2009)*

<sup>35</sup> These mitigation programmes would depend on the results of R3.2.



In the preparedness phase, disaster managers undertake initiatives aimed at coping with the consequences of events caused by hazards. Preparedness consists of:

- Planning including exercises and simulations
- Training
- Awareness and education.
- Early Warning

In the context of tourism, one key theme is the evacuation and repatriation of tourists. Ideally tourists are removed from harm's way but this is only possible in slow setting events that afford warning such as hurricanes. In such cases, repatriation is an important element of preparedness as it is initiated before the event. However, in no-notice events, evacuation and repatriation of tourists can only be undertaken during the response phase at best and, conceivably depending on damages to the transportation infrastructure, during short term recovery.

**3.2.2 Tourism Sector Regional Preparedness Strategic Objectives**

Three key RSOs related to Preparedness are presented and discussed below:

**RSO 5:**

To enhance tourism sector contingency planning and capacity building to minimize the loss of life and injury to tourists, tourism sector workers and property damage with an emphasis on tourist accommodation.

Tourism venues in the same sub-sectors share similar requirements in terms of contingency planning. Regional level measures are possible to facilitate the planning by providing guidance and models. One such regional activity is the development and dissemination of the Multi-Hazard Contingency Planning Manual for the Caribbean Tourism Sector. However, planning alone is not sufficient; human resources must be trained and plans exercised and tested.

**Activities:**

Key activities related to RSO 5 at the Regional level:

- R 5.1 Development of Guide and Models (small, medium and large) for Tourism Accommodation Emergency Response Plans (ERP)

Key activities related to RSO 5 at the National level:

- N 5.1 Adaptation of Guide and Models for Tourism Accommodation Emergency Response Plans to national requirements.
- N 5.2 Develop and implement National programme of workshops to increase capacity for the development of individual ERPs and promote cluster formation<sup>36</sup>
- N5.3 Develop and implement National programme of workshops to integrate tourism cluster ERP and recovery requirements with community ERP and recovery planning

**RSO 6:**

<sup>36</sup> The definition and promotion of Tourism Clusters and their integration with communities is the principal part of RSO 7 but the theme is reflected in many activities related to other RSOs, due to the importance.

To promote individual and family preparedness amongst employees of the tourism sector.

There are several elements that contribute to a hazard resilient workforce in the tourism sector that range from awareness to family preparedness in terms of planning and self-sufficiency. Some regional level measures are possible to promote preparedness in the workforce such as model family plans and lists of self-sufficiency requirements. However, this objective cannot be met through only regional measures. Tourism establishment owners must participate in the process and devise incentives.

**Activities:**

Key activities related to RSO 6 at the Regional level:

- R6.1 Development of Family Preparedness Guide for Tourism employees

Key activities related to RSO 6 at the National level:

- N6.1 National Adaptation and dissemination of Family Preparedness Guides for Tourism employees

**RSO 7:**  
To foster Tourism clusters and their integration into their communities' contingency planning.

The concept of tourism clusters is relatively new to the Caribbean and has not yet attained wide application. The potential usefulness of tourism clusters for DRM may have not been fully explored and studied. Propagation of the concept will require concerted measures in a variety of areas such as research, awareness, policy and planning.

**Activities:**

Key activities related to RSO 7 at the Regional level:

- R7.1 Development of the "Tourism Cluster and the Community" concept
- R7.2 Development of a methodology and process to create Tourism Clusters and promote their integration with communities

Key activities related to RSO 7 at the National level:

- N 7.1 Conduct workshops in communities to apply the "Tourism Cluster and the Community" concept

3.3 Response Specific Strategic Objectives

3.3.1 Response

**Response**  
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.



*Disaster response is predominantly focused on immediate and short-term needs and is sometimes called “disaster relief”. The division between this response stage and the subsequent recovery stage is not clear-cut. Some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage. (UNISDR 2009)*

The response phase includes the mobilization of the necessary emergency services and first responders in the disaster area. This is likely to include a first wave of core emergency and medical services, such as fire-fighters, police and ambulance crews. They may be supported by a number of secondary emergency services, such as specialist rescue teams. The focus of the response phase is to save lives and provide assistance to victims. A well rehearsed emergency/disaster plan developed as part of the preparedness phase enables efficient coordination of rescue. Where required, search and rescue efforts commence at an early stage. Depending on injuries sustained by the victims, outside temperature, and victims’ access to air and water, the vast majority of those affected by a disaster will die within 72 hours after impact<sup>37</sup>. Speed of the initial rescue efforts is therefore vital.

