



DISASTER RISK MANAGEMENT POLICY





EMPOWERED LIVES RESILIENT NATIONS

FOREWORD/ACKNOWLEDGEMENTS

Statement to be provided by the National Disaster Coordinator.

Table of Contents

FOREWO	RD/ACKNOWLEDGEMENTS	
TABLE OF	CONTENTS	
ACRONYI	мs	
EXECUTIV	/E SUMMARY	
SECTION	1	1
1. BAC	KGROUND AND CONTEXT	1
1.1	CONTEXT	1
1.2	DRM POLICY DEVELOPMENT	4
1.3	KEY CONTEXTUAL PROCESSES FOUNDATIONAL TO FURTHERING AND IMPLEMENTIN	1G
INTE	GRATED DIASTER RISK MANAGEMENT	8
SECTION	2	11
	ALS, KEY OBJECTIVES, APPROACHES AND PRINCIPLES	
2.1	POLICY INTENT	
2.2	VISION	11
2.3	GOALS	11
2.4	KEY STRATEGIC OBJECTIVES	13
2.5	KEY APPROACHES TO DRM	15
2.6	GUIDING PRINCIPLES FOR DRM	24
2.7	CODE OF CONDUCT	24
SECTION	3	27
3. INST	TITUTIONAL FRAMEWORK	27
3.1	THE STRUCTURE OF THE DRM SYSTEM ENCOMPASSES	27
SECTION	4	32
4. ELE	MENTAL STRATEGIES FOR INTEGRATED NATIONAL DISASTER	
MANA	GEMENT	32
4.1	RISK IDENTIFICATION, ASSESSMENT, AND EVALUATION	32
42	RISK REDUCTION INCLUDING DISASTER PREVENTION AND MITIGATION	33

4.3	DRM NEXUS WITH CLIMATE CHANGE	36
4.4	EARLY WARNING, PREPAREDNESS, RESPONSE AND RELIEF	37
4.5	REHABILITATION, RECOVERY AND RECONSTRUCTION	42
4.6	RESOURCE MOBILIZATION AND FINANCING RISK MANAGEMENT	43
SECTION	5	48
5. CRO	OSS CUTTING CAPACITY BUILDING FOR FURTHERING DRM	48
5.1	CAPACITY DEVELOPMENT	48
5.2	KNOWLEDGE MANAGEMENT	49
5.3	RESEARCH AND DEVELOPMENT	50
5.4	MONITORING AND EVALUATION	51
SECTION	6	52
6. THE WAY FORWARD		52
ANNEX I .		54
GLOSS	SARY OF TERMS	54
ANNEX: I	I	58
MAPC	OF CHYANA	58

ACRONYMS

CCA Climate Change Adaptation

CCRIF Caribbean Catastrophe Risk Insurance Facility

CDC Civil Defence Commission

CDEMA Caribbean Disaster and Emergency Management Agency

CDM Comprehensive Disaster Management
CSDRM Climate Smart Disaster Risk Management

CSR Corporate Social Responsibility

DANA Damage Assessment and Needs Analysis

DDI Disaster Deficit Index
DRM Disaster Risk Management
DRR Disaster Risk Reduction

EPA Environmental Protection Agency

EWS Early Warning System

GLCDS Guyana Low Carbon Development Strategy

HFA Hyogo Framework for Action HRBA Human Rights Based Approach

ICTs Information and Communications Technologies

IDB Inter-American Development BankIDRM Integrated Disaster Risk Management

IICA Inter-American Institute for Cooperation on Agriculture

LDI Local Disaster Index

MDGs Millennium Development Goals NDS National Development Strategy

NEOC National Emergency Operations Centre

PRSP Poverty Reduction Strategy Paper

PVI Prevalent Disaster Index RMI Risk Management Index

SIDS Small Island Developing States

UNDP United Nations Development Programme

UNICEF United Nations Children's Fund

EXECUTIVE SUMMARY

Section One, presents the **Background and Context** of the Policy. The geography, climate and disaster risk context are introduced, along with concise details regarding the overarching ecological, social and economic contexts of the country. Also presented are overall development challenges, which as such, set the general backdrop for the implementation of DRM nationwide. Climate Change is also introduced as an over-arching contextual change agent.

Considering the multi-hazard proneness of the country, the Government of Guyana has taken up various steps in order to reduce the risks of disasters to save the lives and properties of the most vulnerable populations of the country. The foundational National Disaster Preparedness and Response Plan of 1985, which was later taken as the basis for development of a Multi-hazard Preparedness and Response Plan, set the stage for DRM evolution. In the aftermath of the 2005 flood in Guyana, it was recognized by the Government of Guyana, as well as concerned agencies, that there was the need for the design and implementation of a comprehensive DRM program in Guyana. The Declaration of Turkeyen 2007, highlights Guyana's commitment to addressing vulnerability through disaster prevention and response. The Declaration in Clause 11 furthermore emphasizes Guyana's commitment to the Hyogo Declaration and Plan of Action. Further, the Guyana Low Carbon Development Strategy (GLCDS) emphasizes the linkage between Climate Change and induced drought and flooding and also highlights DRM as an important aspect of Climate Change Adaptation based on eco-system services.

Despite many important disaster management initiatives undertaken in Guyana over the past years, an adequate level of preparedness and policy support is required to address its significant risk reduction planning and programs. In view of the experiences and lessons learnt during the management of various hazards and disasters, the Government of Guyana has formulated this National Disaster Management Policy to emphasize proactive, prospective and preventive strategies in addressing disaster risks.

Section One continues to lay out key contextual processes foundational to furthering and implementing integrated disaster risk management. Resultant from extensive multistakeholder dialogue, identified were key ongoing processes which will contribute to the further development and implementation of comprehensive and integrated DRM Policy in Guyana. These were identified as: Robust Institutional, Governance and Legislative Framework for DRM; Sustainable Funding and Support for DRM; DRM in a Multi-sector, Multi-disciplinary Context; DRM in a Multi-stakeholder Context; A Culture of Risk Awareness, Prevention and Prospective Risk Management; Maintaining a Human-Rights Based Approach; Tracking Progress through Monitoring and Evaluation; DRM Vibrant and Networked at all Levels; and DRM in a Changing Climate.

The National Disaster Management Policy forms part of a comprehensive approach taken by the Government of Guyana and agencies such as the UNDP, IDB, IICA and the World Bank, among others, to strengthen the existing system ensuring that it is closely aligned to that of its regional and international partners. Within this approach several other legislation and policy documents have to be taken into account, such as, among others, the Disaster Risk Management Bill, the Integrated Disaster Risk Management Plan and Implementation Strategy, the Early Warning System Plan, the Multi-hazard Preparedness and Response Plan, which details numerous hazard specific annexes, the National Flood Plan, and the National Public Education Campaign, Damage Assessment and Needs Plan. Several other DRM plans are currently being developed, and these include a draft Integrated DRM Agriculture/Environment Plan and a draft Community Based Integrated DRM Plan. As a unification and coordination mechanism, results statements and key expected outcomes and outputs will be gathered within a Key Results Matrix which will work towards alignment with the HFA Pillars of DRM, up-scaling knowledge management, tracking progress, employing results-based management, avoiding duplication of efforts, encouraging coordination and generally collating the various branches of comprehensive DRM within a more cohesive results-based arena. Importantly, the Key Matrix will also be used to include all results statements from any new plans or instruments as yet to be created.

