



UWI

Policy Guidelines and Frameworks for Mainstreaming of Comprehensive Disaster Management (CDM) in National Policy of Selected Priority Sectors

TOURISM SECTOR

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and Application
of Comprehensive
Disaster Management**
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Policy Guidelines and Frameworks for Mainstreaming of Comprehensive Disaster Management (CDM) in National Policy of Selected Priority Sectors - Tourism Sector

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LIST OF ACRONYMS

AAL	Average Annual Losses
CARICOM	Caribbean Community
CBA	Cost-benefit analysis
CCA	Climate Change Adaptation
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CDMSF	Comprehensive Disaster Management Strategic Framework
DRR	Disaster Risk Reduction
DRRC	Disaster Risk Reduction Centre
EKACDM	Enhancing Knowledge and Application of Comprehensive Disaster Management
GAR	Global Assessment Report
ISD	Institute for Sustainable Development
PDNA	Post Disaster Needs Assessment
SDG	Sustainable Development Goal
SEA	Strategic Environment Assessment
SFDRR	Sendai Framework for Disaster Risk Reduction
SMART	Specific, Measurable, Attainable, Relevant and Timely
UNDP	United Nations Development Programme
USISDR	UN Office for Disaster Risk Reduction
UWI	The University of the West Indies

EXECUTIVE SUMMARY

In 2013, the University of the West Indies' (UWI) Disaster Risk Reduction Centre (DRRC) of the Institute for Sustainable Development (ISD) launched the Enhancing Knowledge and Application of Comprehensive Disaster Management (EKACDM) Programme. The main objective of the project is 'to establish an effective mechanism for managing and sharing Comprehensive Disaster Management (CDM) knowledge that is used for decision-making by governments, local communities, the voluntary sector and the private sector'.

This assignment is to develop a policy framework and guidelines for mainstreaming CDM in two of the five prioritised economic sectors: agriculture and tourism. The policy frameworks and guidelines have been developed to address some of the challenges that countries face in mainstreaming climate change and DRM issues in policies for the tourism sector.

The Caribbean region is recognised as being the second most disaster-prone region in the world (UNDP, 2011 ; UNISDR, 2003 ; United Nations, 2013). This is as a result of its location, heavy dependency on particular sectors for foreign exchange, geology, tectonic setting, and poor land use and environmental practices. Mainstreaming comprehensive disaster management into national sectoral plans and policies is therefore a very important process in achieving and sustaining development.

In determining a policy framework for mainstreaming CDM at the policy level for the tourism sector, it was necessary to define what constitutes 'policy level', especially in the context of mainstreaming. The policy level and its related sub-elements are defined based on UNDP's "Mainstreaming DRR into Development at the National Level: A practical framework ". This framework identifies five key spheres for mainstreaming DRR, one of which is the policy sphere. Each sphere has four components; those at the policy level are listed below:

- a. legislation and regulation,
- b. strategies, policies and planning,
- c. resource mobilisation and allocation, and
- d. political commitment and leadership.

The proposed framework for integrating DRM at the policy level in the tourism sector include the following five essential pillars:

a. Pillar 1 – Define the Tourism Sector

The development of any policy for tourism disaster risk management hinges on a comprehensive understanding of the scope of the tourism sector. The tourism sector has many sub-sectors and is linked to other sectors such as agriculture, health and water, and thematic areas including environment and poverty reduction. Any policy to reduce disaster risk must understand the cross-cutting and interconnected nature of the sector.

In defining the sector, the linkages with national development plans, sectoral or related sub-sectoral plans and policies should also be articulated. This is important because before considering the development of a new policy, existing plans and policies relating to DRR must be identified and analysed. In many instances, existing policies have strong DRR linkages or strongly support the mainstreaming process.

b. Pillar 2 – Understand the DRM issues in the Tourism Sector

Empirical data and findings can enhance the understanding of the sector and the key DRR issues that need to be addressed by policy. An understanding of the sector can be achieved in many ways using a number of analytical tools and methods such as hazard, vulnerability and risk studies, Strategic Environment Assessments

(SEA), Post Disaster Needs Assessments (PDNA) and Cost-benefit analyses (CBA). Understanding the DRM issues in the sector also involves the identification of the various types of stakeholders in the sector, their interest in DRR mainstreaming, and their role in the process.

c. Pillar 3 – Define what a mainstreamed Sector Looks Like

The ideal attribute(s) of a DRR mainstreamed sector can be defined in terms of outcomes in the sector. By defining outcomes, the impact of DRR management/mainstreaming in the tourism sector is clearly established. The results of DRR mainstreaming should be seen in all the critical areas of policy making and implementation in the sector; organisation/institutional capacity and leadership commitment, advocacy and knowledge, and sound implementation. The outcomes of mainstreaming of DRR in the sector should therefore be reflected in these foundation areas, and the linkages between the foundations should also be considered because of the “webbed” concept of mainstreaming.

d. Pillar 4 – Set Policy Objectives

Policy objectives are of importance in developing policies for DRM for the tourism sector. An understanding of the sector includes defining outcomes that exemplify what an ideal sector should look like if DRM is being mainstreamed. The establishment of policy objectives should consider issues identified from Pillars 2 and 3, with the objectives being linked to the outcomes established for the sector. A hierarchy of policy objectives should be established, ensuring that objectives are SMART, and that the accountability framework has appropriate systems for oversight, coordination and control.

e. Pillar 5 – Identify appropriate Instruments and Tools to achieve Objectives

The achievement of policy objectives requires the use of policy instruments which must be given careful thought and analysis. Comprehensive knowledge of the nature and characteristics

as well as the advantages and disadvantages of each of these policy instruments is required to guide selection. Policy instruments for risk reduction can include legislation, standards and guidelines, procedures and tools, enforcement and sanctions, and financial resources.

Despite the popularity of regulatory instruments, decision-makers should also examine non-regulatory instruments as a means of addressing risk. Consideration can be given to adopting integrated risk management approaches, and the relevant instruments adopted as part of the risk management strategy. These instruments fall broadly into three categories:

- a.** Risk Mitigation – These actions are taken prior to the risk event to reduce the likelihood of risk or losses
- b.** Risk Transfer – Some risks cannot be mitigated and in such instances, risk transfer tools should be explored
- c.** Risk Coping – Some risks cannot be mitigated or transferred and so coping strategies have to be developed to better help impacted stakeholders absorb and recover from impacts of hazards.

1 INTRODUCTION AND BACKGROUND

In 2013, the University of the West Indies' (UWI) Disaster Risk Reduction Centre (DRRC) of the Institute for Sustainable Development (ISD) launched the Enhancing Knowledge and Application of Comprehensive Disaster Management (EKACDM) Programme. The EKACDM, a five-year initiative, aims to “establish an effective mechanism for managing and sharing Comprehensive Disaster Management (CDM) knowledge that is used for decision-making in the public, private and voluntary sectors” in the Caribbean. The programme is funded by the Government of Canada through Foreign Affairs, Trade and Development Canada (DFATD), and has as its main priority the successful implementation of the CARICOM Enhanced CDM Strategy and Framework¹. Specifically, the main objective of the project is ‘to establish an effective mechanism for managing and sharing Comprehensive Disaster Management (CDM) knowledge that is used for decision-making by governments, local communities, the voluntary sector and the private sector’. This objective is consistent with Outcome #2 of the 2014–2024 CDM Strategy for the Caribbean, which is “increased and sustained knowledge management and learning for CDM”.

The EKACDM initiative has three (3) main intermediate outcomes:

- **Intermediate Outcome 1:** A Regional Network to generate, manage and share knowledge on Disaster Risk Management, including gendered issues, is operationalised;
- **Intermediate Outcome 2:** Increased use of standardised gender-sensitive educational and training materials for Comprehensive Disaster Management by professionals and students in the Caribbean;
- **Intermediate Outcome 3:** The establishment of an effective mechanism to facilitate the mainstreaming of gender-sensitive, fact-based policies and decision-making on CDM into key economic sectors and Small & Medium Enterprises (SMEs).

Ultimately, the EKACDM Initiative is expected to support the implementation of the CARICOM enhanced CDM Framework to reduce the impact of natural and technological hazards and the effect of climate change on men, women and children in the region.

1.1 SCOPE OF CONSULTANCY

This assignment is to develop policy frameworks and guidelines for mainstreaming CDM in two of the five prioritised economic sectors – agriculture and tourism – and this development takes place under Output 3.1.1 of the EKACDM Initiative. This report specifically focuses on the development of a framework and guidelines for the tourism sector and is applicable for use in all the EKACDM project countries.

The framework and guidelines will support the EKACDM initiative and is aligned with the DRM objectives of the CDM Strategy 2014–2024. This framework and guidelines consider the environment, gender, information and communications technology, and climate change, which are the cross-cutting themes under the EKACDM Initiative.

This output follows from an assessment of CDM integration in five key sectors: health and wellness; agriculture; tourism; finance and economic development; and water management sectors.

1.2 PURPOSE OF POLICY FRAMEWORK AND GUIDELINES

This policy framework and guidelines have been developed to address some of the challenges that countries face in mainstreaming climate change and DRM issues in policies for the tourism sector. The guidelines are meant to present key DRM issues for consideration in policies and strategies of the sector. More importantly, this policy framework and the guidelines support the CDEMA CDM 2014–2024 Strategy, spe-

¹At the time of project design this applied to the 2007–2012 Strategy, but the 2014–2024 CDM Strategy is now the relevant framework.

cifically contributing to the achievement of priority Outcome 3 which is “improved effectiveness of CDM at sectoral levels”. Outcome 3 seeks to address how sector stakeholders plan, coordinate and implement CDM at the national and regional levels by promoting DM programmes in various sectors; integrating hazard and disaster information and concerns into sector development agendas; highlighting the need for investing in disaster-proof measures/initiatives by sectors; and coordinating preparedness, response and recovery efforts amongst various stakeholders.

These guidelines recognise that for development to take place in a country, DRM and climate change issues need to be reconciled with development imperatives especially at the policy level so that they can translate to other hierarchical levels in the country. In the context of Caribbean economies where tourism is one of the main economic drivers, the policy framework and guidelines recognise the importance of integrating the DRM issues in this sector in achieving sustainable development.

To this end, the framework and guidelines will help countries develop climate-smart and DRM-sensitive strategies for the tourism sector that can assure its role in the sustainable development of Caribbean economies can be achieved.

1.3 USES OF THE GUIDELINES

The guidelines are intended for use by:

- a.** Policymakers at regional, national and sector levels including stakeholders in sectors aligned with the tourism sector, for example, agriculture, poverty reduction, environment and development planning
- b.** State actors involved in the approval of investments in the tourism sector
- c.** Non-governmental organisations and civil society involved in advocacy at national and sectoral levels
- d.** Development partners that support national level and sectoral level interventions in the sector.

1.4 LIMITATIONS OF THE GUIDELINES

The framework and guidelines are not for use in operationalising disaster risk management in the tourism sector. Instead, they are to be used as a point of reference when broadly addressing the integration of DRM and climate change issues in tourism policy, and in sectors that are strongly related or aligned to the tourism sector. In this context, the policy framework and guidelines are not intended to serve as a DRM policy for the tourism sector.

The framework and guidelines represent the considerations to be integrated in the tourism sector based on current trends and challenges. They may therefore need to be revised at future dates taking into consideration the level of mainstreaming at policy level.

The guidelines are not country-specific and countries will need to assess their level of mainstreaming and include those considerations and approaches that are most applicable.

2 TECHNICAL APPROACH TO THE DEVELOPMENT OF THE GUIDELINES

The following approach was used to develop the framework and guidelines:

- a. **Literature review** – Several materials and documents were reviewed in the development of the framework and guidelines:
 - i. Materials/documents on the structure and content of policy frameworks – These documents provided suggested approaches for the structure and content of policy frameworks and guidelines. Sample frameworks were examined for finance, agriculture, education, land policy and risk reduction. The main takeaway was identifying the framework around which the document would be developed. The framework was identified as five key pillars for integrating DRM and climate change in the sector.
 - ii. Literature on challenges with mainstreaming DRM in the tourism sector – The main document consulted was the CDM Assessment and Prioritisation report that was prepared as a precursor to this framework and the guidelines. The assessment provided insights on the challenges and barriers to mainstreaming in the tourism sector in the Caribbean. This was buttressed by other literature on mainstreaming DRM in the tourism sector.
 - iii. Documents on Best Practices – These documents identified approaches and guidelines to integrating DRM and climate change at the policy level and also identified cases where countries or institutions have achieved success in this area.
- b. **Development of an annotated outline** – Based on the literature review, an annotated report outline was prepared. The outline identified the key issues under each pillar of the framework that will be addressed by the framework and guidelines.
- c. **Key stakeholder consultations** – The annotated outline was shared with key stakeholders, including the chairperson for the Tourism Thematic Working Group of CDEMA, and was circulated to other members of the working group. The outline was also shared with stakeholders at the Climate Smart Sustainable Forum held in St. Kitts from December 12–13, 2017.
- d. **Completion of the Policy Framework and Guidelines** – The annotated outline was elaborated into the policy framework and guidelines taking into account findings from the literature review and stakeholder feedback.
- e. **Validation of Framework and Guidelines** – A wider stakeholder consultation process was embarked on to solicit feedback and comments on the draft guidelines. The consultation process included representatives from targeted stakeholders: academia; NGOs; tourism ministries and their relevant departments; ministries responsible for national economic planning and development and also environment and planning; and development partners. Where applicable, comments were incorporated and the policy framework and guidelines finalised.

2.1 INTRODUCTION TO MAINSTREAMING

2.1.1 Concept of Mainstreaming

According to the 2015 Global Assessment Report (GAR), disaster risk is increasing, causing economic losses averaging US\$250 billion to US\$300 billion globally each year. Additionally, the average annual losses (AAL) from earthquakes, tsunamis, tropical cyclones and river flooding are now estimated at US\$314 billion in the built environment alone (UNISDR, 2015).

The Caribbean region is recognised as being the second most disaster-prone region in the world (UNDP, 2011 ; UNISDR, 2003 ; United Nations, 2013). This is as a result of its location, heavy dependency on particular sectors for foreign exchange, geology, tectonic setting, and poor land-use and environmental practices. Natural hazards such as hurricanes, landslides, and floods are annual occurrences that present a constant threat to human, economic, social, and environmental development in the region (United Nations, 2013; CDEMA, 2014). Additionally, the inherent physical characteristics of small island states, and the accompanying socio-economic features make the region highly vulnerable to the effects of climate change.

Regular annual disaster losses are estimated at \$3 billion with significant loss to social and productive sectors. Impacts from hazards will only intensify as a result of climate change, as 60% of the region's population and 70% of the economic activity are within two miles of coastlines (CDEMA, 2014). The region's vulnerability is amplified by the fiscal fragility of many of the Caribbean islands. According to Auguste and Cornejo (2015), most of the Caribbean economies' fiscal imbalances have resulted in high levels of public debt, in some cases exceeding its GDP. The implications are grave, especially in terms of delays in development as well as the increase in poverty and inequality. This presents a serious obstacle for the region in achieving sustainable human development as any impact from hazards can significantly erode any development gains achieved by countries of the region. Mainstreaming comprehensive disaster management into national sectoral plans and policies is therefore a very important process in achieving and sustaining development. Pelling and Holloway (2006), in citing work by Tearfund indicated that:

'Mainstreaming' derives from the metaphor of a small, isolated flow of water being drained into the mainstream of a river where it will expand to flow smoothly without loss or diversion. Therefore "mainstreaming risk reduction" describes a process to fully incorporate disaster risk reduction into relief and development policy and practice. It means radically expanding and enhancing disaster risk reduction so that it becomes normal practice, fully institutionalised within an agency's relief and development agenda.