Depending on the nature of the event, there may be numerous people left homeless requiring shelter and assistance. Tourism accommodation facilities located in the affected community – if left serviceable – may play a critical role in the community response effort and as such are a resource. However, their operation capability may be dependent on the restoration of essential services.

#### 3.4.1.1 An Industry on Hold

Tourism activity in the normal sense ceases to exist during the response phase. Tourists caught by an event will either be at or converge on their accommodation facilities. The tourism accommodation facilities face the challenge of providing the best possible service to their stranded guests, with possibly reduced resources: structures that may have been more or less damaged; reduced personnel availability; essential services potentially interrupted; and, a disrupted supply system. The challenge could be even further exacerbated if the facility is deemed essential to provide temporary shelter to other victims.

#### 3.4.1.2 Perception is Reality

The sustainability of a tourism establishment is linked to customer satisfaction and reputation at source markets. In area tourists and the media will be the vectors conveying the information to the source markets. Communications during the response phase are essential to reassure not only the affected population but also source markets. A response perceived as chaotic or even disorganized can have a long-term impact on the future of the industry in the affected country – and in the case of the Caribbean, the region can also be affected. Communicating to the general population affected by the event is, of course, essential during the response; it is an operational necessity. However, communications targeting the external audiences are also essential and these may take a different form and require different skills. Countries in the Caribbean have recognized this reality and have instituted a novel approach to manage communications relying on off-shore resources<sup>38</sup>.

How the response is perceived by tourists at the tourism establishment level is dependent on the response is conducted in the community where the venue is located. In a sense, notwithstanding the level of preparedness and efficient execution of its emergency response plan, a tourism establishment is hostage to what happens in its community.

<sup>37</sup> Walker, Peter (1991). International Search and Rescue Teams, A League Discussion Paper. Geneva.

<sup>38</sup> Crisis Communications Manual for the Islands of the Bahamas, 2006.



3.4.1.3 Regional Dimension to Perception

Source markets do not necessarily distinguish one island from the next. The source markets cannot interpret complex data about natural hazards and tend to shy away from anything that they do not understand. Health and safety are important factors for tourists. Their perception will be shaped by what is being reported in terms of what has occurred and how the situation is being handled. Communications targeting the source markets are vital to sustainability of the tourism industry in the affected country as well as for the Caribbean region on as a whole. The message and the framing of the language, which conveys the magnitude of the problem, must be carefully crafted. Wrong signals to the source markets can have irreparable long-term economic damage to not just the affected country but to the entire region.

3.3.2 Tourism Sector Regional Response Strategic Objectives

Three key RSOs related to Response are presented and discussed below:

**RSO 8:**

To enhance the development of emergency response/disaster plans (and related capacity to execute plans) in the tourism sector (and other key supporting sectors).

This Objective is closely linked to RSO 5 but its focus is specifically on the development of a tourism establishment emergency response plan that is practiced and tested. Tourism venues could benefit from guides, models and/or standards developed at the regional level and adapted at the national level to meet local requirements. A key component in this RSO is the development and execution of the crisis communications plan.

**Activities:**

Key activities related to RSO 8 at the Regional level:

- R8.1 Development of Guide and Models for ERP for Tourism sub-sectors
- R8.2 Development of a Regional Tourism Crisis Communications Framework

Key activities related to RSO 8 at the National level:

- N8.1 Adapt Guide and Model Emergency Response Plan to National requirements
- N8.2 Conduct of ERP planning workshops to include participation of other supporting sectors
- N8.3 Conduct evaluations of tourism sector stakeholders' capacity to execute ERPs

**RSO 9:**

To promote the integration of tourism facilities' response with that of their respective communities (and countries).

Integration of tourism facilities' response with that of the host community ensures that the tourism requirements are given their due consideration during the response. This implies pre-event planning and in cases where community disaster planning is weak, the tourism facilities', particularly if operating within the cluster concept, could provide the needed impetus for enhanced community disaster planning.

**Activities:**

Key activities related to RSO 9 at the Regional level:



- R9.1 Develop a recognition programme for Caribbean tourism businesses that are DRM certified in accordance with agreed designation levels and criteria
- R9.2 Develop an approach and process to foster integration of tourism facilities emergency planning with that of the host community.