Section Two identifies the Policy intent, vision, and details its goals and key strategic objectives. Also identified are the key regional and international approaches to DRM which are: Alignment with Regional and Global Coordination for DRM, Alignment with International Agreements: HFA-based Comprehensive Disaster Management Strategy (CDM), Hyogo Framework for Action (HFA), Hyogo Framework for Action Post 2015 and Millennium Development Goals (MDGs). Section Two continues to detail the multi-faceted approaches to DRM including Multi-Hazards, Multidisciplinary, Multi-sector and Multi-stakeholder. Corrective and Prospective Approaches, and a Human Rights Based Approach to DRM are also described. Gender issues in DRM are highlighted.

Guiding Principles and a Code of Conduct are also portrayed in Section Two. Effective DRM will require the involvement and interaction of many stakeholders, as illustrated in the section of this Policy which outlines the institutional framework. The interactions, coordination, decision making and other activities of the stakeholders must adhere to certain minimum standards of behavior by and among these stakeholders. The mail principle is the respect to for life and the main objective is the protection of human lives and the environment. Other key DRM principles are: Promote non-discrimination; Support the most vulnerable; Respect human dignity: Respect for culture and way of life: Consider environmental impact and Utilize empirical evidence.

Section Three addresses the **Institutional Framework** for DRM in Guyana. While coordination of DRM systems is overarching in its scope covering the political, economic, organizational, operational and informational spheres, operational coordination addresses the critical phases where the theory, preparation and planning align with the outcome of disaster resilience at all levels, for all people, nation-wide. The Institutional Framework established by this policy articulates on the primary actors that are part of the Guyana Disaster Risk

Management system. These actors are on the forefront of all disaster response, preparedness and mitigation activities which have underlying responsibilities for ensuring smooth functioning during disaster and peace times. The implementation of the policy will be supported by these strong institutional systems. The actual structure and design would be illustrative of the political commitment to DRM in Guyana. In support of this design, this section highlights important aspects of the system.

DRM in Guyana encompasses and recognizes duties, roles and responsibilities for a variety of institutions, ministries, agencies, stakeholders sectors and interests. The implementation of this Policy will seek to strengthen the multi-stakeholder and inter-agency collaboration and partnerships. With the wide range of institutions involved in various aspects of DRM, there is, among other elements, a need for coordination of the responsibilities and roles of each institution with respect to DRM within the Institutional System. Multi-stakeholder participation is presented in a chart in this section, depicting the various DRM areas of involvement including human capacity development, public awareness and education, research and development, disaster preparedness and response, national security, early warning and Information Communications Technology, disaster prevention and mitigation, development, monitoring & enforcing legislative DRM Frameworks / international commitments, Human Rights Based DRM, climate smart risk management, along with the various efforts from development partners and supporters. The strategies, measures and initiatives regarding the institutional system are detailed in this Policy.

It is noted that, a critical area to support policy implementation will be the legal and regulatory framework. This framework will be designed to be certain, robust and dynamic so as to enable the effective implementation of DRM actions and initiatives. This is evidenced by the DRM Act, under development. This Policy document also presents elements recommended for the proposed DRM Act in this Section Three.

Section Four of the Policy, describes Elemental Strategies for Integrated National Disaster Management. This section of this Policy presents ongoing and envisaged comprehensive DRM strategies, measures and initiatives. As is noted in Section 1.2.11, numerous other documents have been developed and complement Section Four of the Policy. The following elemental strategies are grouped into the following broad categories, each of which is fully detailed in Section Four.

- 4.1. Risk Identification, Assessment and Evaluation (Cross Reference with HFA 2)
- 4.2. Risk Reduction including Disaster Prevention and Mitigation (HFA 1,3 and 4)
- 4.3. DRM Nexus with Climate Change (HFA 4)
- 4.4. Early Warning, Preparedness, Response and Relief (HFA 1 and 5)
- 4.5. Rehabilitation, Recovery and Reconstruction (HFA 3)
- 4.6. Resource Mobilization and Financing Risk Management (HFA Key Strategy)

Presented is **Risk Identification**, **Assessment and Evaluation**, which includes elements such as risk assessments and maps, multi-risk: elaboration and dissemination, indicators on DRM and vulnerability, data & statistical loss information, scientific and technological development; data sharing, regional and emerging risk and climate modeling and forecasting; and identifying climate-related disaster risks. Within the context of a changing climate, efforts at all levels of DRM, within all disciplines and sectors related to DRM, need gain ongoing recognition of, and appreciation of, the predicted or potential impacts of climate change, as an ongoing process demanding continuous and high resolution surveillance. Appropriate key priority strategies of Risk Identification, Assessment and Evaluation are detailed in this section of the Policy.

Risk Reduction including Disaster Prevention and Mitigation, are introduced. Disaster Prevention involves the outright avoidance of the adverse impact of hazards and to minimize related disasters. Depending on social and technical feasibility and cost/benefit considerations, investing in preventive measures may be justified in areas frequently affected by disasters. Disaster Mitigation is aimed at minimizing the destructive and disruptive effects of hazards and thus lessening the magnitude of any disaster. Strategies, measures and initiatives can be divided into structural and non-structural measures, and can be corrective or prospective in approach. Strategies, measures and initiatives related to disaster prevention are then presented. A multipronged approach needs to be adopted to undertake mitigation measures and listed are initiatives, aimed at both structural and non-structural mitigation. Vis a vi building wide-scoped and embracive awareness and education, a culture of prevention and safety will be furthered by strategies, measures and initiatives as detailed in the Policy.

With reference to the **DRM Nexus with Climate Change**, this Policy document addresses Climate Change as impacting the glacial reserves, water balance, agriculture, forestry, coastal eco systems. Climate Change will continue to affect the predictability and severity of natural disasters in Guyana. Thus Climate Change Adaptation measures are required to continually adjust prevention, mitigation and preparedness measures to reduce disaster risks. As a result of these inherent linkages this Policy promotes associated strategies, measures and initiatives, which are summarized in the document.

Regarding Early Warning, the framework document of 2013 (Revised), entitled *National Early Warning Systems in Guyana*, portrays in detail, the many aspects, elements, challenges and strategic objectives of Early Warning for the country. Additionally, the document outlines the context and rationale for early warning, as well as presenting cross cutting issues, national capacities and future perspectives. Presented in this section of the Policy are some of the key recommendations for more robust early warning in Guyana, brought forth from the ongoing national multi-sector and multi-stakeholder processes to date.

Disaster Preparedness is then presented in the Policy, as a complement to *National Multi-hazard Preparedness Response Plan*, as a precautionary measure to help the population and institutions to respond and cope with the potential impact of a disaster. Effective disaster

preparedness is based on a comprehensive and continuous assessment of vulnerabilities and risks to create awareness of the most likely hazards, their magnitude and the elements at risk. The DRM Policy aims at putting in place a strategy that will ensure preparation of periodic sectoral and integrated contingency plans at all levels and appropriate activation mechanism. Effective preparedness action is based on sound analysis of disaster risks and sound early warning systems. To this end the disaster preparedness strategies, measures and initiatives are then detailed.

Section Four continues to present issues and strategies related to Disaster Response, which is predominantly focused on immediate and short-term needs and is sometimes called "disaster relief" and must above all be effective and appropriate. Prompt and effective response minimizes loss of life and property. All arrangements need to be taken up to ensure integrated, synergized and proactive approach in dealing with any eventualities. This is possible through early warning, fail-safe communication and anticipatory deployment of response teams. Measures and initiatives to disaster response are then listed in detail. Further detailed in this section, are several strategies related to Relief, which is no longer perceived as a gratuitous assistance or provision of emergency relief supplies, but rather viewed as an overarching system of facilitation of assistance to the disaster victims to ensure holistic social safety and security of the affected population.