Benson and Twigg (2007) note that to 'mainstream' disaster risk reduction into development means considering and addressing risks emanating from natural hazards in medium-term strategic development frameworks, legislation and institutional structures, sectoral strategies and policies, budgetary processes, the design and implementation of individual projects, and monitoring and evaluating all of the above.

These definitions are reflected in the Comprehensive Disaster Management Policy (2012) which defines mainstreaming as making comprehensive disaster management an integral dimension of the policies and programmes in all political, economic and societal spheres.

Nunan et al. (2012) summarise mainstreaming DRR as a "recognition that too many factors and activities play a role in achieving DRR and only through a comprehensive cross-sectoral approach will DRR succeed".

The United Nations Development Programme (UNDP, 2004) notes that disasters are both a cause and a product of failed development. Therefore, mainstreaming is a process which seeks to integrate, institutionalise, and embed DRR principles within a government's development agenda. Global recognition of this has seen clear articulation in priority 2 of the Sendai Framework for Disaster Risk Reduction (SF-DRR) as well as in Outcome 2 of the Comprehensive Disaster Management Strategic Framework (CDMSF), in regard to the importance of mainstreaming and integrating DRR within and across all sectors.

2.2 MAINSTREAMING DRR IN THE TOURISM SECTOR

The importance of travel and tourism as an economic activity is growing constantly and has reached, at the international level, dimensions that prior to this period, have not been seen. Over the past decades, international tourist arrivals have more than doubled, from 473 million in 1992 to 1,035 billion in 2012. Tourism is becoming globally one of the most important economic activities, sometimes the dominant economic activity, in many less and least developed countries.

This is the case in the Caribbean region where the tourism sector is a key driver of economic development in the region as it is a primary source of foreign exchange earnings for many countries. The Regional Disaster Risk Management Strategy for the Tourism Sector, 2009 noted that “the Caribbean is the most tourism dependent region in the world”. According to the latest report by the Caribbean Tourism Organization (CTO, 2016), Caribbean tourism continues to break new ground, surpassing 29 million arrivals for the first time in history with increased tourist arrivals at 4.2%. Reports for the Caribbean published by the World Travel and Tourism Council (WTTC) highlighted that overall travel and tourism contributes 15.2% of the Caribbean’s GDP and 13.8% of employment (WTTC, 2018).

At the same time, tourism is affected by crises caused by both natural and man-made hazards. Severe weather events can result in both direct and indirect losses to the sector. Direct damage may cause a loss of property and, the indirect impact, sometimes greater, is felt in the loss of foreign exchange earnings and jobs. The temporary closure of hotels for repairs means fewer visitors, causing other indirect effects such as loss of income from the purchase of local goods and services.

The 2017 hurricane season resulted in an estimated (loss) of 826,100 visitors to the Caribbean, which could have generated US\$741 million and supported 11,005 jobs (WTTC, 2018). Research further suggests that recovery to previous levels could take up to four years, and if this is the case, the region will miss out on over US\$3 billion over this time frame.

Direct and indirect losses from disasters can thus affect not only the entire tourism sector, but also national economies as a whole. There is therefore a business case for integrating disaster risk management into the tourism sector because investing in DRM will contribute to building resilience and a higher capacity to deal with external shocks.

2.3 SUMMARY OF BARRIERS AND CHALLENGES WITH MAINSTREAMING IN THE TOURISM SECTOR

The assessment of CDM integration in the tourism sector², a precursor to the development of this policy framework and guidelines, shows that progress and identifiable actions have been made with mainstreaming in the sector. The findings of the assessment were that countries have legislative frameworks and institutional arrangements to advance the DRM agenda. The countries have enacted legislation and developed and/or adopted policies and plans which generally set the basis for DRM mainstreaming. Some countries have also had much success in the dissemination of information to build a culture of safety and overall resilience through community-based disaster management programmes.

However, DRR and climate change adaptation (CCA) mainstreaming encounters barriers and challenges that need to be overcome to systematically and comprehensively mainstream in the sector. These include, among others, lack of effective monitoring and evaluation, limited use of specific evaluation tools such as indicators and benchmarks, and documentation of good DRR practices in the sector. At a practical level, the adoption and/or applications of methodologies, such as risk analysis and cost benefit analysis, and the lack of funding represent additional hurdles.

Mainstreaming DRR is also stymied by limited intra- and inter-agency collaboration. Whilst there are established means of coordination on DRR through national platforms and mechanisms, in reality, there remains few effective mechanisms to allow collaboration among different levels of the sector, who, for the most part, remain focused on their own DRR programmes.

² Dominica, St. Lucia and Antigua and Barbuda were the countries chosen by EKACDM for the assessment.

3 A POLICY FRAMEWORK FOR MAINSTREAMING CDM IN THE TOURISM SECTOR

3.1 APPLICATION AND IMPORTANCE OF THE FRAMEWORK AND GUIDELINES

In determining a policy framework for mainstreaming CDM at the policy level for the tourism sector, it was necessary to define the policy level, especially in the context of mainstreaming.

Similar to the mainstreaming framework adopted for the CDM assessment and prioritization of the five key sectors, the policy level and its related sub-elements are defined based on UNDP's "Mainstreaming DRR into Development at the National Level: A practical framework". This framework identifies five key spheres of the mainstreaming framework, one of which is the policy sphere. Each sphere has four components and those comprising the policy sphere are legislation and regulation; strategies, policies and planning; resource mobilisation and allocation; and political commitment and leadership. The policy level is important in an organisation or a sector as it serves many functions. Most importantly, it simplifies decision-making by delimiting possible alternatives and prohibits the needs for in-depth analysis of recurrent issues and problems. Resultantly, decision-making at the policy level promotes efficiency.

If certain key and strategic decisions are taken at the policy level, it enables delegation of decisions at the operational and other levels because the guidelines and parameters would have already been set at the policy level. By delegating certain decisions to sub-ordinates, policy level personnel can channel their efforts into identifying opportunities, planning and other activities that typically get left behind. Finally, the policy level is important in securing consistency

and equity in decisions made by the organisation and sector. It allows everyone to take decisions consistent with the guidelines and limits of those established at the policy level. This is also important for mainstreaming as there will be consistency in integrating DRM at the sector level and cumulatively will help to achieve sector development objectives that are sustainable.

Decisions are taken at various levels of an organisation or sector, but it is at the policy level, in some spheres defined as the very top level, that decisions are taken that influence the overall strategy and outcomes and determine if the sector is sustainable and can satisfy the needs of consumers. This level is defined as the functional level as this is the level where decisions are taken that guide strategic decision-making. The strategies developed at this level are often further refined at the level of the organisation or sub-sector in such a way that they move from very broad to become more narrow and restrictive further down the sectoral levels. It is therefore important that mainstreaming start at this level as it influences the entire sector and in this way, CDM is integrated at the operational and less strategic levels.

In the policy domain, mainstreaming activities assess the extent to which DRR/CDM considerations have been included and/or implemented in policies, plans, legislation, and programmes. It also examines the extent to which political commitment, resource mobilisation and allocation are in place to support these plans. At the policy level, the main concern is improving coordination and integrating DRR into national and sectoral development planning. This level of decision-making influences decisions in the other elements of the mainstreaming framework and similarly, those other elements of the framework impact on the policy level. It is the most strategic level of decision-making.

The sub-components of the policy sphere are:

- a. Political Commitment and Leadership** – These are important drivers for mainstreaming as they determine the extent to which policies and laws supporting DRR are implemented. Leadership is necessary to ensure that DRR is an agenda item and that a vision for DRR is created and leads the process of development or policy reform. The leadership for DRR should include at least one high-level political champion (UNDP, 2010) who will drive the DRR process and provide the support to create the environment for other DRR leaders to effect change at the policy level.
- b. Strategies, Policies and Planning** – The political commitment and leadership are expected to be translated into strategies, policies and plans for DRR (UNDP, 2010). It is strongly recommended that existing plans and policies be analysed prior to the development of new policies or plans. That way, gaps are identified and addressed, eliminating duplication. A second recommendation is that plans must include high-level national plans and policies: national development plans; multi-year strategic plans; and international strategies, such as poverty reduction, and Sustainable Development Goals. These are necessary to set the context and results for DRR.
- c. Legislations and Regulations** – Legislations and regulations create an enabling environment for DRM. They set out the rights of citizens and other stakeholders, duties of the state and other stakeholders, enforcement procedures, penalties or incentives for DRR, and standards for DRR.
- d. Resource Mobilisation and Allocation** – The framework requires that political commitment and legislative actions be backed by adequate resources to ensure that leaders translate policies and laws into action through implementation. Resource provision depends on an adequate understanding of the economic impact of disasters, and the related impact on development goals. Allocations must be further informed by cost-benefit analysis or other economic appraisal tools that ensure value for investment. Whilst there is need for dedicated budget lines for DRM, it is recommended that such budgets be calculated as a budget in existing development processes and activities instead of creating separate budget lines.



FIGURE 1: SUB-COMPONENTS OF POLICY LEVEL

4 POLICY FRAMEWORK FOR INTEGRATING CDM IN THE TOURISM SECTOR

The framework for the policy level is proposed to include five essential pillars that must be considered in integrating DRM at the policy level in the tourism sector:

The framework and guidelines are aimed at policymakers in the tourism sector including regulators, senior level strategic and operational level personnel and supervisors who have to make decisions directly or indirectly related to disaster risk management. It is also relevant for stakeholders including consumers and industry players.

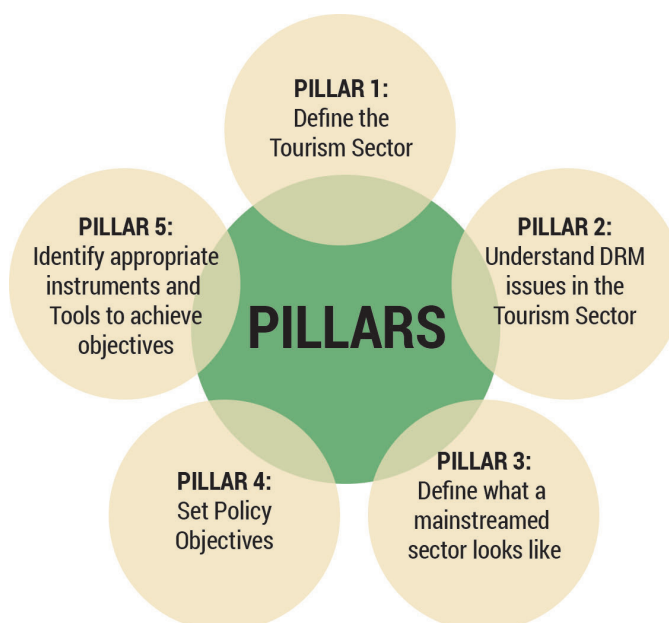


FIGURE 2: FIVE ESSENTIAL PILLARS FOR MAINSTREAMING IN THE TOURISM SECTOR

4.1 PILLAR 1: DEFINE THE TOURISM SECTOR

The development of any policy for tourism disaster risk management hinges on a comprehensive understanding of the scope of the tourism sector. The tourism sector has many sub-sectors and is linked to other sectors such as agriculture, health and water as well as thematic areas including environment and poverty reduction. Any policy to reduce disaster risk must understand the cross-cutting and inter-connected nature of the sector.

4.1.1 Sub-sectors

The tourism sector comprises a multiplicity of sub-sectors and DRR policy for the sector must integrate specific issues and needs of these various sub-sectors. The Caribbean Tourism Organization (CTO) has categorised the regional tourism industry into eight sub-sectors:

- 1. Accommodation** forms part of the core tourism product. All tourists need some type of accommodation; whether a hotel, guesthouse, bed and breakfast establishment, villa, time-share or host home.
- 2. Food and Beverage** is another key facet of the tourism product. All tourists consume food and beverages during their stay, and gastronomic tourism is a fast-growing niche market in the Caribbean.
- 3. Transportation** 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 or 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; other attractions are based on the built heritage, for example, museums and historic sites or on popular culture such as carnivals and music festivals.
5. **Adventure Tourism** 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. **Events and Conferences** form a dynamic sub-sector which requires the pulling together of all elements of the tourism industry to create the end result of an international conference, a carnival or a music festival, for example, a jazz festival or a sporting event such as a cricket test series.
7. **Travel Trade** comprises tour operators, travel agents and destination management companies, which provide ground handling and ground tour operation services.
8. **Tourism Services** involve 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.

4.1.2 Sectors Integrated with the Tourism Sector

1. Tourism and Agriculture Sectors

The linkage between the tourism and agriculture sectors is well documented in the literature with both productive sectors seen as the best opportunity for inclusive economic growth. It is against this background that the linkages between the agriculture and tourism sectors should be defined and highlighted. This linkage represents an important potential mechanism to stimulate and strengthen traditional local producers and processors and to improve the distribution of benefits along the chain while at the same time generating investment incentives for local production³.

The most obvious area for strengthening linkages in the supply chain for tourist consumption products is the food and beverage sub-sector as well as other areas such as crafts. Strengthening linkages and creating synergies between tourism and agriculture should help harness income from tourism to achieve the objectives of sustained and equitable growth (FAO, 2012).

Some of the key areas that need to be considered in defining and articulating tourism linkages with other sectors include:

- Adopting a multi-sectoral approach: Agriculture (and fisheries) and tourism policies are often developed separately, and very few linkages are identified or pursued;
- Reviewing DRR/CCA issues in a joint forum: Similarly, at times the development of these policies does not take into consideration the DRR/CCA issues which affect both sectors;
- Strengthening public/private sector partnership: This cooperative approach creates better economic opportunities and sustainable development.

In a thrust to strengthen these linkages between tourism and other productive sectors, the Government of Jamaica has demonstrated political will and leadership through the establishment of the Tourism Linkages Network (See Box 1).

BOX 1: ESTABLISHMENT OF TOURISM LINKAGES NETWORK IN JAMAICA

In 2013, Cabinet approved the establishment of the Tourism Linkages Network. As priority policy, the Ministry of Tourism has targeted the development and strengthening of sustainable linkages between the tourism sector and other productive sectors of the economy – such as agriculture, manufacturing etc. to which it is closely linked.

The primary objective of the Tourism Linkages Network is to increase the consumption of goods and services that can be competitively sourced locally. It also aims to create employment while generating and retaining the country's foreign exchange earning potential.

The operational structure is through the establishment of a Tourism Network Council comprising key public and private sector partners who oversee the coordination and implementation of effective and sustainable strategies which strengthen and facilitate linkages.

Source: <http://www.mot.gov.jm/page/tourism-linkages-network>

2. Tourism and Environment

Policy directives should ensure that the tourism sector engages in sustainable tourism management and practices. Some key areas for consideration include:

- i. Physical Integrity – To maintain and enhance the quality of landscapes, both urban and rural, and avoid the physical and visual degradation of the environment;
- ii. Biological Diversity – To support the conservation of natural areas, habitats and wildlife, and minimise damage to them;
- iii. Resource Efficiency – To minimise the use of scarce and non-renewable resources in the development and operation of tourism facilities and services;
- iv. Environmental Purity – To minimise the pollution of air, water and land and the generation of waste by tourism enterprises and visitors.