Key activities related to RSO 9 at the National level:

- N9.1 Participation in DRM certification programme
- N9.2 Examine the viability of using TEOCs in National response context
- N9.3 Conduct joint community/tourism planning workshops

RSO 10:

To promote the integration of tourism sector requirements into preparedness and NRPs

Key activities related to RSO 10 at the Regional level: N/A

Key activities related to RSO 10 at the National level:

- N 10.1 Review of the NRP from a tourism perspective -harmonizing roles of the tourism stakeholders (and the TEMC/TEOC, where they exist) with NDOs’ structures and procedures
- N10.2 Hold regular National Tourism Organization - NTO-NDO meetings for coordination and collaboration
- N10.3 Promote regular meeting of Tourism Clusters with community NDO coordinators (where they exist)

3.4 Recovery Specific Strategic Objectives

3.4.1 Recovery

Recovery

The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended, and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programmes, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the “build back better” principle. (UNISDR 2009)

The purpose of recovery is to restore the affected area to a state of normalcy. While recovery may be initiated before the completion of the response phase, its focus is on issues and decisions needed once the immediate needs are addressed by the response. Recovery can be a lengthy process as it concerns efforts to repair and restore (rehabilitate and reconstruct) damaged and destroyed property, restore economic and

social activity and repair other essential infrastructure. Recovery does not lead to a situation of pre-event “status quo”. Although efforts are geared to approximate it, the reality is a new level of equilibrium will be reached and, if the recovery is effectively conducted, it ought to lead to a more resilient situation.

3.4.1.1 Loss Financing

Given a level of damage, the speed and ease of the recovery is dependent on the use made of financial instruments for risk management and transfer such as:

*Instruments for response at high loss levels - Loss Financing through Loans:*

- Contingent Credit
- Emergency Loans (e.g. through the IDB Immediate Response Facility)
- Reconstruction Loans

*Instruments for response at low loss levels - Loss Financing:*

- Loss Financing
- Formal and Informal Risk Coping through Self-Financing
- Calamity Funds
- Reserve Funds
- Transfers of Government Budget
- Transfers from Development Funds
- Reformulation of Existing Loans

3.4.1.2 Opportunity Offered by Recovery

Recovery affords a “window of opportunity” to implement mitigation measures that might otherwise not be compelling or popular.<sup>39</sup> People and officials in the affected are more prone to accept the wisdom of investing in mitigation when they have suffered losses and the event is still fresh in their mind. Building on the experience of the consequences faced, an effective recovery takes advantage of the “window of opportunity” and includes mitigation measures specific to the hazard experienced.

3.4.2 Tourism Sector Regional Recovery Strategic Objectives

Two key RSOs related to Recovery are presented and discussed below:

|                                                                |
|----------------------------------------------------------------|
| <b>RSO 11:</b>                                                 |
| To enhance Business Continuity Planning in the tourism sector. |

<sup>39</sup> Alexander, David (2002). *Principles of Emergency planning and Management*. Terra Publishing



Return to normalcy after an event requires that tourism facilities are able to re-open with the least possible delay. Given a level of damage caused by the event, whether a venue/outlet takes more or less time to return to normal operations is dependent on having and executing a viable business continuity plan.

**Activities:**

Key activities related to RSO 11 at the Regional level:

- R 11.1 Development of standardized Business Continuity Planning (BCP) Guideline
- R 11.2 Development of BCP Training package for a ‘train-the-trainers programme’
- R11.3 Development of a Regional Tourism Crisis Communication Framework

Key activities related to RSO 11 at the National level:

- N 11.1 Adaptation of the regional standard Business Continuity Plans (BCP) Guidelines to National requirements
- N11.2 Conduct of BCP workshops (for capacity building and completion of adequate BCPs)
- N11.3 Review national tourism requirements for recovery to ensure they are addressed in national recovery planning
- N11.4 Monitor development of BCPs in the Tourism sector
- N11.5 Hold Tourism Cluster and Community meetings for BCP development

**RSO 12:**

To promote the establishment of national guidelines for restoration and reconstruction to ensure the immediate re-establishment of tourism economic activities.

Concerted efforts at the national level are required to ensure the most rapid return to normalcy of the tourism sector. Tourists stranded by the event require repatriation in the most expeditious manner. Business continuity activities undertaken by tourism facilities alone are not sufficient to re-establish tourism economic activity. The supporting infrastructure has to be restored to support the activity. Given the importance of the tourism sector in most countries, its requirements to recover from an event should be recognized ahead of time. National guidelines for restoration and reconstruction that take into account the tourism sector needs would greatly facilitate and accelerate the recovery process.