Section Four also covers Rehabilitation, Recovery and Reconstruction, which includes rehabilitation of the affected areas, communities and households; reconstruction of damaged and destroyed critical infrastructure; and recovery from losses sustained during the disaster event, combined with the development of increased resistance to future similar occurrences. The approach to reconstruction and recovery process has to be comprehensive so as to convert adversity into opportunity. Incorporating disaster resilient features to "Build Back Better" will be the guiding principle of an effective recovery and reconstruction process. Recovery normally carries in two phases: a) Early Recovery and b) long term recovery. These two phases are interlinked and it goes hand in hand in the entire reconstruction process. Strategies, measures and initiatives in support of disaster recovery are further detailed in this section.

With regards to **resource mobilization and financing risk management, a** robust and viable financial allocation is key to success DRM program implementations at all levels. Decision making and coordination and its implications for funding and budgetary allocations are closely linked to and affected by the institutional system. There are several sources of funding, which include government funding from the consolidated fund, private sector funding as well as agency funding. Funding will therefore be influenced by the source from which the funding emanates. This Policy therefore supports measures and initiatives with regard to decision making and coordination regarding funding and budgetary allocations. Strategies, measures and initiatives related to resource mobilization, DRM financing, and financial instruments are presented. *International Financial Humanitarian Assistance* continues to play an important role in DRM in Guyana, and envisaged outcomes in this regard are also detailed in Section Four.

Section Five, Cross Cutting Capacity Building for Furthering DRM, presents key elements of Capacity Development, as an integral part of Disaster Risk Management and planning, which entails human resource development at all levels. Strategies for furthering knowledge management, in its broadest definition, for advancing research and development in the many fields related to DRM, as well as for tracking DRM progress through sound monitoring and evaluation systems, are detailed.

Section Six, The Way Forward calls forth a robust commitment and its further policy implementation as essential in order to build trust and commitment among its population in enforcement of a DRM Policy for Guyana. The policy endeavours to capture, in essence an enabling environment which heralds the onset of a different approach in dealing with disasters that have, in the past taken a heavy toll of lives and properties and crippled economic base of the communities. It also illustrates realization of the fact that disasters not only cause a setback to economic and developmental growth, but also seriously affect the national security environment. Further, in the context of a changing climate, with associated impact, DRM maintains pivotal in maintaining development progress to date, and further advancing economic, social and environmental development goals.

SECTION 1

1. BACKGROUND AND CONTEXT

1.1 CONTEXT

- **1.1.1** The geography, climate and settlement patterns of Guyana located on the north coast of South America, make the country prone to natural disasters, especially to floods as well as climate variability, including periods of drought. Guyana is also subject to Atlantic swells as well as high intensity seasonal rainfall.
- 1.1.2 The coastal zone lies near or below sea level, supports 90% of the population, and is the administrative, agricultural, commercial and industrial center of the country. The other 10% of the population lives in the hinterland areas; some of these areas are not easily accessible and tend to be flood-prone during the rainy seasons. Hinterland economic activities are mainly mining, logging and subsistence agriculture.
- 1.1.3 As a result of the dynamic interplay between high tides, high rainfall and a network of drainage and irrigation canals, conservancy dams and sluices designed to support agriculture, the coastal zone is susceptible to high risk of flooding. This risk is also increased by the quality of sea defences along the coastal zone. These defences are more than 150 years old and require continuous maintenance.
- 1.1.4 Climate variability, including hydro-meteorological related events such as flood and drought are at relatively high risks of occurrence in numerous regions of the country. Between 1988 and 2006, flood events affected 965,000 persons and resulted in more than US\$663 million in economic damage. Furthermore, in January 2005, severe floods in the coastal zone affected 25% of the population, resulting in total losses equivalent to 60% of GDP in that year. In June, 2011 severe flooding also affected the interior communities situated in Region 9.

- 1.1.5 There are concerns that the country as a whole, and the agricultural sector in particular, will suffer due to an increase in drought periods and severity, soil erosion caused by wind, and more intense rainstorms leading to flooding and loss of crops, soil erosion and leaching of soil nutrients. The seemingly contradictory problems of drought and flooding are concerns due to increasing uncertainties and unpredictability around future precipitation levels. While overall precipitation totals may remain close to the same, when rainfall does occur, there may be an increased chance of it falling in excessive quantities. Storage, for year round adequate potable water, also remains an issue in some areas.
- 1.1.5 Besides natural disasters, man-made disasters have also occurred in Guyana; the most notable to date was the cyanide spill, which occurred at the Omai Gold Mines in 1995. Man-made disasters can be compounded by natural disasters should both occur simultaneously.
- 1.1.6 The overarching ecological, social and economic contexts of the country permit the richness, diversity, and technical robustness demanded to undertake comprehensive disaster risk management. At the same time, overall development challenges persist, and as such, set the general backdrop for the implementation of DRM nationwide.
- 1.1.7 In terms of economics, the national economy continues to experience positive growth, and has done, almost every year over the past decade. Inflation has been kept largely under control. Recent years have seen the government's stock of debt reduced significantly with external debt now less than half of what it was in the early 1990's. Despite recent improvements, the government is still juggling a sizable external debt (US\$ 1.2 billion, as of June 2013-Ministry of Finance) against the urgent need for expanded public investment. The national economy, based largely on agriculture and extractive industries, remains heavily dependent upon the export of sugar, gold, bauxite, shrimp, timber, and rice which represent nearly 60% of the country's GDP and which are highly susceptible to adverse

climatic and weather conditions, as well as also being vulnerable to fluctuations in global commodity prices.

- 1.1.8 The socio-economic contextual conditions include chronic problems such as a shortage of highly skilled labour and a deficient infrastructure. With unemployment, and more so underemployment, remaining higher than optimal, along with a high cost of living relative to paid salaries, socio-economic challenges remain. Yet looking at the bigger, and more long-term picture, Guyana's Human Development Index value has been consistently increasing and was recorded for 2012 as 0.636, which is in the medium human development category positioning Guyana at 118 out of 187 countries and territories. Between 1980 and 2012, Guyana's HDI value increased from 0.513 to 0.636, an average annual increase of about 0.7 percent. At the same time, the Human Development Index Multidimensional Poverty Index figures for Guyana (2009) showed that 7.7 percent of the population lived in multidimensional poverty, while an additional 12.3 percent were vulnerable to multiple deprivations. With approximately 20% of the population vulnerable to, or living in, multiple deprivations, increasing disaster resilience is both of paramount importance and a multi-faceted challenge to address.
- 1.1.9 Governance issues do not adversely affect DRM, seeing as the altruistic and practical goals of DRM have broad based support. At the same time, only when there are multiple, credible evidence-based, reports clearly demonstrating how comprehensive disaster risk management lessens disaster related economic and social impact, will DRM have the traction needed to gain political and national community will across all sectors, within all regions and at all levels. Clear and repeated evidence-based support for risk transfer mechanisms, insurances and reinsurance schemes, community cooperative loans and other modes of socioeconomic risk transfer need be continuously produced to demonstrate their money and property saving aspects.
- **1.1.10** Ecologically speaking, Guyana has tremendous natural resources, and maintains an overall sound system of ecological functions. To date, this has been largely

due to the fact that population pressures have not been great and have been mostly localized within the capital and surroundings. With ever increasing pressure by local, national and international entities to utilize the natural resource base, the regulatory frameworks are continuing to be updated, as is participation in global programmes such as in low carbon development agendas and REDD plus. Challenges however, remain in the adherence to policy and legislative mechanisms, in adequately tracking environmental impacts, and in environmental management oversight generally. DRM activities that are related to environmental management are generally coordinated with associated environmental management actions vis a vi multi-sector committees and the DRM Platform. Continued up-scaling in linking DRM with environmental management and adaptation to climate change activities, is ongoing as it works towards more efficient and effective implementation in all areas. This also recognizes the importance of achieving the triple bottom line of more coordinated development efforts advancing ecological, social and economic agendas.