These relationships were recognised by the Caribbean Tourism Organization (CTO) with the development of the Caribbean Sustainable Tourism Policy Framework in 20084 to streamline the sustainable tourism agenda in the region (Box 2).

BOX 2: EXISTING POLICY FRAMEWORK ON TOURISM AND THE ENVIRONMENT

One of the policy frameworks in the Caribbean Sustainable Tourism Policy Framework is the Policy on Tourism and the Environment.

This policy guidance on the sustainable use of the natural environment and the cultural heritage is grouped into the following policy objectives:

- the planning, management and monitoring of the environment;
- sustainable patterns of resource use and the application of adaptation; and
- mitigation strategies for tackling the climate changes predicted to be inevitable by the international scientific community.

Contained within the policy are examples of good environmental practices and initiatives implemented throughout the region.

Source: Caribbean Sustainable Tourism Policy Framework



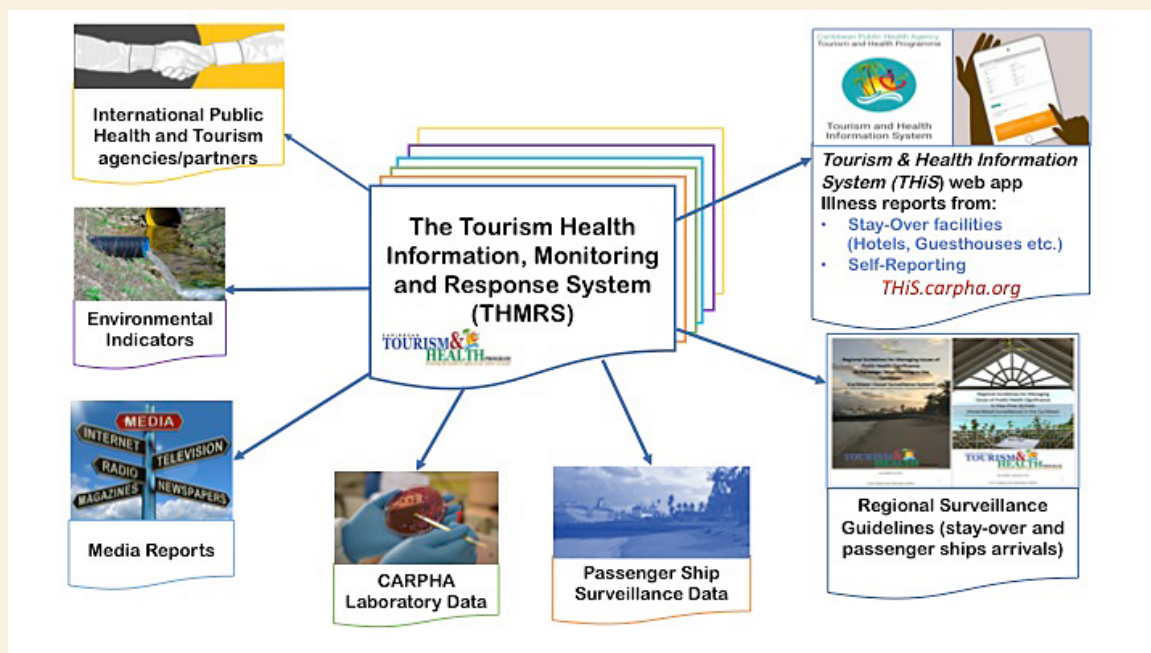
3. Tourism and Health

The relationship between health and tourism should be clearly articulated in the policy directive to include, but not limited to:

- Outbreaks of food and water-borne and other enteric illnesses in hotels and cruise-ships;
- Deficiencies in environmental sanitation which are key considerations in the formulation of policy directives relating to improving the health, safety and security of visitors and locals;
- Crime and violence;
- High obesity, heart disease, stroke, cancer, diabetes in the tourism workforce.

The Caribbean Public Health Agency (CARPHA), in partnership with the Caribbean Tourism Organization (CTO) and the Caribbean Hotel and Tourism Association (CHTA), established a Regional Tourism and Health Programme (THP) in 2014. This programme has the following components: real time; early alert and response tourism-based surveillance system; food safety and environmental sanitation training; health, safety and environment (HSE) standards; and tourism and health partnerships (Box 3).

BOX 3: TOURISM SURVEILLANCE & RESPONSE SYSTEM



Source: <http://carpha.org/What-We-Do/Tourism-and-Health-Programme>

4. Tourism and Water Resource Management

Tourism is a large consumer of water and impacts heavily on water demand, especially for Small Island Developing States (SIDs). The pressure on water supply is further exacerbated by the projected impact of climate change and variability. The policy directive should address water resource management in the sector as part of the overall sustainable tourism agenda. The Caribbean Hotel and Tourist Association (CHTA) has published a Water Conservation Toolkit which is available at the following website: http://www.caribbeanhotelandtourism.com/downloads/CH-TAEF_WaterConservation.pdf

5. Tourism and Poverty Reduction

The potential for tourism to contribute to poverty reduction is being increasingly recognised, partly because it is one of the few sectors in which poor countries' cultural and natural resources give them a comparative economic advantage. The development of tourism provides a good opportunity to help alleviate poverty because it is often a new source of revenue in rural areas (UNEP & WTO, 2005).

Employment generation is a key element of poverty reduction. However, the challenge the sector should address is the identification of strategies to channel visitor spending towards the poor, including through the informal economy. Employment potential can also be optimised through the training of persons to fill the demand for services and products in a range of tourism linked sub-sectors.

4.1.3 Linkages with National Development Plans, Sectoral or Related Sub-sector Plans and Policies

Before considering the development of a new policy, existing plans and policies relating to DRR must be identified and analysed. In many instances, existing policies have strong DRR linkages or strongly support the mainstreaming process. In such cases, it may be better to seek to strengthen an existing policy or policies rather than creating a new one as this will lead to duplication and affect buy-in and ownership from stakeholders (UNDP, 2010).

QUICK FACTS 1:

Before Considering New policies:

- Identify and analyse existing policies that have strong DRR linkages
- Strengthen existing policies before creating new ones: this avoids duplication and affects stakeholder buy-in
- Locate the sector in national development – what role does tourism have in national development and how will CDM contribute to this role?

Similarly, the policies of other sectors must also be examined to identify the extent to which they promote disaster risk reduction and support the mainstreaming process. Policies and plans for tourism disaster risk management cannot be stand-alone policies, but should instead be linked with other sectoral policies, plans and strategies such as the national development plan for the country, DRM/climate change policy, land-use and management policy, water sector policy and so on.

Integrating DRR broadly at the sectoral level and more specifically to the tourism sector must start at the point at which national development plans are being developed. It is in these national level planning processes that the cross-cutting issues such as climate change, gender, and ICT are integrated.

4.1.4 Locating the Sector in National Development

Integrating DRM in the sector requires an understanding of the role that the sector plays in the national economy through its contribution to GDP, foreign exchange earnings, and employer of labour. This is especially important in the Caribbean as tourism remains one of the most dominant sectors of the regional economy, employing more than 2.3 million people, and attracting investments of US\$6.8 billion (12.6% of total investments in the region) in 2016. The WTCC (2017) anticipates that capital investment should rise by 3.5% per annum over the next ten years to US\$9.8 billion in 2027 (13.9% of total).

4.2 PILLAR 2 : UNDERSTAND THE DRM ISSUES IN THE TOURISM SECTOR

Empirical data and findings can enhance the understanding of the sector and the key DRR issues that need to be addressed by policy. An understanding of the sector can be achieved in many ways using a number of tools, methods and approaches.

4.2.1 Analytical Tools and Methods

The use of analytical tools and methods is critical to the understanding of the sector. In addressing the appropriate policy issues, it should be ensured that these tools are available to help understand disaster-related risk in the sector, and that the tools and methods are applicable to the broad policy level and not only the project level. Any findings from the application of these tools and methods should provide key findings on the issues of the sector, sub-sectors or broad institutional level, and guide policy decisions.

4.2.1.1 Hazard, Vulnerability and Risk Studies and Assessments

Several tools and approaches are available to the sector to conduct these studies and assessments. While some are tailored for the sector, others are generic, and can be applied through sector lenses or modified/adapted for use by the sector.

- a. **Standard for Conducting Hazard Mapping, Vulnerability Assessment and Economic Valuation for Risk Assessment for the Tourism Sector**– Drafted in 2008, the standard defines and describes the procedures for assessing risks due to natural hazards in the tourism sector using a probabilistic approach. Probabilistic risk is the chance of something adverse occurring. This method assesses the likelihood of an event or events causing harmful consequences – casualties, damaged property, lost livelihoods, disrupted economic activity, and damage to the environment. Annex 1 provides a case study of the multi-hazard risk assessment that was conducted for the resort area of Negril, Jamaica in 2016.

- b. **HAZUS-MH Risk Assessment** – The Federal Emergency Management Agency (FEMA) developed a how-to guide on “Understanding Your Risks: Identifying Hazards and Estimating Losses”. Conducting a risk assessment for the tourism sector tells you:

- i. The hazards to which the sector is susceptible;
- ii. What these hazards can do to physical, social, and economic assets;
- iii. Which areas are most vulnerable to damage from these hazards; and
- iv. The resulting cost of damages or costs that could be avoided through future mitigation projects.

Completion of such an assessment facilitates the setting of mitigation priorities and goals, and the evaluating of potential mitigation measures through the use of benefit-cost analyses and other techniques.

QUICK FACTS 2:



- c. Toolbox for Crisis Communications** – Crisis communications is a crucial element of a good crisis management system. It helps limit the negative impact of a crisis by addressing the information needs of all industry stakeholders in an efficient, timely and responsible manner. The United Nations World Tourism Organization (UNWTO) has developed a Toolbox on Crisis Communications in Tourism. It includes step-by-step protocols, checklists, sample templates configured by type of crisis and media categories, guidelines for measuring effectiveness, best practices and the use of social media in times of crisis. This Toolbox serves as a practical guide for travel and tourism stakeholders, to effectively address the challenges generated by crises (UNWTO, 2011).

4.2.1.2 Strategic Environment Assessment (SEA) for the Tourism Sector

Strategic Environmental Assessment (SEA) is a set of analytical and participatory processes for incorporating environmental considerations, at early stages of decision-making, into policies, plans, and programmes that affect natural resources. SEA fosters and provides critical systematic consideration at the sectoral, regional, and national levels to promote environmental sustainability, smart growth, and pollution prevention. The term “SEA” encompasses a spectrum of analytical processes such as Strategic Environmental and Social Assessment (SESA), Strategic Social Environmental Assessment (SSEA), Country Environmental Analysis (CEA), Combined Strategic Impact Assessment (CSIA), and Cumulative Impact Assessment (CIA).

Because the environment includes critical resources necessary for protecting the tourism sector against hazards and given the linkages between both sectors, an SEA is helpful in incorporating environmental considerations into the development of public policies and strategic decisions. An SEA can be completed for the tourism sector as is often the case for priority sectors of countries.

4.2.1.3 Post-disaster Impact Assessments

Post-disaster impact data provides information on the nature and extent of impact of hazards on the tourism sector. This impact can be further quantified and represented in economic terms such as impact on sector, GDP and is also useful for identifying the recovery needs of the sector.

The Post-Disaster Needs Assessment technique of the Economic Commission for Latin America and the Caribbean has been widely used to collect and assess the socio-economic and environmental impacts of disasters. Cross-cutting issues such as gender, climate change and environment are also included in this assessment.

The techniques used for this assessment provide procedures for estimating the effects and impacts of disasters and provide an integral accounting approach to bring them together in a coherent picture, distinguishing between loss and damage taking into account linkages between different sectors of the economy. Over time, data and information from these assessments can be analysed and compared and used to influence policy.

4.2.1.4 Cost-benefit Analysis

Cost-benefit analysis (CBA) is an economic tool that can be used to compare the costs and benefits of DRR interventions. Research has shown that the economic benefits derived from DRR interventions outweigh their costs. Not enough of these studies are being done to better understand the short-, medium- and long-term benefits derived from investing in DRR. Often, CBA is undertaken at the project or programme level, but there are very strong linkages with policy level as it provides justification for spending on DRR and allocation of sufficient budget for related activities. Not only is it an excellent tool for advocacy and effecting change in high-level decision-making, but it is also useful for identifying options and instruments best suited for advancing DRR. Similarly, climate change adaptation should be approached using similar tools.

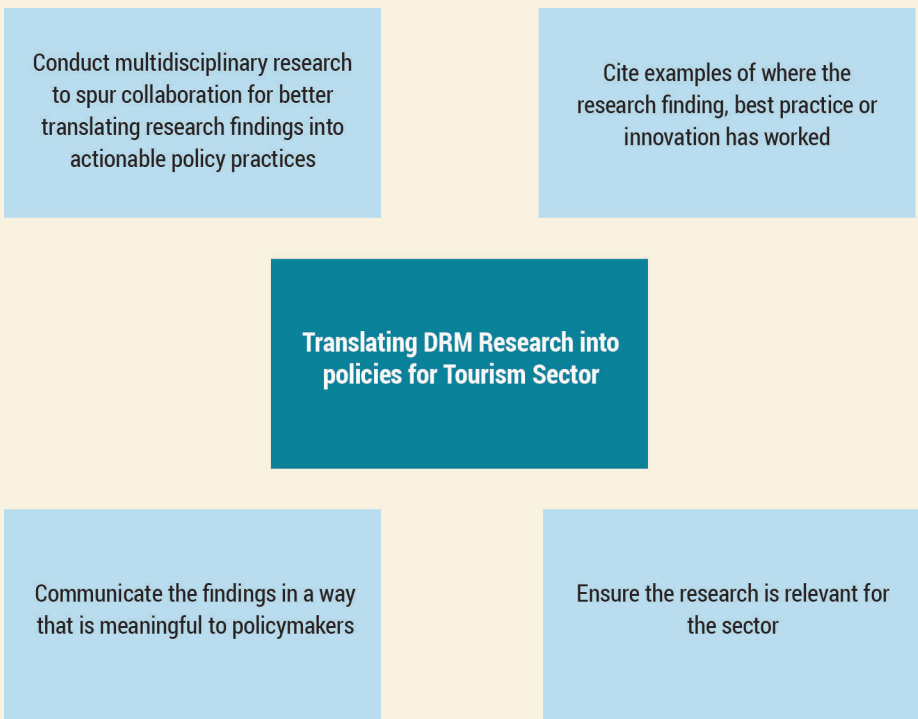
4.2.1.5 Capacity to Use Tools and Methods

The presence of the assessment and analysis tools and procedures by themselves do not completely address the information needs for driving policy. It is important that technocrats have the capacity to use the tools and approaches. There are a number of ways to build this capacity such as through training, technical cooperation and access to information repositories and databases. Technocrats can then interpret and present the findings for decision-makers to use in policy development.

4.2.1.6 Translating Research Into Policy

Research sometimes does not drive policy decisions despite the compelling evidence that is presented. Suggestions for translating DRM-related research into DRM policies for the tourism sector is shown in Box 4.