**Activities:**

Key activities related to RSO 12 at the Regional level:

- R 12.1 Development of Regional Guidelines for Recovery that consider tourism requirements

Key activities related to RSO 12 at the National level:

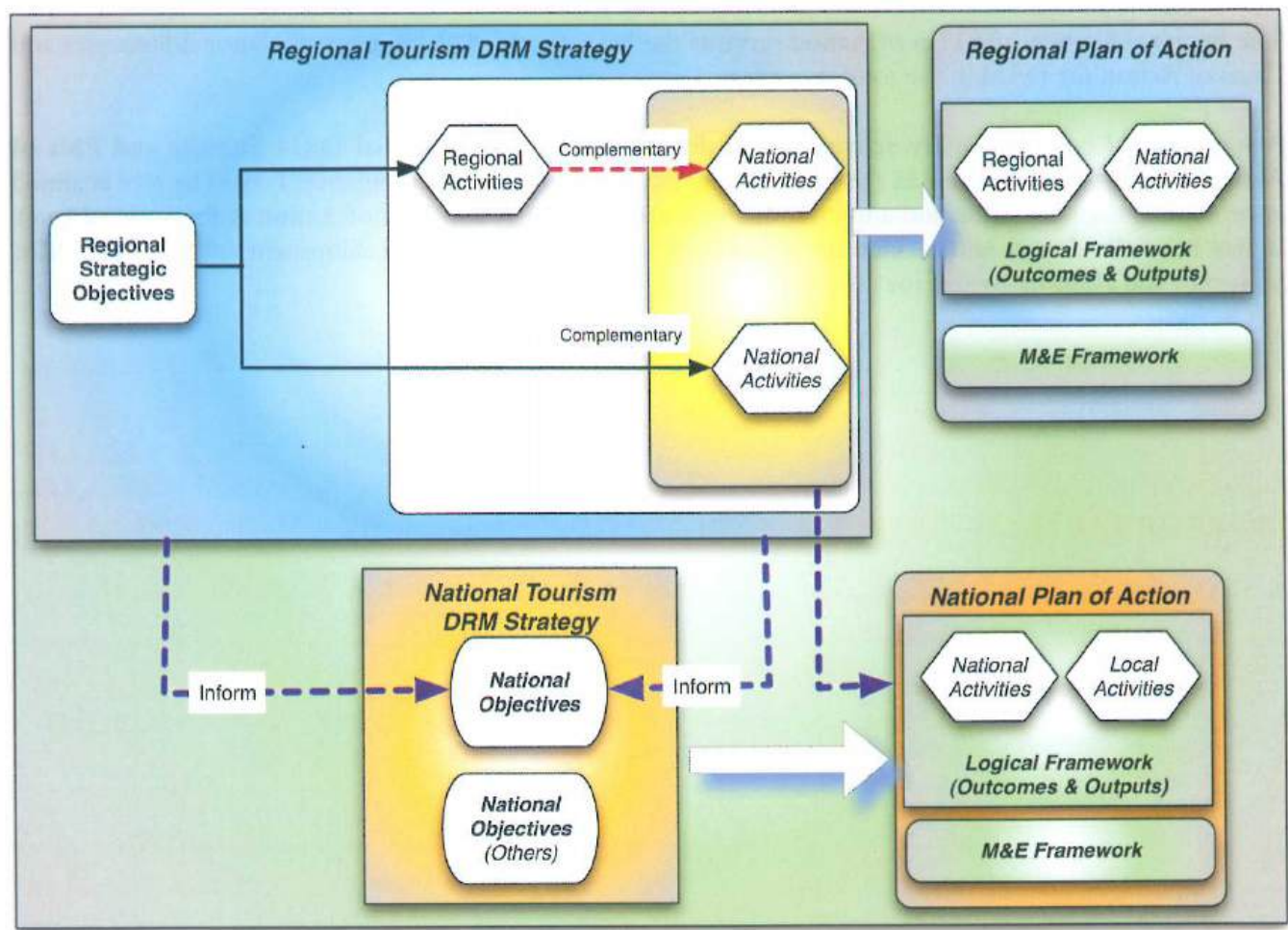
- N 12.1 Adaptation of Regional Guidelines for Recovery to ensure restoration of Tourism activity in post-disaster events



4. From the Regional to National Level

This Regional DRM Strategy for the Tourism Sector relies on the development and implementation of National Tourism Strategies and Plans of Action to attain its full potential. National strategies will have strong linkages to the regional strategy as both should complement and reinforce each other. In all cases, regional activities by themselves will be insufficient to attain an RSO and will require complementary activities at the national level. Figure 4 below depicts the linkages between the regional and national level activities and resulting linkages between Regional and National Strategies.

Figure 4. Regional and National DRM Strategy Linkages



Individual National Strategies and Plans of Action will differ from each other, as each should of course be tailored to the country's particular circumstances and priorities. Nevertheless, they will all share a common link to the Regional Strategy and Plan of Action. The latter will inform the development of National Strategies by suggesting common regional objectives and identifying potential complementary national activities that could be rolled up into potential National Objectives, which, in turn, would also help to achieve the RSOs. To meet their own particular requirements or priorities, National Strategies could also include National Objectives not reflected in the Regional Strategy.