1.1.11 Within the overall context of a global scale changing climate, hydrometeorological events will be far less predictable. Changes in weather patterns, in the intensity, and in the frequency of events are already being recorded and are envisaged to continue. Sea level rise, and more importantly rapid sea level rise, is regarded as potentially of extremely high risk for all coastal, and low lying areas in Guyana.

1.2 DRM POLICY DEVELOPMENT

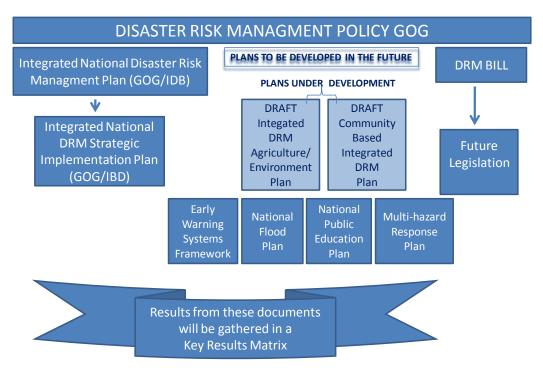
- **1.2.1** Considering the multi-hazard proneness of the country, the Government of Guyana has taken up various steps in order to reduce the risks of disasters to save the lives and properties of the most vulnerable populations of the country.
- **1.2.2** Building resilience and reducing vulnerability are elemental organizing principles within a comprehensive disaster risk management framework. Vulnerabilities have been widely acknowledged in all national strategies. The Poverty Reduction

- Strategy Paper (PRSP) highlights the vulnerability of Guyana to disaster risks, particularly natural disasters due to the geo-topography of Guyana.
- **1.2.3** The Declaration of Turkeyen 2007, highlights Guyana's commitment to addressing vulnerability through disaster prevention and response. The Declaration in Clause 11 furthermore emphasizes Guyana's commitment to the Hyogo Declaration and Plan of Action.
- 1.2.4 Efforts have been made at the institutional level to continue to upscale disaster preparedness and response, and to embrace a comprehensive disaster risk management approach. The foundational National Disaster Preparedness and Response Plan of 1985, which was later taken as the basis for development of a Multi-hazard Preparedness and Response Plan, set the stage for DRM evolution.
- **1.2.5** In the aftermath of the 2005 flood in Guyana, it was recognized by the Government of Guyana, as well as concerned agencies, that there was the need for the design and implementation of a comprehensive DRM program in Guyana.
- 1.2.6 In terms of environmental emergencies, the EPA developed the 2006, National Environment Emergency Response Plan. The National Environment Emergency Response Plan was prepared with the purpose of protecting the environment and the sustainable use of natural resources and to facilitate recovery from the detrimental effects of incidents. The incorporation of elements of this Plan will be important to the effective implementation of this Policy. The Ministry of Education also drafted a Disaster Preparedness Policy post 2005 floods.
- **1.2.7** In terms of physical infrastructure addressing hazards and risks, considerable investments have been made, and will continue to be made, to address drainage and irrigation and sea and river defences, thereby reducing vulnerability to floods.
- **1.2.8** Regarding information and data sources related to DRM, up-scaling continues in this area, with hydro-meteorology continuing to be a priority, as sound progress is being made in the hydro-meteorological service by improving the meteorology

and hydrological technology and information system, with the aim of improving weather and climate forecasting. This is recognized as of even increasing importance in the light of climate change, and is also directly associated with sustainable livelihoods in Guyana.

- **1.2.9** Further, the Guyana Low Carbon Development Strategy (GLCDS) emphasizes the linkage between Climate Change and induced drought and flooding and also highlights DRM as an important aspect of Climate Change Adaptation based on eco-system services.
- 1.2.10 Despite many important disaster management initiatives undertaken in Guyana over the past years, an adequate level of preparedness and policy support is required to address its significant risk reduction planning and programs. In view of the experiences and lessons learnt during the management of various hazards and disasters, the Government of Guyana has formulated this National Disaster Management policy to emphasize proactive, prospective and preventive strategies in addressing disaster risks.
- 1.2.11 This policy forms part of a comprehensive approach taken by the Government of Guyana and agencies such as the UNDP, IDB, IICA and the World Bank, among others, to strengthen the existing system ensuring that it is closely aligned to that of its regional and international partners. Within this approach several other legislation and policy documents have to be taken into account, such as, among others, the Disaster Risk Management Bill, the Integrated Disaster Risk Management Plan and Implementation Strategy, the Early Warning System Plan, the Multi-hazard Preparedness and Response Plan, which details numerous hazard specific annexes, the National Flood Plan, and the National Public Education Campaign, Damage Assessment and Needs Plan. Several other DRM plans are currently being developed, and these include a draft Integrated DRM Agriculture/Environment Plan and a draft Community Based Integrated DRM Plan. As a unification and coordination mechanism, results statements and key expected outcomes and outputs will be gathered within a Key Results Matrix which will work towards alignment with the HFA Pillars of DRM, up-scaling

knowledge management, tracking progress, employing results-based management, avoiding duplication of efforts, encouraging coordination and generally collating the various branches of comprehensive DRM within a more cohesive results-based arena. (Please refer to Annex II.) Importantly, the Key Matrix will also be used to include all new results statements from any new plans or instruments as yet to be created. Please refer to Figure I, as below: Principal National Level Comprehensive DRM Policy and Planning Documents 2013.



PRINCIPAL NATIONAL LEVEL COMPREHENSIVE DRM POLICY AND PLANNING DOCUMENTS GUYANA 2013

Figure 1

1.2.12 As comprehensive and integrative DRM policy and planning are furthered, a balance within corrective and prospective DRM approaches will be maintained. While risks that are already present and which can be managed and reduced now will be prioritized as is necessary, at the same time, DRM activities will work to address and seek to avoid the development of new or increased disaster risks.

1.3 <u>KEY CONTEXTUAL PROCESSES FOUNDATIONAL TO FURTHERING</u> AND IMPLEMENTING INTEGRATED DIASTER RISK MANAGEMENT

Resultant from extensive multi-stakeholder dialogue, identified were key ongoing processes, which will contribute to the further development and implementation of comprehensive and integrated DRM Policy in Guyana. These factors were emphasized, as they will enable a strong vibrant policy that will enhance the preparedness, preventive and mitigative approaches for reducing disaster risks in the country. The key processes are introduced as below. More detailed related discussions follow throughout the Policy document regarding these elemental and ongoing processes.

1.3.1 Institutional, Governance and Legislative Framework for DRM

- i. Defining the roles and responsibilities of local government and departments with respect to Disaster Risk Management.
- ii. Setting out the objectives of the Disaster Management Continuum.
- iii. Strengthening institutional and legal frameworks that streamline processes for effective and efficient disaster management in the country.
- iv. Collating and coordinating all relevant legislative mechanisms within all sectors, as they are relevant to DRM, into one updated document.
- v. Ensuring that key policy, legislative and planning documents will be crafted and structured in such a way as to be able to respond to contextual changes within the decade long implementation of the National DRM Plans.