BOX 4: SUGGESTIONS FOR TRANSLATING DRM RESEARCH INTO POLICIES IN TOURISM SECTOR



4.3 STAKEHOLDER CONSULTATIONS

Any DRM policies developed for the tourism sector must take into consideration the different stakeholders in the sector, their interest in DRR mainstreaming and their role in the process. It is therefore important to map key decision-makers and stakeholders. The following guideline should be considered in identifying and engaging stakeholders in the process:

- **Government** – Government has a role to play in reducing risk in the sector. Government as a stakeholder in DRR mainstreaming for the sector has many stakeholders who are involved because key decisions are taken at the community, local, sectoral and national levels. At the national level, government is important in the policy dialogue, in the use of policy instruments, such as legislation and regulation, and in the setting of national strategic plans for the sector. At the sectoral level, institutions play a key role, as this is the level at which programmes and projects are implemented and monitored.
- **Communities** – Engaging local populations and host communities at tourism destinations is beneficial from two perspectives. They know the hazards, vulnerability and risks, and can contribute to risk reduction by guiding development away from these areas or making recommendations that can mitigate risks. On the other hand, local populations are beneficiaries of projects and programmes and engaging them is important for ownership and buy-in.
- **Academia and Research** – Mainstreaming is a multi-disciplinary process, drawing on the skills of several experts (UNDP, 2010). This is no different for the tourism sector which has several sub-sectors and several elements making up the tourism system. The need for the involvement of several disciplines, such as natural resource management, engineering, land-use planning, ICT and others, is relevant for tourism mainstreaming.

- **Private Sector** – In the development and growth discussion, government is often seen as the enabler, and the private sector, the engine of growth. Considering that disaster management is a development issue, the role of private sector in mainstreaming should not be overlooked. The private sector has equal responsibility to integrate disaster management in its businesses to safeguard against shocks and allow for continuity should some disruption occur.
- **Media** – Reinforcement of risk reduction messages and advocacy are some of the key functions of media in risk reduction. This group is also important in highlighting risks and their underlying causes especially if it relates to inefficiency and poor decision-making.

QUICK FACTS 3:

Before Considering New policies:

- i. Tourism establishments and tourism enterprises, e.g., hotel associations, tour operator bodies, etc.;
- ii. Government departments and agencies – planning & environment, national disaster offices, health & agriculture etc.;
- iii. Institutions engaged in financing tourism programmes and projects, e.g., Ministry of Finance;
- iv. Local populations and host communities of tourism destinations;
- v. NGOs and other advocacy groups involved in tourism and tourism-related projects;
- vi. Academia – universities and colleges.

Drafting DRM policies need to involve the perspective of various stakeholders through consultation, cooperation, partnership and negotiation. Engaging a wide variety of actors in the sector increases the chance of the results and outputs from the mainstreaming process being more sustainable. Stakeholder analysis is an important tool that can help to identify, in a fair and equitable manner, the stakeholders that should participate in the sector mainstreaming process.

BOX 5: GUIDING QUESTIONS TO IDENTIFY STAKEHOLDERS FOR PARTICIPATING IN MAINSTREAMING

- Who might be affected (positively or negatively) by the development concern to be addressed?
- Who are the representatives of those likely to be affected?
- Who are the 'voiceless' for whom special efforts may have to be made?
- Who is responsible for what is intended?
- Who is likely to mobilise for or against what is intended?
- Who can make what is intended more effective through their participation, or less effective by their non-participation or outright opposition?
- Who can contribute financial and technical resources?
- Whose behaviour has to change for the effort to succeed?

Source: Mainstreaming Drylands into National Development Frameworks, UNDP, 2008

4.4 MONITORING AND SURVEILLANCE

The development of monitoring systems for DRR is important for guiding policy. For a full understanding of the issues that the policy should address, it is important that monitoring take place at several levels, that is, project, programme, plan and policy levels, and the interrelationships between these various levels established as this will determine whether the targeted outcomes are being achieved.

Monitoring should be done of risks (natural and man-made hazards and health-related risks), vulnerabilities (tourism plant and assets, tourists and staff) and strategic plans and programmes. It is important that policy directive identify and partner with existing monitoring and surveillance systems, for example, with the Caribbean Public Health Agency (CARPHA) on health-related risks to provide timely alerts to adverse health, and environmental incidents that may affect the sector.

A distinction should be made of the general need for monitoring and the ex-post monitoring of projects and programmes. In the pre-implementation phase, to inform policy, monitoring can involve participatory and consultative approaches that solicit the views and feedback of stakeholders on the risk management practices of the sector. It can also involve the use of surveillance systems that are directly related to the sector or other sectors that impact the tourism sector. Similarly, in the post-project phase, programme and capacity building activities should be monitored. At that stage, it will be determined whether objectives, goals and outcomes are being achieved. Information at that stage may be useful to guide the development of new policies or guide policy review.

Monitoring (and surveillance) depends on the availability of timely, comprehensive and high-quality data and information on the sector. There must also be the requisite expertise and resources to monitor and interpret this information and draw conclusions for policy and regulation.

4.5 PILLAR 3: DEFINE WHAT A MAINSTREAMED SECTOR LOOKS LIKE

4.5.1 Expected Outcomes

It is important that the characteristics of an ideal sector be defined as it serves as a reference point for the development of the policy, and will also be used for monitoring and evaluating. The ideal attribute(s) of a mainstreamed sector can be defined in terms of outcomes. By defining outcomes, the role of the tourism sector in the broader context of development is clearly established. Outcomes are among the highest level of achievement of results, suggesting that several activities and outputs contribute to the achievement of outcomes and include those that take place at the operational level.

Outcomes are tied to strategic planning periods, and so new outcomes may be formulated at the end of those periods. National development plans, strategic plans and the resultant sector plans will define specific progress to be achieved by the sector, within that specified period of time.

These outcomes are important for monitoring and evaluation and gauging the extent to which CDM has been mainstreamed in the sector within that time frame. While there are expected outputs from the tourism sector mainstreaming process, it should be borne in mind that these outputs connect to larger outcomes for the sector. Outcomes for the sector may not be framed in DRM language, but in broader terms.

Suggested Outcome for the sector could be, for example:

- Increased and sustained use of standardised tools and materials for integration of CDM in the Tourism Sector

Where there is a deep understanding of the sector, outcomes at local and national levels can be defined and the intervention logic at each stage designed with this in mind. This is important as mainstreaming has different levels of intervention, from local to international, and each should be strategically linked. CDM mainstreaming in the sector is likely to be more successful over the long term if it is promoted at all levels.

4.6 FOUNDATIONS OF A MAINSTREAMED SECTOR

The foundations of a mainstreamed sector should be clearly identified as they are essential in the formulation of outcomes. These foundations comprise key requirements for mainstreaming one of which is a strong policy level comprising the presence of key policy documents: resources and political leadership (see section 3.1). In addition to these, the following are key foundations for a mainstreamed sector:

1. **Organisational/institutional capacity and leadership commitment:** For mainstreaming to be successful, the institutional arrangements and necessary capacity to support the CDM mainstreaming process must be in place. These include such elements as organisational rules, procedures and incentives. Implicit in organisational capacity is the necessity to appoint a nodal agency at the national level. Similarly, appointing an agency with DRR responsibilities at the sectoral level will help drive, coordinate and sustain DRR mainstreaming. This should also be followed by focal points that have the responsibility at the organisational level and whose responsibilities include ensuring DRR is mainstreamed in the functions of the organisational and/or departmental levels. Focal points are most effective when their responsibilities for DRR are reinforced through internal procedures and incentives. It is also important that these procedures be routine and take place at the appropriate junctures in the programme cycle. Such procedures can include tools such as:

- templates
- checklists
- coordination mechanisms, etc.

Incentives, such as reward and recognition, can drive focal points to develop these additional tools which are often seen as additional workloads.

To effectively mainstream DRR, capacity development is also critical. Capacity development covers a wide range of activities which include creating and developing capacities, as well as managing, using and retaining these capacities. The starting point for capacity development is the engagement of stakeholders to promote awareness of DRR in the sector.

DRR is inherently complex and requires a multi-level approach. It is therefore important that multiple stakeholders be engaged in the process through coordination and building partnerships with internal and external partners. Coordination mechanisms should be formalised at the sector level, the same way it is at the national level.

- 2. Advocacy and knowledge:** Advocacy and knowledge is at the heart of any DRR mainstreaming strategy and may include advocacy for policy reforms, organisational change, and implementing pilot projects.

The integration of CDM in the tourism sector requires that effort be placed on building awareness as a means of empowering decision-makers, tourism interests, and the public about DRR goals. Tools and methods for assessing or integrating CDM into development in the sector (see 2.1) are critical as they provide the basis for mitigation and prevention solutions. Research by academic and non-academic institutions are important for advocacy and awareness raising, and can focus on hazards, their impact, or ways to reduce the associated risks. At the tertiary level, professional courses and specialist degree programmes can help to build the capacity of technocrats and experts who

must interact with DRR issues in their sectors.

The availability and subsequent dissemination of good practices and technology are key components of advocacy and awareness (Box 6). These good practices often showcase benefits to DRR and all available methods to promote these good practices should be used. These include journals, documentaries, media stories, workshops, and conferences.

Citizen Participation: Participation of communities in decision-making and the extent to which NGOs, civil society, institutions, and community-based organisations are involved in the goal of DRR and Climate Change Adaptation (CCA) affects mainstreaming in the sector. This framework recognises that with participation of the citizenry, there is increased ownership and buy-in for development activities. This, in turn, increases the efficiency and sustainability of development and ultimately makes DRR more successful.

- 3. Sound Implementation:** Risk-proofing investments, monitoring and evaluation of projects, and compliance and enforcement of laws and regulations can guide policy in the sector. Tools and methods should be used to calculate, assess and anticipate risks (Section 2.1). The findings from these assessments can be used to drive policy such as informing construction design standards, setbacks from shoreline to ensure developments are hazard-proof. At policy level, the notion that hazard-proofing development is an investment for which the return is resilience to hazards should be promoted.

The “webbed” concept of mainstreaming means that all foundations are linked, and these linkages will have to be considered in developing policy in the tourism sector.

Having these areas integrated in the formulation of outcomes is essential to having a mainstreamed sector as they represent a benchmark definition of the fundamentals of mainstreaming; provide a basis for analysis; and ultimately, the elaboration of outcomes.

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4.7.1 International Frameworks

Sendai Framework for Disaster Risk Reduction

The SFDRR was developed as a follow on to the Hyogo Framework for Action (HFA) in 2015. The framework's expected outcome is the substantial reduction of disaster risk and losses in lives, livelihoods, and health in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries. Goals and targets to achieve these expected outcomes as well as four priorities for action were articulated as follows:

- Priority 1:** Understanding disaster risk
- Priority 2:** Strengthening disaster risk governance to manage disaster risk
- Priority 3:** Investing in disaster risk reduction for resilience
- Priority 4:** Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction

The full document can be accessed http://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf

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Priority 2: Strengthening disaster risk governance to manage disaster risk

Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction

The full document can be accessed http://www.unisdr.org/files/43291_sendairframewor rkfordrren.pdf

QUICK FACTS 5:

Sustainable Development Goals

The UNDP describes the Sustainable Development Goals (SDGs), otherwise known as the Global Goals, as a 'universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity' (<http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>).

The 17 Goals and 169 targets build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with the other

- **Outcome 1:** Strengthened institutional arrangements for Comprehensive Disaster Management implementation at national and regional levels
- **Outcome 2:** Increased and sustained knowledge management and learning for Comprehensive Disaster Management
- **Outcome 3:** Improved effectiveness of CDM at sectoral levels
- **Outcome 4:** Strengthened and sustained capacity for a culture of safety and community resilience in Participating States.

Important to note also is that the implementation of the CDM Strategy also focuses on the inclusion of several cross-cutting themes. These are gender, climate change, information and communications technology (ICT) and environmental sustainability.

It is significant to note that the outcome of the SFDRR is closely aligned to the long-term goal of the CDMSF with both affirming the need to substantially reduce disaster risk and build resilience. CDEMA mapped the SFDRR Priorities for Action and the priority areas of the CDMSF to demonstrate the high level of comparability between these two frameworks.

4.8 REGIONAL FRAMEWORKS

4.8.1 Comprehensive Disaster Management Strategy

The regional disaster management agency, the Caribbean Disaster and Emergency Management Agency (CDEMA), developed a draft Regional Comprehensive Disaster Management (CDM) Strategy and Programming Framework 2014–2024. The new strategy builds on the successes of the 2007–2012 CDM and aims to address the existing gaps in achieving CDM and mainstreaming DRM at the sectoral level. The goal of the 2014–2024 CDM Strategy is to realise . “Safer, more resilient and sustainable CDEMA Participating States through Comprehensive Disaster Management”. This goal is supported by four high-level priority outcomes and sixteen outputs as represented in the CDM Logic Model. The four priority outcomes in the 2014–2024 strategy are:

4.8.2 National Outcomes for DRR

National outcomes for mainstreaming can be determined from national development plans or national level strategic plans for disaster risk reduction. A prerequisite for establishing national outcomes is the existence of a national system of multi-stakeholder coordination, to highlight the need for benefit and desired outcomes for risk reduction. Such a coordination mechanism is recognised and encouraged by the SFDRR which has stated that “It is necessary to support the implementation, follow-up and review of this framework through supporting countries, including through the national platforms or their equivalent, in their development of national plans and monitor trends and patterns in disaster risk, loss and impact” (UNISDR, 2015).

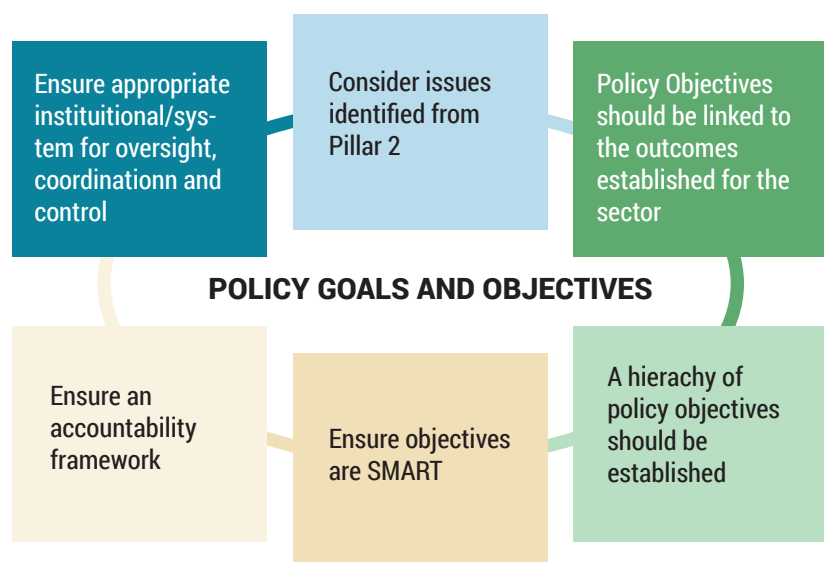
4.8.3 Sector Outcomes for DRR

In establishing sector outcomes for DRR, international, regional and national level outcomes for DRR should be consulted and used as a guide, as should the CDM and national outcomes for DRR. The CDM Strategy includes a priority outcome for sector mainstreaming and includes work plans that each of the committees or working groups use in their implementation and operationalisation of the CDM Strategy. National development plans often include goals, priorities or strategies for risk reduction and the tourism sector align its DRR outcomes with these national level goals.

Importantly, the sector should use its local assessment of risk, challenges and issues to guide its prioritisation of issues and resultant outcomes for DRR.