**5. Plan of Action**

**5.1 Introduction and Purpose**

The Regional Plan of Action - Part II, related to this document - contains and presents details related to the various key activities at the regional and national levels that can serve to achieve or contribute to the RSOs. They form an essential part of this Regional Strategy, laying out the way forward for how the RSOs can move from desired result to action.

**5.2 Guidance in the Development of National Strategies and Plans of Action**

The Regional Strategy and Plan of Action serve as the basis for the development of National Strategies and Plans of Action for DRM in the tourism sector.

A key regional complementary activity to the development of the Regional DRM Strategy and Plan of Action for the Tourism sector in the Caribbean is the development of a Guidance Tool. The tool is aimed at promoting the adaptation and adoption of the Regional Strategy and Plan of Action at the national level. It has been developed with a view to assisting in the process of the development of National DRM Strategies and Plans of Action for the Tourism sector.



## Annex I – Framework Diagram of Strategy and Plan of Action

### Vision

A sustainable Caribbean Tourism sector with an enhanced resilience to consequences of regional events caused by natural hazards.

### Goal

To build a culture of natural hazard risk reduction within the Caribbean Tourism sector to minimize potential deaths, injuries, loss of property, livelihoods, economic activity and damage to the environment caused by natural hazards through strengthening capacity for Mitigation, Preparedness, Response and Recovery.

### MITIGATION

### PREPAREDNESS

RSO 1. To promote the availability and use of natural hazard risk information in the tourism sector.

RSO 2. To promote adherence to land use planning regulations & building codes in the development of new tourism infrastructure & retrofitting of older infrastructure not built to an approved code.

RSO 3. To foster national consideration of protective structural works to minimize damage from natural hazards to key environmental and other assets.

RSO 4. To promote mitigation, including risk transfer, as economically viable measures in the tourism sector.

RSO 5. To enhance tourism sector contingency planning & capacity building to minimize the loss of life & injury to tourists, tourism sector workers & property damage with an emphasis on tourist accommodation.

RSO 6. To promote individual and family preparedness amongst employees of the tourism sector.

RSO 7. To foster tourism clusters and their integration into their communities' contingency planning.

#### Regional Activities

R1.1 Develop a regional risk information system for the tourism sector  
R1.2 Development of a standard HRVA Tool in the tourism sector  
R1.3 Integrate risk information into regional tourism policies, plans and programmes  
R1.4 Incorporate risk identification into tourism curricula of tertiary education in the region

#### National Activities

N1.1 Promote National Adaptation and utilization of the HRVA Tool  
N1.2 Integrate risk information into national tourism policies, plans and programmes  
N1.3 Promote community level HRVA by conducting workshops  
N1.4 Promote tourism site level HRVA using results from community HRVA

#### Draft Regional Activities

R2.1 Create an incentive programme for voluntary compliance of land-use planning policies & application of approved building codes

#### National Activities

N2.1 Familiarize Tourism establishments with local land use planning policies  
N2.2 Promulgate National acceptance of an incentive programme to promote voluntary adherence to land use planning regulations & approved building standards  
N2.3 Implement National public awareness programme aimed at Tourism sector & investors highlighting "safety"  
N2.4 Identify champion for national enforcement of land use planning & building regulations

#### Regional Activities

R3.1 Issue Regional hazard mapping standards  
R3.2 Undertake studies to identify potential mitigation measures for key tourism assets at risk (beach erosion etc.)

#### National Activities

N3.1 Develop National inventory(ies) of "key tourism" assets  
N3.2 Undertake or complete National hazard mapping  
N3.3 Develop National mitigation programmes for key tourism assets at risk  
N3.4 Implement National mitigation programmes for priority key tourism assets at risk

#### Regional Activities

R 4.1 Development of appropriate regional financial instruments for managing disaster risk, such as a regional contingency fund or insurance for the tourism sector  
R 4.2 Compilation (& dissemination) of Best Practices for Mitigation in the Tourism Sector  
R 4.3 Incorporate DRM in tourism curricula at regional educational institutions  
National Activities  
N4.1 Adaptation of the regional financial instruments for managing disaster risk, such as a contingency fund or insurance for the tourism sector

#### Draft Regional Activities

R 5.1 Development of Guide and Models (small, medium and large) for Tourism Accommodation ERP

#### Draft National Activities

N 5.1 Adaptation of Guide and Models for Tourism Accommodation Emergency Response Plans to national requirements.  
N 5.2 Develop and implement National programme of workshops to increase capacity for the development of individual ERPs and promote cluster formation<sup>1</sup>  
N5.3 Develop and implement National programme of workshops to integrate tourism cluster ERP and recovery requirements with community ERP and recovery planning

#### Draft Regional Activities

R6.1 Development of Family Preparedness Guide for Tourism employees.