1.3.2 Sustainable Funding and Support for DRM

- i. Ensuring the funding for Disaster Risk Management is sufficient, streamlined, and efficient.
- ii. Establishing a Trust Fund for DRM for undertaking risk mitigation activities.
- iii. Encouraging broader participation of volunteers, locally, nationally and internationally

1.3.3 DRM in a Multi-sector, Multi-disciplinary Context

- i. Developing policies and plans with the aim of increasing resilience of the most vulnerable as the centre-point for integrating Sustainable Development, Poverty Eradication, Sustainable Livelihoods, DRM and Climate Change Adaptation.
- ii. Elucidating the relationship between Disaster Risk Management and Development, considering social, economic, and ecological sustainability.
- iii. Maintaining consideration, and addressing both common and uncommon threats.

1.3.4 DRM in a Multi-stakeholder Context

- i. Ensuring strong coordination by various stakeholders to address disaster risk management in a comprehensive manner through fostering partnership among government, United Nations Organizations, international/regional/national civil society organizations, academic and research organizations, the media and publicprivate partnerships.
- ii. Calling for the Guyanese community at large vis-à-vis public education and awareness to participate and engage in DRM.

1.3.5 A Culture of Risk Awareness, Prevention and Prospective Risk Management

- i. Promoting an increased national level disaster awareness and culture of safety and capacity building for disaster preparedness and risk reduction at all levels.
- ii. Addressing vulnerabilities routinely in assessments.
- iii. Cultivating a balance of both corrective and prospective DRM.

1.3.6 Maintaining a Human-Rights Based Approach

i. Assuring that DRM policies, legislation and plans maintain a human-rights based approach, ensuring the inclusion of issues related to equality and disparity, of prioritizing the most vulnerable people, including the elderly and infirmed, children, those with disabilities and special needs, including people who are institutionalized. Issues related to gender, social protection, psycho-social issues of DRM are also considered.

ii. Assuring standards and protocols regarding human-rights based issues are in place.

1.3.7 Tracking Progress

- Policies will call for tracking progress, by establishing monitoring and evaluation mechanisms and processes including baselines and indicators, and practicing results-based management.
- ii. Maintaining focus at the local/community level for informed and high-resolution assessments.
- iii. Maintaining recognition of the importance of data and information gathering and knowledge management.

1.3.8 DRM Vibrant and Networked at all Levels

- i. Encouraging DRM at the community, regional and national level, and encouraging DRM representation and partnerships in the Caribbean and elsewhere internationally.
- ii. Emphasizing the need for mechanisms and venues, which permit DRM networking.

1.3.9 DRM in a Changing Climate

- A. Encouraging the recognition of risks of Climate Change and its likelihood of exacerbating existing hazards in disasters, as less predictable.
- B. Devising measures to help the citizens of Guyana to be climate informed and adjust through climate change adaptations efforts including disaster risk management is a foundational concept throughout this policy.

SECTION 2

2. GOALS, KEY OBJECTIVES, APPROACHES AND PRINCIPLES

2.1 POLICY INTENT

This policy sets out to establish the guiding principles and architecture for disaster risk management (DRM) in Guyana by presenting the institutional structures, roles, responsibilities, authorities and key processes required to achieve a coordinated, coherent and consistent approach. This policy also seeks to provide an overarching framework for decision-making and coordination across DRM sectors and multiple stakeholders inclusive of government, civil society, private sector, and the international community.

2.2 <u>VISION</u>

The vision of the DRM Policy framework is to improve the quality of life in Guyana by adopting and supporting a proactive, holistic, multi-hazard oriented and technology driven approach to DRM, ensuring the involvement and participation of all stakeholders, and directed towards reducing exposures to hazards and vulnerability and building resilience, thus ensuring a protected, safe, secure and disaster resilient Guyana.

2.3 GOALS

The Disaster Risk Management Policy, with its associated legislative and planning implementation mechanisms, seeks to achieve the following goals which in turn support overall social, economic and sustainable development within the country.

- **2.3.1** The prevention and/or reduction of disaster impacts on families, infrastructure, livelihoods, and the environment.
- **2.3.2** Increased resilience of communities in terms of reducing their vulnerability and increasing their ability to withstand and minimize disaster impact.
- **2.3.3** The integration and dovetailing of DRM actions, strategies and initiatives with national priorities.
- **2.3.4** DRM mainstreamed into national development planning and integrated into each departmental/ministerial development plans with dedicated financial allocations earmarked in the national budgetary provisions for mitigation measures.
- **2.3.5** Strategic direction for DRM in Guyana oriented with international and regional norms and best practices.
- **2.3.6** Sustained and adequate capacities and resources to address DRM at local, regional and national levels.
- **2.3.7** Strengthened governance, institutional, legal, financial and sectoral arrangements supporting DRM at all levels.
- **2.3.8** Holistic DRM policy, planning and programs embracing multi-disciplinary, and multi-sector agendas, whilst maintaining multi-stakeholder participation.
- **2.3.9** A human-rights based approach mainstreamed throughout DRM, including elements of equality and disparity such as gender issues, and including focus on the most vulnerable populations, the very poor, and those living remotely, as well as those with disabilities and special needs, including their carers, the infirmed, the very young and elderly, and also including emphasis on social protection during and past event, and DRM related psycho-social issues.

- **2.3.10** DRM policy, planning, and programs encouraging better linkages of DRM with Climate Change Adaptations (CCA).
- **2.3.11** National capacities to maintain state of the art, evidenced-based information and data, including future modeling capacities on risk related economic, social and ecological climate change impacts globally, and especially impacts related to Guyana.
- **2.3.12** A balance between corrective and prospective approaches to DRM maintained in DRM policy, planning, and programs, simultaneously addressing existent DRM challenges and ensuring that present risks are not increased.

2.4 **KEY STRATEGIC OBJECTIVES**

The key strategic objectives of this Policy, working towards the achievement of the aforementioned goals of DRM, include the following. These are ongoing, inclusive, and transparent processes.

- **2.4.1** Systematically incorporating international, regional, national and local disaster risk reduction strategies and approaches into the implementation of understanding underlying causes of risk, emergency preparedness, response and recovery.
- 2.4.2 Mainstreaming disaster management into the developmental policies, planning processes, land planning and financial, formal and non-formal educational systems, as well as into human-rights based related policies, strategies and measures. Special attention to be made to gender as a cross cutting dimension of DRM.
- **2.4.3** Promoting linkages among DRM, sustainable development, and Climate Change adaptation for reduction of vulnerability to hazard impacts and disasters.

- **2.4.4** Establishing an institutional system with robust, resilient, coordinated, financially sound, effective, and conducive to efficient DRM, with multi-stakeholder involvement as well as clearly defined institutional roles and responsibilities.
- **2.4.5** Developing and strengthening mechanisms and capacities to build resilience to hazards and preparing communities to ensure that they are fully equipped to anticipate and respond to disaster events.
- **2.4.6** Promoting a culture of prevention, preparedness and resilience through knowledge, innovations and education and encourage mitigation measures based on technology, traditional wisdom and environmental sustainability.
- **2.4.7** Promoting a balance between supporting corrective DRM measures and prospective DRM measures.
- **2.4.8** Enabling regulatory environment and compliance mechanisms for ensuring disaster risk management.
- **2.4.9** Developing contemporary forecasting and Early Warning Systems (EWS) backed by responsive and fail-safe communication with information technology support.
- **2.4.10** Undertaking post disaster recovery and reconstruction as an opportunity to build back better.
- **2.4.11** Ensuring that DRM progress is tracked with baseline development and adequate monitoring and evaluation mechanisms in place.
- **2.4.12** Ensuring proactive partnership with the media, private sector organizations, academic and research and other civil society bodies for disaster risk management.
- **2.4.13** Ensuring sustainability of resources financial, human and material for DRM efforts.