4.9 PILLAR 4: SET POLICY GOALS AND OBJECTIVES

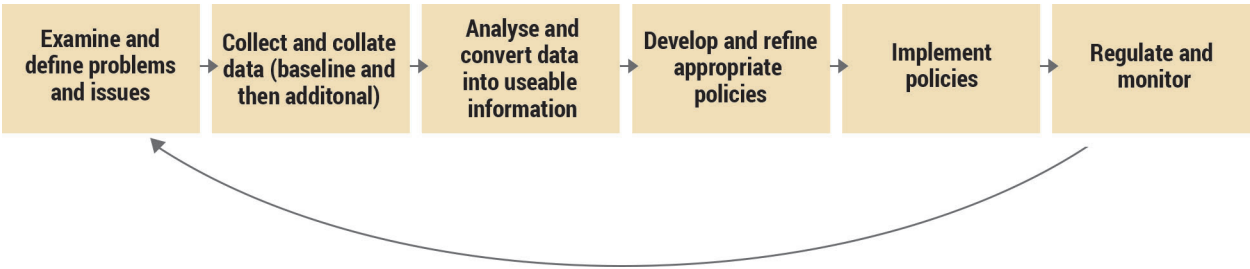
Policy objectives are of paramount importance in developing policies for DRM for the tourism sector. An understanding of the sector includes defining outcomes that exemplify what an ideal sector should look like if DRM is being mainstreamed. Policy objectives help to elaborate and define those outcomes that the government wishes to achieve for the sector and identify any trade-offs that may have to be made. These objectives are not only important for monitoring, but also components of the accountability framework.



4.9.1 Identification and Analysis of Problems and Issues

The elaboration of a policy, whether specific to DRM or otherwise, must be guided by identification and analysis of issues at global, regional and local levels. This is because policy must address issues in their broadest terms and a consideration of how those issues are linked to regional and global spheres must be addressed. This is important as it is these issues that the policy objectives must target and seek to correct, otherwise achievement of the outcomes may be jeopardised.

The analysis should focus on sector issues and the issues of other sectors related to the tourism sector (Refer to Pillar 2). This will ensure that the environmental, economic, and social dimensions of risk management in the sector are adequately guided by policy. Though data may show a compelling case for DRM in the sector, the case for intervention must also be driven by sound analysis of the nature of the problems and potential benefits from interventions.



Source: UNEP, 2008

FIGURE 3: NEXUS BETWEEN DATA AND POLICY PROCESS REQUIREMENTS

4.9.2 Consider Climate Change and Climate Variability

Climate change, which has international and local dimensions, must be factored into the analysis of the problems. While not a hazard itself, climate change is considered a threat multiplier and short-, medium- and long-term impacts of climate-related impacts must be considered. To this extent, inter-annual climate variability, inter-decadal climate variability, and long-term climate change must be addressed at the policy level.

With its close connections to the environment and climate itself, tourism, like agriculture, is a highly climate-sensitive economic sector (UNWTO-UNEP-WMO, 2008). The Climate Studies Group at the University of the West Indies, Mona (2012) and CARIBSAVE (2009) have summarised the main climate risks to tourism in Table 1.

THREAT	IMPACT
Warmer temperatures	Heat stress for tourists, increased cooling costs for hotels, changes in: plant wildlife, insect populations and distribution range, changes in infectious diseases e.g. more dengue
Increasing frequency and intensity of extreme storms	Beach loss; damage to tourism facilities, flooding, increased insurance costs or loss of insurability, business interruption costs. Adverse conditions will lead to cancellations leading to job losses.
Less rainfall	Water shortages; competition for water between sectors; desertification
Increased frequency of heavy precipitation events	Flooding damage to historic architectural and cultural assets, damage to tourism infrastructure.
Sea level rise	Coastal erosion, loss of beach area, higher costs to protect and maintain waterfronts and to implement sea defences.
Sea surface temperature rise	Increased coral bleaching and degradation of marine resources and aesthetics in dive and snorkel locations.
Changes in terrestrial and marine biodiversity	Loss of natural attraction and species.
Dry conditions and more frequent and larger forest fires	Loss of natural attractions, damage to tourism infrastructure.

Source: CSGM, 2012 and CARIBSAVE, 2009

TABLE 1: HOW CLIMATE CHANGE CAN AFFECT TOURISM SECTOR

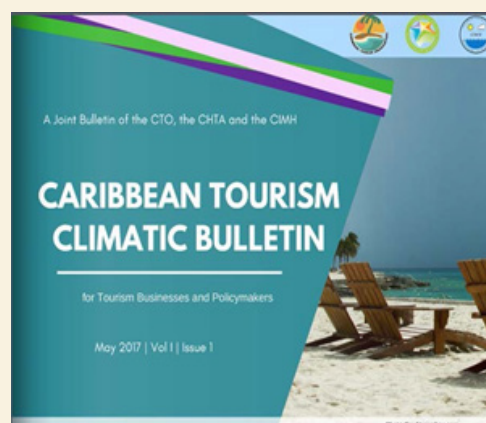
The Caribbean Tourism Organization in collaboration with the Caribbean Institute of Meteorology and Hydrology and the Caribbean Hotel Tourism Association has developed climate change resources to include a climatic bulletin specific for the tourism sector (Box 7).

BOX 7: CLIMATIC BULLETIN FOR TOURISM SECTOR

The bulletin is a joint effort between CTO, CHTA and CIMH to help tourism businesses and policy-makers identify and prepare for favourable or inclement climate conditions in the Caribbean and source markets, before they occur.

The information can help to inform strategic decisions related to the use of environmental resources, marketing and the enhancement of visitor experience.

Source: <http://rcc.cimh.edu.bb/>



4.9.3 Gender Issues in the Tourism Sector

According to the European Institute for Gender Equality, little attention has been paid to how the tourism industry benefits women and men, as well as to the relation between tourism and gender equality. The UNWTO also noted that tourism presents both opportunities and challenges for women, which makes the gender equality perspective highly relevant.

It is against this background that gender issues should be taken into consideration in the articulation of policy directive for the tourism sector. The articulation of policy directive should consult Gender-Sensitive Strategy to Mainstream CDM in the Tourism Sector (draft) that has been developed under the EKACDM

Initiative by the Institute for Gender and Development Studies, at the University of the West Indies, Mona Campus.

4.9.4 Articulation of Policy Objectives

Policy objectives for managing disaster risks in the tourism sector should be clearly defined and should be linked to the outcomes established for the sector. Policy objectives are important as they elaborate the desired goal of government, provide a roadmap for managing risk in the sector, and facilitate a pathway for more specific intervention.

Policy objectives should be elaborated at a general level in such a way that it is applicable to the entire sector. Notwithstanding, if there is a case for elaboration of objectives at a micro-level, according to the needs of sub-sectors or institutions, this should be pursued. CDM Policy objectives for the sector should be guided by the policy issues and problems to be addressed, international frameworks (as mentioned above), and outcomes for the sector as guided by the national development plan for the country or otherwise.

A clear hierarchy of policy objectives should be established, and these should be determined based on an objective system of weighting the issues identified and the needs to be addressed. Policy objectives should be carefully analysed to ensure that they are not in conflict, and where they are found to be, careful analysis of the trade-offs need to be carried out. To highlight the importance of the policy objectives and analysis of the risks associated with failure to achieve these objectives it is important to develop SMART policy objectives.

Developing SMART Policy Objectives for CDM mainstreaming in the Tourism Sector

Objectives are defined by a beginning and end, they go beyond the day-to-day tasks and describe a result linked to achieving a goal at the sector level. They are clear statements that need to be accomplished by a specific end date. Good objectives must be SMART.	
S	SPECIFIC • What do you need to achieve? Are you clear on the parameters and outcomes? • Have you provided enough detail that ensures clarity and common understanding of what is to be achieved? • What is the expected result?
M	MEASURABLE • Could this be measured and decided on without argument that the result can be achieved? • How will you know the objective has been achieved? • What indicators will you look for to measure progress and success? • What data is available? Do new measures need to be identified? • Think about quantity and quality measures.
A	ACHIEVABLE / ALIGNED • How does this objective fit with your local strategic priorities in the context of the sector's role? • Does the achievement of sector objectives contribute to overall achievement of national development or DRR objectives? • What would be the impact to DRR in the sector if the objective was not achieved?
R	RELEVANT • Is the objective appropriate for the sector's role in development and in risk reduction? • Can the objectives be achieved with available resources? If not, how can this be addressed? • What help will you require internally (within the sector) and externally? • Does the sector have the relevant skills and knowledge to complete the objectives to the defined specifics?
T	TIME-BOUND • Are there clearly defined goals linked to these objectives? Are there other objectives that depend on the completion of these objectives? • What could impact/compromise the deadline? How can these be mitigated if they are a concern? • Is the deadline realistic?

Source: Performance Development Review: Guide to writing SMART Objectives, University of Glasgow, retrieved from https://www.gla.ac.uk/media/media_455373_en.pdf

4.9.5 Ensure an Accountability Framework

Policy objectives are an important monitoring tool as they measure the effectiveness of policy interventions and are an essential component of transparency and accountability. Through public disclosure of these objectives, government will have to explain the extent to which these objectives are being achieved and the reasons for not achieving them, especially if there are significant failures in meeting them.

To give effect to the objectives, they should be incorporated in the objectives of the sub-sectors and institutions that make up the sector. It may also be necessary for advocacy groups and civil society to embrace these objectives as they support the government in their achievement and hold them accountable in the process. These same objectives are also useful in managing stakeholder expectations for risk reduction. The objectives must have the supporting indicators and targets to make them measurable.

To achieve the level of desired stakeholder involvement with policy objectives, governments should establish mechanisms that will bring visibility to these objectives and assess the level of achievement. Governments generally use annual reports as a monitoring and transparency tool to publish its risk reduction objectives, report on progress and successes, and identify challenges and risks to the achievement of these objectives. The reports should also outline remedial actions that the government will take to address the challenges. Often, these actions can be positive, such as providing additional resources where necessary. They can also be negative and include such measures as removal of appointed persons who may lack the leadership required to achieve the risk reduction objectives. In employing any of these corrective actions, careful analysis and sound judgement must be employed.

4.9.6 Institutional Design and System for Policy Implementation

The appropriate institutional setup or system for oversight, coordination and control is critical for policy to be effective and successfully implemented. National disaster management frameworks are usually led by a designated national institution or agency. Measures to improve institutional arrangements include establishment of an advisory body or technical committee comprising public and private sector stakeholders to operationalise the mainstreaming process in the tourism sector. This could be streamlined through the development of terms of reference for the advisory body as shown in Box 8.

BOX 8: SAMPLE SCOPE FOR TERMS OF REFERENCE

- Set-up priorities and provide advice related to statistical development activities;
- Provide a forum for consultations and coordination regarding progress evaluation, performance and diagnostics;
- Use feedback information from National Workshops for the preparation of reports with findings, conclusions and recommendations;
- Advise on corrective actions if and when needed;
- Provide recommendations and other resource needs.

Source: <http://www.fao.org/docrep/003/x2465e/x2465e0b.htm>

4.10 PILLAR 5: IDENTIFY POLICY INSTRUMENTS AND DEVELOP STRATEGIES AND PLANS

The achievement of policy objectives requires the use of policy instruments which must be given careful thought and analysis. Comprehensive knowledge of the nature and characteristics and also the advantages and disadvantages of each of these policy instruments is required to guide selection.

4.10.1 Regulations

Regulations are a popular policy instrument not just for the tourism sector, but for other sectors. Government and other stakeholders must have thorough knowledge of the various pieces of legislation and regulations that support risk reduction in the sector. It may not be necessary to create new legislation for managing risk in the sector. Instead, a principal act that governs the sector should be examined and its key features that support risk reduction should be understood. As emphasised before, the tourism sector is cross-cutting and so legislation governing water, land-use planning, macroeconomic development and social protection will have implications for and should be used to reduce risk in the sector. These regulations often affect stakeholder behaviours and set government expectations for risk reduction. They also help to create an enabling environment to start, sustain and institutionalise a culture of mainstreaming.

As a policy instrument for risk reduction, legislation can provide the following:

- a. **Standards and Guidelines** – Standards prescribed by national planning agencies relating to environmental management, land-use planning and development control, and food hygiene, for example, are important for risk reduction.
- b. **Procedures and Tools** – Similarly, approaches and tools such as Strategic Environmental Assessments (SEA) and Environmental Impact Assessments (EIA) are prescribed under planning and development laws, but

are applicable and used in tourism risk management and are especially useful for risk-proofing new or existing project investments in the sector.

- c. **Enforcement and Sanctions** – Enforcement is a key component of legislation and regulation as it is important for compliance. Regulation that fails to elicit an adequate level of compliance also means a failure to meet its underlying policy objectives (OECD, 2000).

QUICK FACTS 7:

The three necessary conditions for compliance

Reasons for non-compliance can be found at three different levels:

- The degree to which the target group knows of and comprehends the rules;.
- The degree to which the target group is willing to comply either because of economic incentives, positive attitudes arising from a sense of good citizenship, acceptance of policy goals, or pressure from enforcement activities;.
- The degree to which the target group is able to comply with the rules.

At each of those three levels, governments should employ a mix of activities to ensure that its policy will take effect:

- Communication with the target group to inform it about its rights and duties and to explain the rules;.
- The use of many kinds of policy instruments (taxes, prohibitions and subsidies, for example) to influence the behaviour of the target group, backed up with a variety of enforcement activities (such as inspections and sanctions);.

- Adequate implementation to make the policy workable in practice, which means that governments have to ensure that the necessary information is provided to the target group and other technical facilities or mechanisms are made available

At each of the three levels, failures can make government policy ineffective.

Source: OECD, 2000

- d. Institutional Capacity** – Laws can create new organisations or mandate existing ones to carry out certain risk reduction activities on behalf of the government. It can also mandate institutions that should lead risk reduction efforts for the sector.
- e. Financial Resources** – Some regulations mandate governments to set aside specific amounts of financial resources towards risk reduction or mandate the establishment of funds to support risk reduction or specific elements of the disaster risk management framework. These provisions may be embedded in legislations that directly govern the sector or in legislations from a cross-cutting or aligned sector.
- f. Cooperation Agreements** – While cooperation agreements may not themselves be included in legislations, they are often the result of high-level discussions and agreements and form the basis for cooperation among countries and institutions or sectors. They include (i) cooperation frameworks between developed and developing countries, (ii) agreements between donors and NGOs and (iii) agreements among donors. These differ in that some exist over longer periods of time than others. These cooperation tools are important because they assist in resource mobilisation and harmonisation, technical assistance, support for technology transfer, research and capacity building. Advocates of mainstreaming must ensure that

they contribute to the processes leading to the finalisation of these cooperation frameworks (UNDP, 2008 – Drylands).

- g. Tools for Participation** – Some legislations mandate the participation of specific groups of stakeholders in the decision-making process. However, while not prepared under any specific laws, some governments, through Cabinet approval, have developed guidelines for participation in the decision-making process. These include codes of consultation which serve as an inclusive and broad-based decision-making process by ensuring participation of multiple stakeholders and encouraging a bottom-up process. In some instances, there are tools governing the behaviours of stakeholders and partners and these are often described in codes of conduct. Tools for participation serve three purposes:

- i. soliciting input,
- ii. getting consensus and
- iii. disseminating information.

It is to be reiterated that these safeguards may not reside in any single legislation. The processes of defining and understanding the sector will help to identify these linkages so that the available legislations can be fully developed.

- h. Financial Incentives and Agreements** – These are economic instruments that can be used to influence behaviour and support change. Government action may involve:
 - Providing financial support and opportunities for compliance with regulatory instruments;
 - Influencing and working with development assistance agencies whose policies in recipient countries are increasingly influenced through priorities and programmes agreed with governments;
 - Influencing the financial decision-making policies and actions of commercial sources of finance.