#### Draft National Activities

N6.1 National Adaptation and dissemination of Family Preparedness Guides for Tourism employees

#### Draft Regional Activities

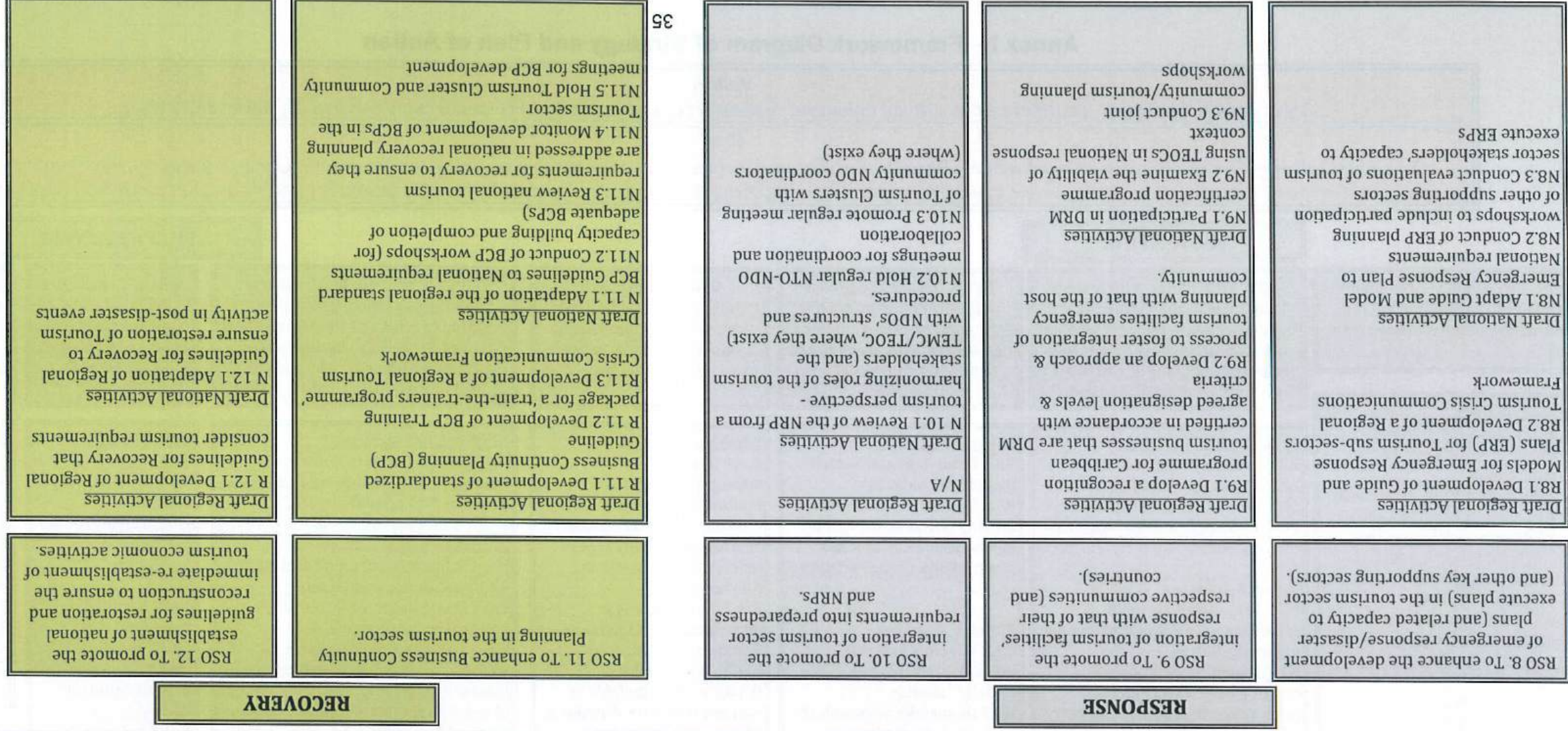
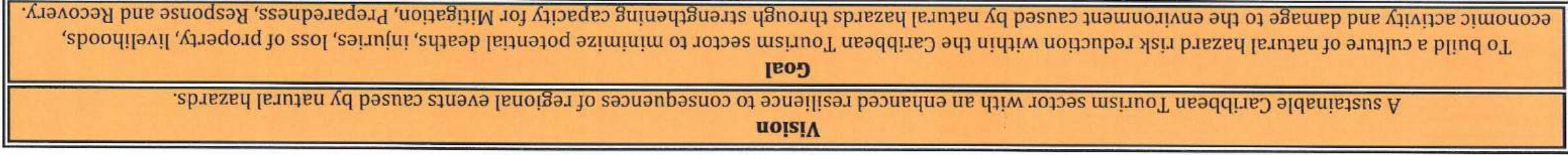
R7.1 Development of the "Tourism Cluster and the Community" concept  
R7.2 Development of a methodology and process to create Tourism Clusters and promote their integration with communities