2.4.14 Ensuring that DRM organizations maintain organizational learning and development, and the ability to adjust to future scenarios with potentially even higher demands.

2.5 KEY APPROACHES TO DRM

2.5.1 National, Regional and Global Coordination for DRM

Disasters do not recognize geographical boundaries. Major disasters may often simultaneously affect several countries in a particular period of time. It will be the national endeavour to develop close cooperation and coordination at the international level in all spheres of Disaster Risk Management. In the context of DRM, coordination may be defined as bringing together the different elements of a complex activity or organization into a harmonious and efficient relationship and to negotiate with other stakeholders in order to work together effectively. Thus coordination with various national, regional and international best practices and organizations very often helps in identifying the gaps and it gives a broadened and well tested expertise and experience of utilization of the same, in a more concerted manner. This will result in a well informed, well coordinated, well planned, and effectively delivered program support.

Coordination does not only restrict itself to government departments or ministries, as it cut across whole gamut of educational, training and knowledge organization for better and effective program process. Thus an existing coordination mechanism of DRM stakeholders in Guyana is key in successful program implementations. Good coordination mechanisms will lead and promote transparent inter-ministry and inter-agency dialogue, and will engage with, and utilize, the additional good will, skills and resources of civil society and importantly the increasing concern and involvement of business and private sector. It encourages information sharing and positive communication that remains mutually respectful of each participants mandated roles responsibilities, skills and expertise. This will result in a well informed, well planned, and

effectively delivered service to the people of Guyana and its regional and international counterparts.

2.5.2 International Agreements: Comprehensive Disaster Management Strategy (CDM)

DRM Policy in Guyana is based on widely accepted best practices of the regional and international community for effective risk reduction approaches. This Policy incorporates elements of the HFA-based Comprehensive Disaster Management Strategy (CDM), regional framework for DRM. It reflects Guyana's commitment CDM, the regional strategy and framework for managing disaster risk in the Caribbean endorsed by Guyana in 2001, and again in 2006, when the framework was enhanced to promote the strategies laid out in the HFA.

There are several important outcomes, interventions, and initiatives which emerge from the CDM, and which are incorporated into elements of this Policy. These include the following.

- Ensuring improved coordination at national and regional levels for disaster management.
- ii. Establishing and strengthening the infrastructure for fact-based policy and decision making in all areas including adaptation to climate variability and change, ICTs, gender and disabilities.
- iii. Consolidation of past initiatives and best practices including strengthening and building on these lessons learnt for wider policy support.
- iv. Focusing on communities by:
 - a. Improving understanding and local/community based knowledge sharing on priority hazards;
 - b. Improving coordination and collaboration between community disaster organizations and other research/data partners;
 - c. Ensuring that communities are more aware and knowledgeable on disaster management and related procedures;
 - d. Ensuring that standardized holistic and gender-sensitive community methodologies for natural and anthropogenic hazard identification and mapping,

- vulnerability and risk assessments, recovery and rehabilitation procedures are developed and applied in selected communities;
- e. Enhancing Early Warning Systems for disaster risk reduction at the community and national levels;
- f. Capacity development at all levels; and
- g. Ensuring that Community Based Disaster Management (CBDM) includes last mile integration of the policy, plans and execution.

2.5.3 International Agreements: Hyogo Framework for Action (HFA) and Millennium Development Goals (MDGs).

This Policy closely aligns itself to the international framework for DRM, consistent with Guyana's commitment to the Hyogo Framework for Action 2005-2015 (HFA) and the Millennium Development Goals (MDGs). The MDGs provide a basis through which DRM can be integrated into and linked with sustainable development. The Millennium Report recommends a five-fold strategy for reducing losses from disasters. The elements of that strategy will be part of this Policy. Measures will be adopted that reflect Guyana's commitment to the MDG as well as to DRM. These commitments will be reflected by the adoption of measures supporting the integration of the elements of these international and regional instruments into the Guyana DRM framework.

• Priorities for Action outlined in the HFA include:

- a) Ensuring that disaster risk reduction is a national and local priority with a strong institutional basis for implementation;
- b) Promoting the identification, assessment and monitoring of disaster risks and enhancement of early warning,
- c) Using knowledge, innovation and education to build a culture of safety and resilience at all levels;
- d) Reducing the underlying risk factors; and
- e) Strengthening disaster preparedness for effective response at all levels.

- Priorities for Action outlined in the Millennium Development Goals include:
- a) Mainstreaming strategies to reduce disaster losses in PRSP's;
- b) Incorporating DRM in infrastructure investment;
- c) Ensuring social safety nets for the vulnerable, particularly through Government provisions;
- d) Early warning capacities and information campaigns supported by Governments;
- e) Pre-crisis emergency and contingency planning;
- f) Integrating hazard and risk assessments as part of environmental impact assessments; and
- g) Ensuring that schools in high-risk areas have developed and implemented disaster preparedness and contingency plans.

Hyogo Framework for Action Post 2015

In terms of envisaging the next decade, and in keeping with the HFA, it has been accepted that HFA2 should build on the achievements of HFA and other international agreements. The efforts to implement HFA will have to continue. Making note of the main DRM themes resultant from the 2013 Global Platform Consultations, below are key areas for DRM action, compiled from the culmination of consultations by stakeholders over the course of 2012-2013 including at regional level platforms. They are:

- i. the importance of community-level involvement;
- ii. targeting and including the most vulnerable populations;
- iii. women as leaders;
- iv. children and youth: new generation of opportunity;
- v. health:
- vi. integrating climate change adaptation, development and disaster risk reduction;
- vii. the role of science;
- viii. knowledge-sharing and education;
- ix. capacity-building: financing, risk assessment, preparedness and early warning;
- x. private sector involvement in disaster risk reduction;
- xi. political will and leadership; and
- xii. governance, accountability, transparency and inclusiveness.

2.5.4 Multi-Faceted Approach to DRM

Disaster risk management is continuously evolving. Implementing comprehensive disaster risk management demands the integration of disciplines, sectors, and stakeholders. This holistic and integrated approach is inclusive in terms of embracing the whole spectrum of hazards and risk scenarios.

2.5.5 Multi-Hazards Approach

This Policy adopts a 'multi-hazard' approach to DRM in Guyana. The multi-hazard approach means that the institutions, coordination mechanisms, processes and principles identified in this Policy will be effective for any type of hazard or disaster scenario that may affect Guyana. The multi-hazard approach further focuses on establishing lasting institutions and mechanisms that can be flexibly applied to any current or developing disaster. Additionally, it provides a common conceptual framework, which can be utilized over a wide range of DRM issues. The multi-hazard approach will also involve effective management of knowledge of the full range of hazards in all aspects of DRM in Guyana.

2.5.6 Multidisciplinary Approach

This approach involves drawing appropriately from multiple disciplines to redefine problems outside of normal boundaries and reach solutions based on a new understanding of complex situations. Disciplines around DRM include, geography, earth sciences, economics, social sciences, ecology, and logistics, among others.

2.5.7 Multi-sector Approach

As DRM straddles a number of subject areas, it also demands interaction with many sectors. In fact, DRM activities parlay with all Ministries is Guyana, to lesser or greater degrees.

2.5.8 Multi-stakeholder Approach

In order to bring about a paradigm shift from relief centric approach to preparedness, and mitigation, efforts would be made to mainstream prevention and mitigation measures into developmental plans and programs by enlisting cooperation among various stakeholders. DRM participation in Guyana is vibrant, diverse and broad, making up representatives from government and statutory bodies, inter-governmental organizations, civil society and non-governmental bodies, from commercial enterprises, from research, academic and educational organizations, international development partners and from the media. This policy is the result of multi-stakeholder processes and is thus a co-creation of all participants.