BOX 9: EXAMPLES OF FINANCIAL ASSISTANCE FOR SUSTAINABILITY MEASURES

In Barbados, the Tourism Development Act (2002) makes specific provision for expenditure on acquiring eco-certification and on community tourism programmes to be offset at a rate of 150% against tax assessable income.

Source: UNEP

It should be noted that enforcement of regulations that promote disaster risk management in the sector can take place in various formats and should have effect at various levels of the sector.

4.10.2 Non-regulatory Policy Instruments

Despite the popularity of regulatory instruments, decision-makers should examine non-regulatory instruments as a means of addressing risk. To better manage risks in the sector, consideration can be given to adopting integrated risk management layers and the instruments adopted as part of the risk management strategy.

4.10.3 Integrated Risk Management Layer

Another approach to achieving policy objectives for CDM and CCA is to adopt the integrated risk management layer conceptual framework. It means that following the completion of the assessment of risk, management strategies can be proposed and these fall broadly into three categories:

- a. **Risk Mitigation** – These actions are taken prior to the risk event to reduce the likelihood of risk or losses. These are useful for risks that occur with relatively low frequency, and with lower intensity impact. These options are varied and numerous and include engineering solutions, such as construction of sea wall, revetment, flood-proof and earthquake-proof buildings, and “soft”

measures, such as adhering to planning regulations in relation to setback from the shoreline and rainwater harvesting.

- b. **Risk Transfer** – Some risks cannot be mitigated and in such instances risk transfer tools should be explored. These transfer the potential consequences to a third party for a fee or premium. The decision on whether to purchase insurance coverage is part of the cost/benefit evaluation associated with the risk management decision process (Banks 2005: 72–74).
- c. **Risk Coping** – Some risks cannot be mitigated or transferred, and so coping strategies must be developed to better help stakeholders absorb and recover from effects of hazards. These instruments improve resilience with events through ex ante preparation to ensure business continuity following an event. For the tourism sector, the development of business continuity plans is critical. Business Continuity Management Plan (BCP) comprises those documented arrangements that enable you to manage any disruption to your business and maintain the continuity of services to your customers (Figure 4).

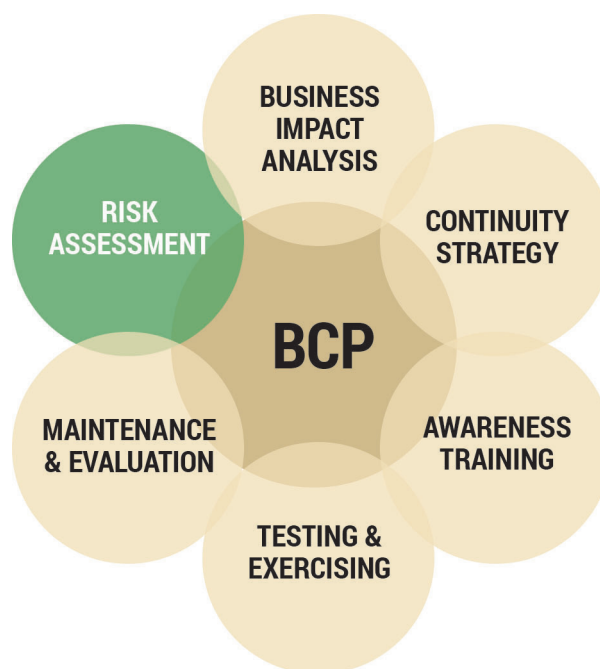
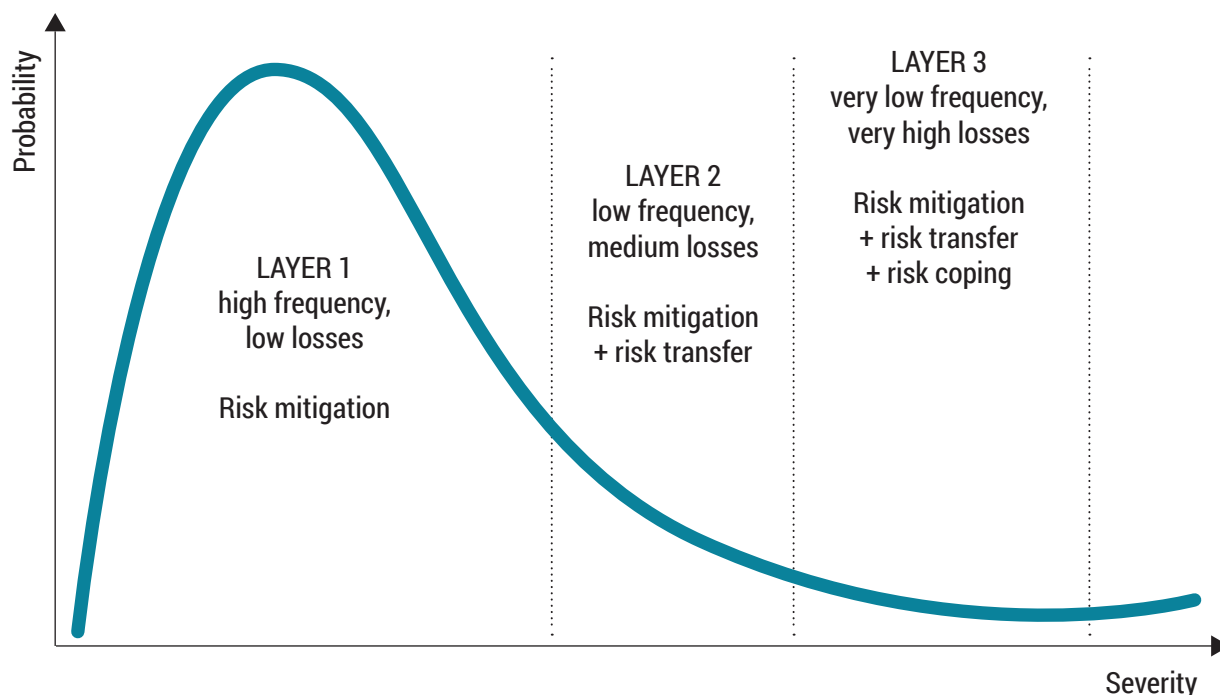


FIGURE 4: STEPS IN THE BCP PROCESS



RISK MITIGATION Strategies	RISK Transfer	RISK Coping
Actions are taken prior to risk event to reduce the likelihood of risk or losses. E.g., Adhere to setback from shoreline, sea revetment, groynes, earthquake- proof building,	Transfer the potential consequences to a third party for a fee or premium Formal: Insurance;	Help absorb and recover from impacts E.g., Business continuity planning

Source: World Bank, 2016

FIGURE 5: SUGGESTED APPROACH FOR MANAGING RISK IN THE TOURISM SECTOR

Risk management strategies should be selected after a thorough understanding of the risk (See Pillar 2) as this will determine the approach that is most suited. The World Bank suggests the following:

- a.** Risk Mitigation – Mitigation is best suited for hazards that have a high frequency, but results in low losses
- b.** Risk Mitigation and Risk Transfer – These strategies are recommended for scenarios where hazard frequencies are low, but results in medium losses
- c.** Risk Mitigation, Risk Transfer and Risk Coping – All three strategies are required for scenarios where hazard frequency is very low, but the resultant losses are high.

Criteria for Selecting Instruments and Tools for Mainstreaming

The choice of policy instruments should be guided by a combination of the following criteria:

- **The objective** – The choice instrument or tool should address as precisely as possible the policy issue and related objective that it is intended to target. An instrument may be used to support more than one policy objective and instruments and tools are not mutually exclusive.
- **The relevance of the tool to the problem under analysis** – The selection of the tool must be relevant and appropriate to provide accurate information.
- **The technical capacity to use the tool** – While a tool or instrument may be ideal to address the policy issue, it should be ensured that the capacities to implement the tool are available. These include the institutional mechanism, technical and human capacity, training and budgetary resources.
- **The data requirements that can be supported in the process of using the tool** – Data availability is often a challenge for policy making and the tourism sector is no different. The consistency of data collection and availability of data can hamper decisions about the extent of the policy issue or problem to be solved and hamper the implementation of the ready option best identified to remedy the problem.
- **Whether the proposed time frame for use of the tool is realistic** – Sufficient time needs to be allocated for some instruments and tools to work. The drafting and approval of legislation and regulation, for example, often takes time and the effect of newly passed legislation may not be felt immediately. This is often due to the time it takes to operationalise the provisions of the legislation.
- **Whether there are enough funds to support the use of the tool** – Policies should be assessed and an estimate of the cost of implementation determined. It is important from the outset that the cost for supporting the use of the tool be determined and government budgets together with alternative sources of funding be identified to support the use of tools and policies.
- **The availability of any required software, and technology** – Risk assessment may require the use of specialised softwares such as a Geographic Information System (GIS). Similarly, estimating climate impacts on tourism requires specialised softwares for such purposes. These should be identified, and their availability determined.
- **The political, economic and social climate** – Also of importance is the receptivity towards findings from the use of the tool. The choice of tool is sometimes influenced by the political and socioeconomic climate in the country. In some instances, advocates or the government may insist on the use of regulatory tools as a way of changing long-term practices.

HIGH-LEVEL CHECKLIST

High-level checklist for each of the pillars for mainstreaming

PILLAR 1 – DEFINE THE TOURISM SECTOR

Has the tourism sector been properly defined?	
Have all the sub-sectors that comprise the sector been identified and agreed?	Does the national system identify the sub-sectors that comprise the tourism sector? Is the tourism sector consistently using these classifications or have they adopted other classifications? Using a standardised classification ensures consistency in collecting and reporting tourism data.
Has the linkages with the tourism and other sectors and development issues been made?	The tourism sector is cross-cutting and thematic areas or other sectors that will impact mainstreaming need to be identified and integrated in tourism policy.
Have existing tourism sector policies and strategies been assessed to determine how well DRM has been integrated?	While tourism sector policy may not be specific to DRM, the latter needs to be integrated in the sectoral policy documents and strengthened where DRM integration is found to be weak.
Have the scope and functions of the tourism sector been defined so that its contribution to national development can be appropriately identified?	Is there a full understanding and recognition of the various contributions that the tourism sector makes to the economy? This roles and function of the sector need to be incorporated in national development so that the DRM strategies and policy options that are put forward can sufficiently address all dimensions of the sector's role in development.

PILLAR 2 – UNDERSTAND THE DRM ISSUES IN THE TOURISM SECTOR

Are the DRM issues in the sector sufficiently identified and understood so that appropriate policies and strategies can be developed?	
Are monitoring and surveillance systems in place to collect data on DRM issues and problems?	Data on the various issues to be addressed by policy is important and it is essential that this data is credible, up-to-date, relevant and adequate in time and scope.
Have the views of a wide variety of stakeholders been solicited and integrated in policy?	In addition to surveillance and monitoring systems, stakeholder input is important for addressing issues that hinder mainstreaming and providing solutions to those issues. Is the feedback from a wide variety of stakeholders being incorporated?
Are emerging risks being identified and constantly monitored internationally, regionally and locally?	Is the DRM landscape changing and non-traditional hazards impacting the sector? Are systems in place to monitor, identify and assess emerging hazards? Is there collaboration with international and regional partners to monitor these risks?
Are analytical tools and methods available to help understand risk in the sector at the strategic level?	Analytical tools are useful in assessing and understanding risk so that solutions and options are more targeted? Is the sector using available tools, toolkits, techniques and methods to better understand and quantify risk?
How are the results of risk assessments used in decisions concerning allocation of resources for: i. Emergency preparedness? ii. Disaster prevention and mitigation measures? iii. Disaster risk financing and risk transfer tools?	Risk assessment should be used to guide risk reduction interventions in the sector. The assessments are useful for all components of the risk management framework.
Does the capacity to use the tools and methods exist? Is there adequate expertise to properly analyse and understand the risk, identify options and formulate policy response?	Do the technical and non-technical experts in the sector have the capacity to use these tools? Have training and other capacity building initiatives been undertaken? Are the results being applied to risk mitigation in the sector?
Is disaster impact data being collected and analysed?	Is there an understanding of the extent to which the sector is being impacted? Are there sub-sectors that are being more severely impacted?

PILLAR 3 – DEFINE WHAT A MAINSTREAMED SECTOR LOOKS LIKE

Have outcomes been established that defines what an “ideal” mainstreamed sector looks like?	
Are outcomes for the sector linked to outcomes in national development plans?	National development plans and strategies set the frame for national development and the role that sectors will play in this process. Has the role of the sector in the national development plan been identified? Has the link with the sector and national outcomes been established? Have targets and indicators for risk reduction been included?
Have global and regional frameworks been consulted and mapped to sector outcomes?	Have global and regional DRM frameworks for the sector been identified? Have global frameworks been translated and made relevant to the sector in the local and national contexts? Have regional frameworks been adopted to the national and sector contexts? Have plans been developed to translate regional outcomes to the sector level through a logical framework?
Have transparency and accountability systems been established to monitor the achievement of outcomes?	Are outcomes at the sectoral and national levels being monitored along with their related outputs to determine the extent to which mainstreaming is taking place and the extent to which development outcomes are being achieved?

PILLAR 4 – ESTABLISH APPROPRIATE POLICY GOALS AND OBJECTIVES

Has appropriate policy goals and objectives been established to addresses the DRM issues and problems?	
Are the objectives aligned with the intended outcomes?	Policy objectives should be aligned with the expected outcomes as they help to elaborate and define those risk reduction outcomes that the government wishes to achieve for the sector and identify any trade-offs that may have to be made.
Are the objectives of a strategic nature to guide the entire sector?	Policy objectives should be elaborated at a general level in such a way that they are applicable to the entire sector. Policy objectives should provide a roadmap for managing risk in the sector and facilitate a pathway for more specific intervention in the sector.
Have policy issues been weighted or an objective system of prioritisation conducted to identify the issues to be addressed?	A range of issues will be generated from an understanding of the risk in the sector. All cannot be addressed simultaneously and a system of objective prioritisation will help determine which issues are to be addressed first.
Has any analysis been done to identify conflicts of objectives and the need for any trade-offs?	Has the mix of policy instruments been carefully considered and potential conflicts in instruments identified?
Have policy objectives been incorporated in policies, plans and programmes of sub- sectors?	Operational, policy objectives should be incorporated in strategic and operational plans and programmes of related sub-sectors as it is the alignment of outputs at these levels that will determine the achievement of objectives.
Have policy objectives been adopted by civil society and advocacy groups?	In addition to government-related sectors and thematic areas, civil society should adopt the same policy objectives so that all stakeholders are working toward the same objectives.
Have indicators and targets been established for the objectives to ensure that they are measurable?	Indicators and targets are essential to the measuring of the levels of achievement of objectives and holding decision-makers accountable. By doing so, the level of success and progress at risk reduction in the sector can be measured.
Have monitoring systems been established for the policy goals and objectives?	In order for monitoring to take place, systems should be established to bring visibility to the objectives and assess the level of progress. Are mechanisms in place to facilitate this? Do annual reports report on achievement of policy objectives for DRR?
Have policy objectives been publicly articulated?	Are all stakeholders aware of the policy objectives? Have they been published and are they accessible to the public?