#### Draft National Activities

N 7.1 Conduct workshops in communities to apply the "Tourism Cluster and the Community" concept



Annex I – Framework Diagram of Strategy and Plan of Action





Annex II – Relevant Best DRM Practices to the Strategy

While there are many examples of best practices in DRM internationally, the tendency is to utilize the word best practices very reservedly in the Caribbean Tourism context. The extent to which good practices in the Tourism sector for DRM has been mainstreamed that is, involving an interdisciplinary or multi-agency and inter-sectoral approach to integrate Mitigation, Preparedness, Response and Recovery into the wider framework of sustainable development is still an evolving phenomena.

➤ CTO Study

The Caribbean Tourism Organization under the European Union funded Caribbean Regional Sustainable Tourism Development Programme (CRSTDP) in 2008, commissioned a study to determine the good practices in natural hazard risk management in the Caribbean Tourism sector<sup>40</sup>. The study was undertaken to provide input into this regional public good initiative (DRM Strategy and Plan of Action for the Tourism Sector in the Caribbean) being implemented by CDEMA. Though only a draft report was submitted at the end of the CRSTDP in June 2008, the research served to highlight a number of transferable practices internationally and regionally that are applicable to a number of sectors but could also be applied to the Caribbean in general, and specifically to the Tourism industry. Some of these are highlighted in the table below

Table A.2 – Sample of Global and Regional Natural Hazard Risk Management Good Practices

| Natural Hazard             | Location/<br>Destination(s) | Good Practice                                                                                                                                                                                                                                                                                                  | Level of<br>Action |
|----------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Global – Outside Caribbean |                             |                                                                                                                                                                                                                                                                                                                |                    |
| Storms surges              | Fiji                        | Stringent building codes and strong enforcement so that resorts are now built at least 2.6m above mean seal level and 30m off the high tide mark and structures must be able to withstand wind speeds of 60km                                                                                                  | National           |
| Earthquakes                | Armenia                     | National Seismic Protection Agency, Education Ministry and schools produced a theatrical performance to teach children how to prepare and what to before, during and after an earthquake, through interactive education-play                                                                                   | National<br>Local  |
| Landslide                  | Indonesia                   | Effective use of broadcast media for enacting drills and real-time information dissemination                                                                                                                                                                                                                   | National<br>Local  |
| Tsunami                    | India                       | An established local NGO network was used to support need of a relief programme after the tsunami in 2004. The network had existing communication and advocacy experience and able to ensure all affected groups, particularly vulnerable groups were provided with assistance during the rehabilitation phase | Local              |
| Caribbean                  |                             |                                                                                                                                                                                                                                                                                                                |                    |
| Hurricane                  | Dominican                   | Communities identified and implemented                                                                                                                                                                                                                                                                         | Local              |

<sup>40</sup> Simpson, M.C. and Gladin, E (2008) Good Practices: Natural Hazard Risk Management in the Caribbean Tourism Sector (Draft). Caribbean Regional Sustainable Tourism Development Programme (CRSTDP), Caribbean Tourism Organization, Barbados



Annex II – Relevant Best DRM Practices to the Strategy

|             |           |                                                                                                                                                                                                                                                                                                                                 |          |
|-------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|             | Republic  | small risk reduction projects and actions e.g. construction of containment walls and drainage ditches addressing local environmental and health concerns, reducing floods and landslides; the positive effect of these initiatives was demonstrated by the reduced impact of Hurricane Georges on the participating communities |          |
| Hurricane   | Grenada   | National risk reduction initiative involved hazard mapping, conducting vulnerability assessments and development of a national risk reduction policy and plan                                                                                                                                                                   | National |
| All Hazards | Jamaica   | Identified communication protocol through the Office of Disaster Preparedness and Emergency Management and other public and private organizations and identified strategies which could be implemented to respond to the immediate emergency as well as Recovery                                                                | National |
| All Hazards | Caribbean | A Radio Soap Opera on Natural Disaster was created in the Caribbean as a public broadcasting initiative aimed at improving disaster Preparedness through “educative theatre” techniques, comprising 15 episodes of 10 minute broadcast                                                                                          | Regional |