2.5.9 Corrective and Prospective Approach

Corrective management works in the sphere of, existing risk, affecting already existing populations, their livelihoods and support infrastructure. Where such risk exists, "corrective" (or "compensatory") management techniques may be instrumented in order to reduce or mitigate existing risk levels. Existing risk is not the only risk management concern. However, it has tended to dominate and perhaps typifies in the mind of the general public what risk reduction (or disaster prevention and mitigation) is all about. There are risks that are not as yet "on the ground" but that may develop in the future. The anticipation of future risk, the control of future risk factors, and the incorporation of risk control aspects in future development and project planning, increasingly go under the nomenclature of "prospective" risk management (2009 ISDR Global Assessment Report on Disaster Risk Reduction). Dependent on priorities and contextual realities, DRM in Guyana will strive to strike a balance between corrective and prospective approaches to DRM.

2.5.10 Human Rights Based Approach (HRBA) to DRM

Whilst the concept of Human Rights protection is widely acknowledged as a crucial element of humanitarian strategies at times of emergency and disaster situations, the longer-term aspects linked to the promotion and definition of a human rights-based approach in disaster prevention and reduction is still limited. Critical issues in human rights when considering DRM are as follows.

i. Non-discrimination (of gender, age, ethnicity)

- ii. Attention to the most vulnerable, including those with disabilities, special needs, the very young, elderly, infirmed, institutionalized and other groups.
- iii. Legal protection
- iv. Social protection
- v. Right to human security
- vi. Access to health and medical services, including psycho-social treatment
- vii. Shelter and housing
- viii. Clean water and sanitation
- ix. Safe schools and disaster-resilient education
- x. Compensation and/risk transfer or other socio-economic risk transfer or insurance schemes.

Guyana shall proceed with advancing a Human Rights based approach to DRM by undertaking the following.

- **2.5.11** Promoting Human Rights, especially the fundamental ones as the non-discriminatory principle, in front-line agencies' mandates as well as in national DRM policies.
- **2.5.12** Avoiding duplication of effort by building on existent plans (For example, build on UNICEF HRBA DRM/Emergency Plans for children and young people): expand existing legislation, codes and guidelines in order to include a human rights perspective in DRM measures.
- **2.5.13** Including benchmarks, targets and indicators in DRM (i.e. HFA monitor) elements that can capture the human rights dimension in disaster management programme implementation.
- **2.5.14** The National Platform for DRM shall consider HRBA in its disaster management planning. This includes mapping institutions and organizations that are duty bearers in ensuring human rights in disaster and profiling the right holders, in particularly those that are at risk and vulnerable.

- **2.5.15** National Platforms shall consider involving legal experts and Human Rights specialists to help mainstream Human Rights in Disaster Risk Management legislation.
- **2.5.16** National Platforms shall promote the definition of people-centered Human Rights Based Disaster Risk Management Strategies.
- **2.5.17** Vulnerability analysis in disaster management shall consider human rights issues among their social, economic, ecological, and cultural criteria.
- 2.5.18 Protection activities in pre-disaster, shall create and/or consolidate an environment political, social, cultural, institutional, economic and legal "conducive to full respect for the rights of the individual" (IASC 2008)
- **2.5.19** Request all stakeholders to incorporate Human Rights Based Approaches in their respective portfolios and roles.
- **2.5.20** In international fora, Guyana will align with global efforts enhancing the recognition of specific human rights consideration for climatic / environmental IDPs / refugees.

Focus on Equality - Gender in DRM

An important human rights based approach issue concerning equality is gender in DRM. Gender mainstreaming strategies measures and initiatives designed to address this important policy area include those as below.

- i. Committing to gender analysis and gender mainstreaming through enhance cooperation and collaboration among all stakeholders.
- ii. Ensuring women and men's equal access to natural hazard early warning systems.
- iii. Establishing gender specific data and statistics on impact of disasters.
- iv. Carrying out gender-sensitive vulnerability, risk and capacity assessments.
- v. Increasing awareness of the public and media on the gender-sensitive vulnerabilities and capacities in disasters and gender-specific needs and concerns in DRM.
- vi. Supporting research institutions to study the cost-benefit and efficiency of gendersensitive policies and programmes in disaster risk reduction, climate change adaptation, and poverty reduction.
- vii. Supporting gender-sensitive financial risk sharing and risk transfer mechanisms.
- viii. Improving disaster preparedness, response and contingency planning from a gender perspective and making them respond to the specific needs and concerns of men and women.
- ix. Increasing women's participation in disaster relief coordination and securing equal access to disaster relief assistance between men and women.
- x. Developing and implementing gender-sensitive indicators of preparedness, response, and recovery and to monitor and measure progress on policy initiatives.
- xi. Monitoring and evaluation will be developed to be comprehensively gender-sensitive, starting from the criteria with which indicators are established, which are then used to analyze the results of activities.
- xii. Ensuring sufficient financial and human resources are committed towards Gender Mainstreaming.

2.6 GUIDING PRINCIPLES FOR DRM

Political commitment to this Policy is one of the primary factors which will guide implementation. Implementation will be supported by clearly articulated plans, projects, and actions. These and other implementation tools will be supported by this Policy. Implementation of this Policy will further be supported by guiding principles. These include those as below.

- **2.6.1** Advance robust coordination, collaboration, and communication.
- **2.6.2** Ensure dynamic networking and partnerships nationally and internationally, especially with multi-stakeholders, including the private sector.
- **2.6.3** Embrace regional and international DRM perspectives and participating in regional and international fora.
- **2.6.4** Aim at resilient communities while identifying the key role of communities in DRM.
- **2.6.5** Factor DRM into Climate Risk Management and vice versa.
- **2.6.6** Upscale Research, Development including information management at all levels.
- **2.6.7** Track progress with sound monitoring and evaluation.
- **2.6.8** View DRM as a cross cutting in all developmental initiatives.
- **2.6.9** Upscale Knowledge Management and Organizational Learning.
- **2.6.10** Emphasize the demonstration of the economics of DRM, of costs of inaction and costs of action.
- **2.6.11** Emphasize the incorporation of DRM aspects in legislative components.
- **2.6.12** Emphasis media interaction, communications, and dissemination of information and data.

2.7 CODE OF CONDUCT

Effective DRM will require the involvement and interaction of many stakeholders, as illustrated in the section of this Policy, which outlines the institutional framework. The interactions, coordination, decision-making and other activities of the stakeholders must adhere to certain minimum standards of behavior by and

among these stakeholders. The mail principle is the respect to for life and the main objective is the protection of human lives and the environment. The strategies and initiatives outlined in this Policy will be guided by the minimum standards articulated in this section.

Stakeholders will therefore:

2.7.1 Promote non-discrimination

Actions and initiatives will be executed regardless of gender, ethnicity, political or religious affiliation, or geographical considerations of the beneficiaries. Actions and initiatives will be based on an assessment of the needs of the affected populations as well as the existing local capacities to meet those needs.

2.7.2 Support the most vulnerable

Throughout the DRM system great consideration must be given to these special groups. This policy will seek to enhance the safety and protection of women, children, and disabled people, and other highly vulnerable groups, as well as build their resilience.

2.7.3 Consider environmental impact

Particular attention will be given to environmental impacts in the design, management, and implementation of DRM programmes, activities, and initiatives so as to safeguard the right to an environment that is not harmful to health, well-being, or livelihood, and to protect the ecosystems and biodiversity.