PILLAR 5 – IDENTIFY POLICY INSTRUMENTS AND DEVELOP STRATEGIES AND PLANS

Have national DRM and sector laws been examined and their relevance and appropriateness for risk reduction determined?	
Is there a sector Act that provides an overarching framework for integrating DRM in the sector?	Bear in mind that a national act for disaster risk management may not provide sufficient legislative support and enforcement required to address the peculiarities of the sector. Existing sector acts should be used in risk reduction efforts. Where there are gaps in legislation, the solution may lie in utilising legislation governing allied sectors or strengthening existing laws.
Are the provisions in the Act well understood and applied to DRM in the sector?	Understanding DRM issues will help in strengthening application to DRM and utilising enforcement as part of that process.
Is there a national DRR Act that identifies the roles for the sector in the mainstreaming process?	Does the national DRR Act recognise the role of sectors and institutions in mainstreaming? Do coordinating mechanisms established under the national DRM Act include sector representatives and provide opportunities to integrate sector concerns in the broader risk reduction effort?

5 SUMMARY AND CONCLUDING REMARKS

The case for mainstreaming or integration DRM in the tourism sector is well established. The sector's significant contribution to GDP, employment, and investments reinforce the need to protect the sector from the more deleterious effects of climate events. The assessment of CDM integration in the tourism sector as a precursor to the development of the policy framework found that identifiable actions and progress have been made with mainstreaming in the sector, however, there are barriers and challenges that the sector needs to overcome to systematically and comprehensively mainstream DRR and CCA.

The development of this policy framework and the related guidelines are to support and build on existing initiatives to address some of the challenges that countries face in mainstreaming climate change and DRM issues in policies for the tourism sector. The policy level is concerned with formulation or general statements and strategies that guide or channel managerial decisions concerning tourism and other sectors. This is important as the decision to mainstream or integrate CDM at the sectoral level must recognise the purpose of the policy level and understand how decisions taken are filtered down the hierarchical levels of the sector. This is very important for embedding DRM in decisions at all levels in the sector.

There is no single recipe for mainstreaming DRM/CCA in the tourism sector. This policy framework and the guidelines are underpinned by five (5) essential pillars – defining the tourism sector; understanding the DRM/CCA issues in the sector; defining what a mainstreamed sector looks like; setting policy goals and objectives; and identifying policy instruments and developing strategies and plans to implement objectives and goals, all of which are deemed important ingredients for overcoming some of the challenges linked to mainstreaming DRM/CCA in the sector.

Of importance is that this framework and the related guidelines are not a stand-alone document and as such, the CDEMA CDM Strategy (2104–2024) along with other regional publications such as Disaster Risk Management Strategy and Plan of Action for the Tourism Sector in the Caribbean should be considered in the application of this framework and the associated guidelines.

“Undoubtedly, tourism industries are one of the most economically important set of industries worldwide” (Pforr, 2009). As identified in the 2013 Global Assessment Report (UNISDR, 2013), tourism is also one of the most susceptible and vulnerable industries to disasters. It is therefore important to integrate or mainstream DRM and CCA in the tourism sector because direct and indirect losses from disasters not only affect the sector itself, but can severely affect the local and national economies. In the case of the Caribbean, this is particularly the case because travel and tourism contribute 15.2% of the Caribbean's GDP and 13.8% of employment. However, in many Caribbean countries, the sector accounts for over 25% of GDP – more than double the world average of 10.4% (WTTC, 2018).

Mainstreaming DRR/CCA in the tourism sector is a challenge, but it is also an opportunity for building resilience in the sector and ensuring the long-term economic viability and sustainability of the sector in the region.

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ANNEX 1: CASE STUDY: CLIMATE RISK ATLAS OF COASTAL HAZARDS AND RISK IN NEGRIL, JAMAICA

The GOJ/Adaptation Fund Programme, “Enhancing the Resilience of the Agriculture Sector and Coastal Areas to Protect Livelihoods and improve Food Security” Project/Programme is intended to facilitate the implementation of options that are integral to the climate change adaptation initiatives for Jamaica, particularly as it relates to livelihoods protection and food security. One of the main outputs under the project is the development of a Climate Risk Atlas to raise awareness of the presence of and impacts from climate-related hazards, specifically storm surges and sea level rise. The atlas is also critical to improving the capacity of key stakeholders, primarily relating to tourism, agriculture, coastal resources.

The results show that resorts (hotels, guest houses, villas, etc.) account for the highest percentage of 50% of buildings exposed to the baseline 100-year storm surge return period⁵. Under sea level rise conditions exposure of resorts in Negril could potentially increase by 3% by the end of the century.

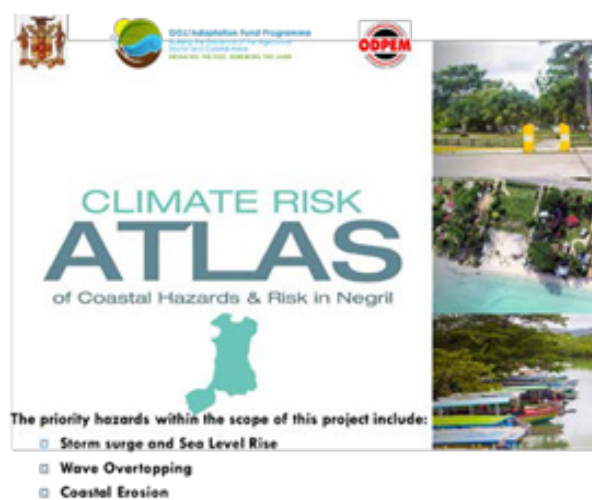
Similarly, resorts account for the highest percentage of buildings exposed (17.4%) to coastal erosion associated with a 100-year storm event.

The expected annualised loss for baseline storm surge scenario for the tourism sector is estimated at US\$4,777,495 of the total annual risk in Negril. The average annual losses (AAL) increase under sea level rise conditions by contributing an additional US\$1.8 million to the expected average annual losses by the end of the century.

The following were included among the recommendations:

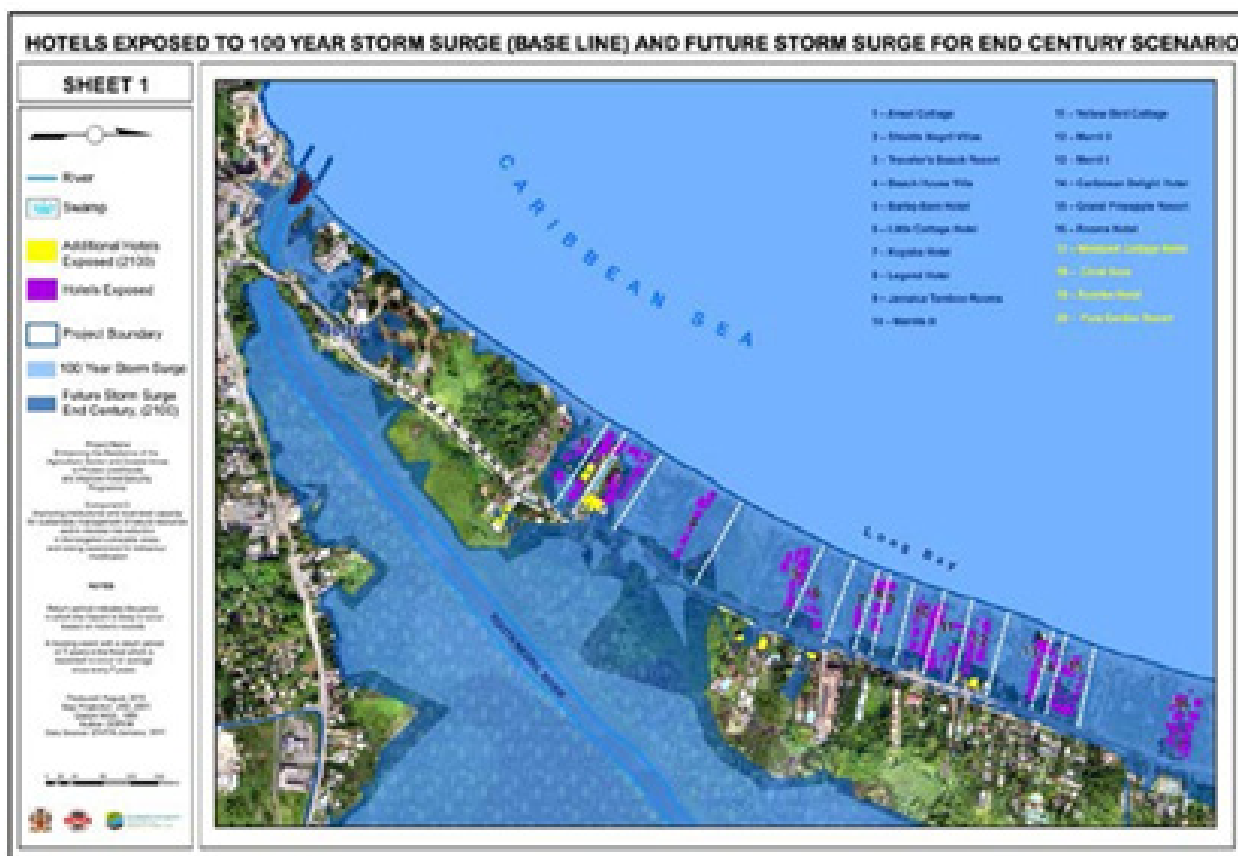
- i. The findings from the Atlas should be incorporated and form the basis for any development plan and order created for Negril;
- ii. Stakeholder sensitization should include media practitioners, Negril hoteliers, local authorities, NGOs and businesses;
- iii. The findings from this Atlas should be used as a guide to developing other outputs under the programme, more specifically, the Beach Restoration Guidelines.

QUICK FACTS 8:



⁵ Return period indicates the period in which the hazard is likely to occur based on historic records.

QUICK FACTS 9:



ANNEX 2: CASE FOR CDM MAINSTREAMING

As is widely known, disasters erode the gains of development. The Caribbean region is recognised as being the second most disaster-prone region in the world (UNDP, 2011 ; UNISDR, 2003 ; United Nations, 2013). This is because of its location, heavy dependency on sectors for foreign exchange, geology, tectonic setting, and poor land-use and environmental practices. Natural hazards such as hurricanes, landslides, and floods are annual occurrences that present a constant threat to human, economic, social, and environmental development in the region (United Nations, 2013 ; CDEMA, 2014). Additionally, the inherent physical characteristics as small island states, and the accompanying socioeconomic features make the region highly vulnerable to the effects of climate change.

Regular annual disaster losses are estimated at \$3 billion with significant losses to social and productive sectors. Impacts from hazards will only intensify because of climate change, as 60% of the region's population and 70% of the economic activity are within two miles of coastlines (CDEMA, 2014). The region's vulnerability is amplified by the fiscal fragility of many of the Caribbean islands. According to Auguste and Cornejo (2015), most of the Caribbean economies' fiscal imbalances have resulted in high levels of public debt, in some cases, exceeding its GDP. The implication is grave, especially in terms of delays in development as well as the increase in poverty and inequality. This presents a serious obstacle for the region in achieving sustainable human development, hence the importance of mainstreaming CDM in national policies and programmes.

Tearfund defines mainstreaming in this way:

'Mainstreaming' derives from the metaphor of a small, isolated flow of water being drained into the main stream of a river where it will expand to flow smoothly without loss or diversion. Therefore, "mainstreaming risk reduction" describes a process to fully incorporate disaster risk reduction into relief and development policy and practice. It means radically expanding and enhancing disaster risk reduction so that it becomes normal practice, fully institutionalised within an agency's relief and development agenda.

(Pelling and Holloway, 2006).

Benson and Twigg (2007) note that to 'mainstream' disaster risk reduction into development means considering and addressing risks emanating from natural hazards in medium-term strategic development frameworks, legislation and institutional structures, sectoral strategies and policies, budgetary processes, and the design and implementation of individual projects, and then monitoring and evaluating all the above.

These definitions are reflected in the Comprehensive Disaster Management Policy (2012), which defines mainstreaming as making comprehensive disaster management an integral dimension of the policies and programmes in all political, economic and societal spheres.

The common thread running through these definitions is that mainstreaming requires a holistic and multi- sectoral approach to be successful. As aptly summarised by Nunan et al. (2012), mainstreaming DRR is a “recognition that too many factors and activities play a role in achieving DRR and only through a comprehensive cross-sectoral approach will DRR succeed”.

The United Nations Development Programme (UNDP, 2004) notes that disasters are both a cause and a product of failed development. Therefore, mainstreaming is a process which seeks to integrate, institutionalise, and embed DRR principles within a government’s development agenda. Hence, global recognition of the importance of mainstreaming and integrating DRR within and across all sectors has seen clear articulation in two international frameworks for disaster risk reduction: Priority 2 of the Sendai Framework for Disaster Risk Reduction (SFDRR); and Outcome 2 of the Comprehensive Disaster Management Strategic Framework (CDMSF).

According to the Global Assessment Report (GAR) (2015), disaster risk is increasing, causing economic losses averaging US\$250 billion to US\$300 billion globally each year. Additionally, the average annual losses (AAL) from earthquakes, tsunamis, tropical cyclones and river flooding are now estimated at US\$314 billion in the built environment alone (UNISDR, 2015).

Conceptual Framework

The GAR 2015 has acknowledged that the Hyogo Framework for Action (HFA) 2005–2015, the key global instrument that guided implementation of DRR, has generated substantial investment in, and commitment to disaster risk reduction by stakeholders at all levels. However, the expected outcome of the HFA has only been partially achieved because it has “proved far less effective in managing the underlying risks” (UNISDR 2015, p. 4). These risks are generated within a broader development framework, hence, addressing them requires actions such as poverty reduction, planning and managing cities appropriately, and protecting and restoring ecosystems (UNISDR, 2015). In other words, multi- sectoral efforts and emphases are required to effectively mainstream DRR in all relevant sectors to build resilience to natural disasters.

Sendai Framework

Although advancements were made to systematically reduce disaster risks through the implementation of the HFA, it has been replaced with the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015–2030. This is the third international framework on Disaster Risk Reduction and it was adopted in 2015 at the Third UN World Conference in Sendai, Japan. Its overarching goal is to “prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience”.

With four priorities for action and seven target goals, the Framework places greater focus than HFA on local actions and involvement in disaster risk reduction, governance, and disaster risk prevention, reduction, and recovery. There is greater emphasis on State responsibility for reducing the risk of disasters and engaging stakeholders at all levels to use an inclusive and risk-informed approach to address Disaster Risk Management. Priority areas of action are:

- a. **Priority 1: Understanding disaster risk-** An understanding of disaster risk in all its dimensions of vulnerability; capacity, exposure of persons and assets, hazard characteristics, and the environment;
- b. **Priority 2: Strengthening disaster risk governance to manage disaster risk-** Disaster risk governance at the national, regional and global levels is vital to the management of disaster risk reduction in all sectors. It is also important to ensure the coherence of national and local frameworks of laws, regulations and public policies which, by defining roles and responsibilities, guide, encourage and incentivise the public and private sectors to take action and address disaster risks;

- c. Priority 3: Investing in disaster risk reduction for resilience-** Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment;
- d. Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction-** Strengthening of disaster preparedness for more effective response and ensuring capacities are in place for effective recovery. The recovery, rehabilitation and reconstruction phase needs to be prepared ahead of the disaster, creating an opportunity to «Build Back Better» through integrating disaster risk reduction measures. Women and persons with disabilities should publicly lead and promote gender-equitable and universally accessible approaches during the response and reconstruction phases.