*Adapted from Simpson et al (2008)*

➤ Relevant Practice from Canada – Outside Tourism

Best practices in other economic sectors can also inform the Caribbean Tourism Sector. A case in point is the Canadian Chemical industry initiative “Responsible Care”<sup>41</sup> which evolved from the Emergency Preparedness Canada programme “Safeguard” aimed at promoting Preparedness through public and private sector partnerships in communications. The Chemical industry adapted the Safeguard concept and included Community Awareness and Emergency Response (CAER) as one of its six codes of practice to which members are expected to adhere in order to retain membership. The CAER Code requires membership to design and implement extensive community outreach programmes based on openness and cooperation. In many cases, implementation of CAER acted as the impetus for the host community to improve and strengthen their own disaster management capacity.

A variation of this approach could be developed within CTO membership to “certify” businesses meeting specified DRM criteria thereby gaining the right to use a logo such as “CARISAFEGUARD”.

➤ General DRM Best Practices from the Caribbean – The British Virgin Islands

One Caribbean best practice case study not specifically highlighted in the CTO report relates to work that the British Virgin Islands (BVI) has done. The BVI was the subject of a 2005 United Nations Development Programme report entitled, “British Virgin Islands: Integration of Disaster Risk Management into the Development Agenda- A Best Practice Case Study” summarized below.

<sup>41</sup> [www.ccpa.ca/ResponsibleCare/](http://www.ccpa.ca/ResponsibleCare/)

Annex II – Relevant Best DRM Practices to the Strategy

| All-Hazard, and All Sector Focused “Best Practices” in British Virgin Islands |                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Focus                                                                         | Details                                                                                                                                                                                                                                                                                                                                             |
| Legal, policy and planning Frameworks                                         | Disaster Management Act (2003)- its policies, plans, programmes, organizational structures, and disaster risk management processes endorse and embrace Comprehensive Disaster Management (CDM)                                                                                                                                                      |
|                                                                               | National Integrated and Development Strategy established by the government to promote sustainable development of the territory. The strategy is supported by a National Integrated Development Plan and a National Disaster Management Policy. Planning integrates several time horizons including a 10 year Mitigation strategy                    |
|                                                                               | Established Natural and Technological Specific Hazard Plans                                                                                                                                                                                                                                                                                         |
|                                                                               | An established National Development Plan, which is periodically revised, and subsidiary plans provides for policies and procedures for all hazards.                                                                                                                                                                                                 |
|                                                                               | Building regulations were upgraded to provide stricter requirements under the <i>Building Regulations and Land and Infrastructure Development Guidelines in the Disaster Mitigation Strategy</i>                                                                                                                                                    |
|                                                                               | The Ministry of Finance (MoF) (Development Planning Unit) ensures hazard Mitigation is an integral part of all economic planning and makes provisions for the funding of Mitigation efforts                                                                                                                                                         |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                     |
| Operational                                                                   | Established National Emergency Operation Centre Plan                                                                                                                                                                                                                                                                                                |
|                                                                               | Early warning systems are a crucial component of the BVI's disaster management system and provisions made in its legislation, policies and day-to-day programmes                                                                                                                                                                                    |
|                                                                               | 5%- 1% of annual government revenues are contributed to the Disaster Contingency Fund                                                                                                                                                                                                                                                               |
|                                                                               | Established Emergency Telecommunication Plan                                                                                                                                                                                                                                                                                                        |
| All Sectors                                                                   | Integration of disaster risk reduction into the routine work programmes of all public departments and in other sectors is stipulated in the legislation                                                                                                                                                                                             |
|                                                                               | Capability Assessment of Key Agencies Undertake                                                                                                                                                                                                                                                                                                     |
|                                                                               | Annual programme of training is prepared, approved for implementation and is budgeted. Participants are drawn from the public sector, private entities and civil society organizations                                                                                                                                                              |
| Community                                                                     | Ten zonal communities are part of the organization structure for disaster risk management in the territory                                                                                                                                                                                                                                          |
|                                                                               | Physical vulnerability is centred on helping communities deal with disasters , improving disaster Preparedness, Mitigation and Recovery systems, enhancing environmental management, establishing construction and financing mechanisms to replace damaged infrastructure, and reducing the levels/impact of external shocks from the global market |



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- Former Consultancy Inception Report and CDERA comments.
- Report of the first meeting of the TAC.
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- Former Draft Strategy and TAC comments.