ANNEX 3: REGIONAL EFFORTS AT MAINSTREAMING CDM

Consistent with global thinking on DRR, the regional disaster management agency, the Caribbean Disaster and Emergency Management Agency (CDEMA), developed a draft Regional Comprehensive Disaster Management Strategy and Programming Framework (CDMSF) 2014–2024. The new strategy builds on the successes of the 2007–2012 CDM and aims to address the existing gaps in achieving CDM and mainstreaming DRM at the sectoral level. The goal of the CDMSF 2014–2024 is to realise “safer, more resilient and sustainable CDM in participating states through Comprehensive Disaster Management”. This goal is supported by four high-level priority outcomes and sixteen outputs as represented in the CDM Logic Model. The implementation of the CDMSF also focuses on the inclusion of several cross-cutting themes. These are: (i) Gender (ii) Climate Change (iii) Information and Communications Technology, and (iv) Environmental Sustainability.

It is significant to note that the outcomes of the Sendai Disaster Framework Risk Reduction (SDFRR) are closely aligned to the long-term goals of the CDMSF, with both affirming the need to substantially reduce disaster risk and build resilience. CDEMA mapped the SDFRR Priorities for Action and the priority areas of the CDMSF to demonstrate the high level of compatibility between these two frameworks (Figure 6). The CDMSF provides the conceptual framework for this assignment, the outputs of which will contribute to attaining the desired results in CDEMA's priority areas.

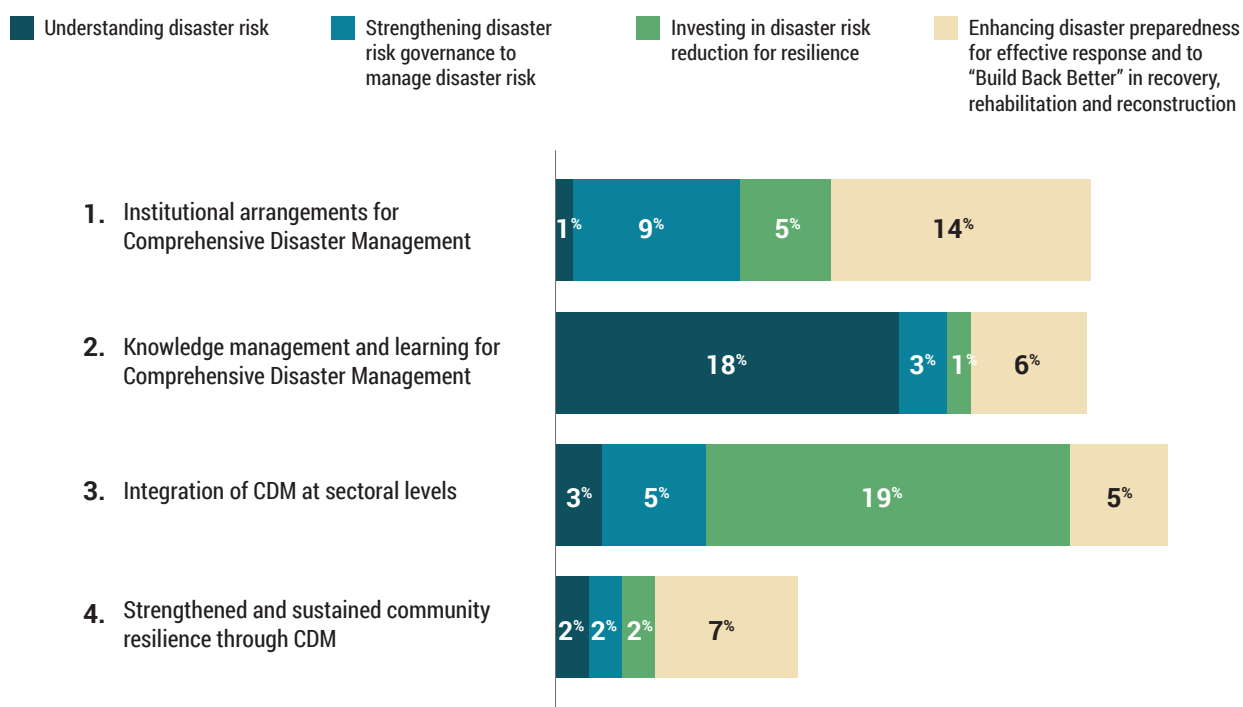


FIGURE 6: CDMSF PRIORITIES FOR ACTION

Past Initiatives: 2007–2012 CDM Strategy

The previous iteration of the CDM Strategy, 2007–2012, also had sector mainstreaming as a priority. This goal was more specifically addressed in Outcome 3: “Disaster Risk Management has been mainstreamed at the national level and incorporated into key sectors of the national economies (including health, tourism, agriculture and nutrition)”. This outcome had a number of related outputs, namely:

- a. CDM is recognised as the roadmap for building resilience, and decision-makers in the public and private sectors understand and take action on Disaster Risk Management;
- b. Disaster Risk Management capacity is enhanced for lead sector agencies, national and regional insurance entities, and financial institutions;
- c. Hazard information and Disaster Risk Management is integrated into sectoral policies, laws, development planning and operations, and decision-making in tourism, health, agriculture and nutrition, planning and infrastructure;
- d. Prevention, mitigation, preparedness, response, recovery and rehabilitation procedures have been developed and implemented in tourism, health, agriculture and nutrition, planning and infrastructure.

The evaluation of the 2007–2012 CDM Strategy found that much progress had been made with sector mainstreaming. The key findings from this assessment have been documented in the 2014–2024 CDM Strategy as follows:

- a. The enabling environment (through the presence of model CDM legislation, policies and strategies) at the national level has been selectively advanced in some countries and remains an area of priority for others. Moreover, the degree to which sectors have an enabling environment which increasingly integrates DM, climate and gender considerations was greater than during the former strategic period;

- b. There was an uneven improvement in terms of the use and adoption of model tools for CDM implementation and especially, a greater emphasis is placed on monitoring, evaluation and reporting at various levels. There was an overall high positive change in mainstreaming efforts over the period. However, there is still need for a continued focus on the integration of work plans and the provision of resources for CDM implementation at the sectoral level. The congruence of National Sustainable Development Plans or Strategies with sectoral plans and CDM policies must continue to be supported and aligned. Evidence of the integration of gender considerations into national and sectoral plans must be increased and the presence and adoption of Emergency Response Plans and Business Continuity Plans must be fostered at the sectoral level.

Current Initiative: 2014–2024 Comprehensive Disaster Management (CDM) Strategy

The current CDM Strategy has one of its four priority areas dedicated to sector-level CDM mainstreaming. Priority Area 3 (PA3) is “Improved Integration of CDM at sector levels” and its related outcomes are:

- 1. Regional outcome 3.1 (RO 3.1) – Strategic disaster risk management programming for priority sectors improved;
- 2. Regional outcome 3.2 (RO 3.2) – Hazard information integrated into development planning and work programming for priority sectors;
- 3. Regional outcome 3.3 (RO 3.3) – Incentive programmes developed and applied for the promotion of the risk reduction/CCA in infrastructure investment in priority sectors.

The CDM Strategy prioritises seven sectors: Health, Education, Tourism, Agriculture, Civil Society, Finance and Economic Development, and Physical and Environment Planning. Four of these (Health, Tourism, Agriculture and Finance) are the focus of this consultancy. A fifth sector, water which was included in this assessment, is not included in the CDM Strategy. Outcome PA3 seeks to address how sector stakeholders plan, coordinate and implement CDM at the national and regional levels by:

- Promoting DM programmes in sectors
- Integrating hazard and disaster information and concerns into sector development agendas
- Highlighting the need for investing in disaster-proof measures/initiatives within the sectors
- Coordinating preparedness, response and recovery efforts amongst various stakeholders.

A performance monitoring framework has been developed, and is the key tool being used to monitor and evaluate the strategy. The outcome indicators for PA3 (RO3.1–RO3.3) used to determine ‘improved integration of CDM at sectoral levels’ are:

1. RO 3.1 – Number of Participating States with sector specific DRM plans that have been implemented
2. RO 3.2 – Number of participating States that have integrated normative requirements for risk mitigation.
3. RO 3.3 – Number of Participating States applying incentive programmes for DRR and CCA.

The indicators suggest that achieving the outcome for the sector mainstreaming priority area greatly depends on the extent to which Participating States put in place plans, appropriate standards, and provide incentives in the priority sectors. The specific country and sector contexts are therefore important factors in determining progress and these include existing progress, strengths, challenges and gaps in mainstreaming.

The CDM governance mechanism (Figure 7) is the vehicle for the implementation of the CDM Strategy. This mechanism includes sector sub-committees for each of the priority sectors created under the CDM Coordination and Harmonization Council (CHC). This mechanism is designed to allow inter-institutional partnership that allows for cooperation, coordination and participation, across and within the sectors.

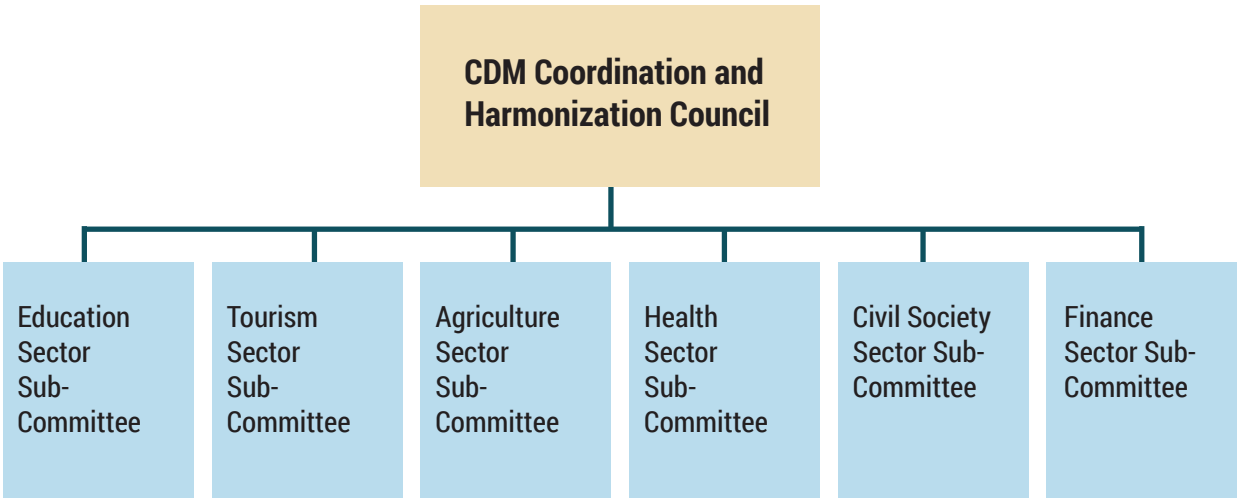


FIGURE 7: COMPOSITION OF THE CDM GOVERNANCE MECHANISM

Through the work of the sector sub-committees (SSC), mainstreaming in the sector is expected to be advanced building on the progress achieved in the previous iteration of the CDM Strategy. Activities expected to be continued and enhanced are:

- a.** Developing training materials for sector actors where education and training programmes need to be further developed and implemented for these sector actors. Training and education efforts should address the fundamentals of DRR within a multi-hazard environment. Additionally, the quality of CDM training materials should be enhanced;
- b.** Building local/community level capacities for CDM where local capacity for sector specific disaster mitigation, preparedness and response is improved, and community mobilisation increased. This will support advocacy for a concomitant increase of resources for communities at risk and individual/family preparedness;
- c.** Building sector level capacities for CDM where sector sub-committees (SSC) are strengthened, resources, particularly funding, mobilised, institutional capacities enhanced within the sector, sector DRM strategies developed, and hazard information incorporated into sector planning and development. Improved capacity will also result in emergency plans being either developed or enhanced within the sector, recovery/reconstruction is enhanced, and key sector actors are sensitised about DRM;
- d.** Improving information sharing where management systems and services (inventories, directories etc.) are developed for sectors and the levels of information sharing are increased within sectors;
- e.** Enhancing collaboration and dialogue (among actors across sectors and at different levels) where coordination among sectors is enhanced, synergies identified, and partnerships established where appropriate; dialogue and cooperation within and across sectors is also promoted and improved;

- f.** Performing various types of assessments (including risk, vulnerability, needs and capacities) where capacity for disaster damage assessment is enhanced, there are improved methods for predictive multi-risk assessments and socioeconomic analysis of risk reduction actions, capacity for developing and applying methodologies, studies and models is strengthened and sectoral needs and vulnerability assessments completed at the national level;
- g.** Standardising CDM tools and approaches where vulnerability assessment methodologies are consolidated and improved with risk management protocols developed for the sector.

For the most part, these work programme areas for the sector committees show strong alignment with the assessment tool used to determine the extent to which sectors have progressed with mainstreaming and factors affecting the level of progress.

CDM Audit

Other initiatives aimed at assessing progress and providing a basis for recommendations for improving mainstreaming in the sectors is the application of the CDM Audit Tool 2015–2016. Though the audit is not yet available for scrutiny, CDEMA facilitated its use in a review of national DRR priorities, allowing countries to arrive at their top three national priorities based on the 2014–2024 CDM Strategy. From the discussion, participating countries identified the following as the five priority areas:

- a.** Early Warning Systems (EWS)
- b.** Community Resilience
- c.** Capacity Building, Training and Public Awareness
- d.** Institutional Strengthening
- e.** Private-Public Partnership.

The report from this event (CDEMA, 2016) notes that “these priorities were also validated by the results emerging from the application of the CDM Audit Tool 2015–2016”. These findings are based on an analysis of the CDM Audit Tool results in six countries. Four out of the five priority areas fall under the preparedness category of the audit tool, and only the partnership between public and private sector falls under mitigation. Institutional strengthening links to governance in the tool, the application of which found that the integration of CDM into national sector policies and work plans, and the existence of sectoral legislation mandating CDM responsibilities, are weak areas to be addressed. The results show that proper planning frameworks are weak because these sectors generally lack disaster plans which are congruent with national and community CDM plans.

Recommendations from the Audit to address priority areas relevant to sector mainstreaming include:

- Developing and adopting a model of legislation, regulation and policy to manage risk at the regional level, for all sectors;
- Establishing chairs at appropriate universities within the region to coordinate risk engineering research specific to the region;
- Encouraging the establishment of a regional training centre that can, inter alia, facilitate the Implementation of the Global School Safety Framework (CDEMA’s Model Safe School Programme) throughout the region with a view to harmonization of approaches to school safety;
- Engaging the private sector directly in advancing disaster risk reduction efforts (e.g., creating a regional private sector network on DRR and promoting the collaboration between National Disaster Management Offices and National Chambers of Commerce).

THE EKACDM INITIATIVE

The Enhancing Knowledge and Application of Comprehensive Disaster Management, EKACDM) Initiative is a five year project which was implemented in the Caribbean region from September 2013 to December 2018 by the Disaster Risk Reduction Centre, the Institute for Sustainable Development, the University of the West Indies. This Initiative seeks to establish an effective mechanism and programme to promote an integrated approach to Comprehensive Disaster Management knowledge in the Caribbean region, to fast track the implementation of the CARICOM Enhanced Comprehensive Disaster Management (CDM) Strategy and Frameworks (2007 - 2012 and 2014 - 2024).

The ultimate outcome of the EKACDM Initiative is to reduce the impact of natural and technological hazards and the effects of climate change on men, women and children in the Caribbean region. It seeks to position the region with greater knowledge and practical solutions to strengthen climate adaptation, and other sustainable practices that will make the region more resilient and sustainable.

For further information:

<http://www.uwi.edu/EKACDM/index.aspx>

<http://uwi.edu/drrc/>

<http://www.uwi.edu/isd/>