2.7.4 Respect human dignity

Stakeholders will ensure that the implementation of actions, strategies and initiatives do not result in cruel, inhuman, or degrading treatment.

2.7.5 Utilize empirical evidence

DRM strategies, actions, initiatives, and interventions must be based on facts and verifiable information. Data gathered from research, early warning systems and the continuous monitoring of disaster occurrence and trends would provide the basis of DRM strategies, actions, initiatives, and interventions.

2.7.6 Respect for culture and way of life

Stakeholders will respect the culture, traditions, and way of life of the communities in which activities are undertaken, and incorporate best practices, which contribute to building resilience to disaster risks.

SECTION 3

3. INSTITUTIONAL FRAMEWORK

While coordination of DRM systems is overarching in its scope covering the political, economic, organizational, operational and informational spheres, operational coordination addresses the critical phases where the theory, preparation and planning align with the outcome of disaster resilience at all levels, for all people, nation-wide. The policy will set the framework, create the structure, and provide the guidelines that will trigger the manifestation of its goals. This DRM policy provides a basis for integrating existing and planned legislation along with sector specific mandates, strategies, action plans, contingency plans, policies and other DRM tools.

The Institutional framework established by this policy articulates on the primary actors that are part of the Guyana Disaster Risk Management system. These actors are on the forefront of all disaster response, preparedness and mitigation activities, which have underlying responsibilities for ensuring, smooth functioning during disaster and peace times. The implementation of the policy will be supported by these strong institutional systems. The actual structure and design would be illustrative of the political commitment to DRM in Guyana. In support of this design, this section highlights important aspects of the system. (Please refer to Figure II)

3.1 THE STRUCTURE OF THE DRM SYSTEM ENCOMPASSES:

- i. The Office of the President
- ii. The Cabinet
- iii. The National Disaster Coordinator
- iv. The Civil Defence Commission
- v. The sectoral Sub Committees
- vi. The Disaster Risk Management Platform
- vii. The Regional Democratic Councils and the Neighborhood Democratic Councils and Village Councils
- viii. The National Emergency Operation Centre and the Regional Emergency Operation Centres

- ix. The Rapid Damage Assessment Teams, the National Damage Assessment and Needs Assessment Teams, and the Regional Damage Assessment and Needs Assessment Teams
- x. The National Multi-Hazard Alert System, including the National Emergency Broadcast System

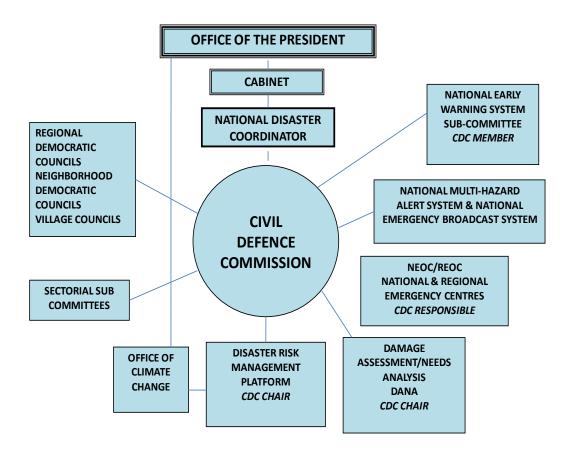


Figure II

- 3.2 DRM in Guyana encompasses and recognizes duties, roles and responsibilities for a variety of institutions, ministries, agencies, stakeholders sectors and interests. The implementation of this Policy will seek to strengthen the inter-agency collaboration and partnerships.
- 3.3 Presently duties and responsibilities are currently articulated in several contexts and in several instruments, all of which comprise part of the national DRM framework. Institutional roles, duties and responsibilities are presently articulated in the context of

- a National Multi-Hazard Alert System for Guyana, the National Disaster Risk Management Platform and the DANA Framework and Plan.
- 3.4 The critical institution in the DRM structure is the CDC. The Director General of the CDC (or his alternate) serves as the chair of the DANA Committee, as well as the National Disaster Risk Management Platform. Though not designated as the Chairman, the CDC is also a member of the National Early Warning System Sub-Committee. The CDC also is responsible for the National Emergency Operations Centre (NEOC). This is a critical institution, which is activated in times of disasters in Guyana.
- 3.5 In addition to the CDC and the NEOC, several Government Ministries, institutions, agencies, non-governmental organizations, the private sector and international and regional organizations are involved in DRM. The areas of involvement are highlighted in Figure III as below.

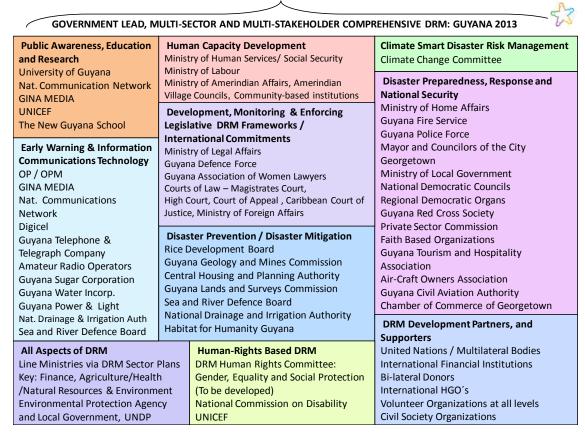


Figure III

- **3.6** With the wide range of institutions involved in various aspects of DRM, there is, among other elements, a need for coordination of the responsibilities and roles of each institution with respect to DRM within the Institutional System. The strategies, measures, and initiatives regarding the institutional system will involve the following.
 - i. Strengthening the institutional system and framework at national, regional and community levels, including the establishment of national DRM Committees, Regional Committees and supporting community based committees.
 - ii. Integrating integrated DRM (IDRM) plans and strategies into the institutional system.
 - iii. Implementing guiding principles in the institutional system, which will ensure that the system is adaptable, robust, and publicly defensible and does not derogate from existing institutional roles and responsibilities.
 - iv. Disaster Management to be built into developmental plans: It will ensure mainstreaming of DRM into development agenda of all existing and new developmental programs and projects which shall incorporate disaster resilient specifications in design and constructions. The relevant ministry/department will give due weightage to those factors while allocation resources.
 - v. Mitigations Projects: The guidelines on various disasters will form the basis for formulation of plans and mitigation projects at national, provincial and community level. The prioritized mitigations projects will be implemented adhering to the norms and guidelines to mitigate further disaster risks.
 - vi. The DRM National will be utilized to its fullest potential. The Platform could champion a disaster risk information clearing house, amongst its many other supporting and collaborative efforts, as is evident within its defined Terms of Reference (Revised 2013).
- 3.7 A critical area to support Policy implementation will be the legal and regulatory framework. This framework will be designed to be certain, robust and dynamic so as

to enable the effective implementation of DRM actions and initiatives. The DRM Act, under development, evidences this. The proposed DRM Act should address some of the following elements.

- i. Definitions of core concepts.
- ii. Identification of objectives and purposes of the Act.
- iii. Prescribing duties and responsibilities of DRM stakeholders.
- iv. Enshrining Principles of accountability and transparency.
- v. Developing provisions governing Pre-Disaster and Post-Disaster activities and arrangements.
- vi. Seeking legislative support for preparedness measures.
- vii. Entrenching and supporting finance, resource mobilization, funding and budgetary allocation strategies, and initiatives.
- viii. Identifying cooperation and coordinating mechanisms.
- ix. Developing provisions regarding volunteers.
- x. Ensuring coordination among stakeholders.
- xi. Ensuring respect for fundamental rights and freedoms.
- xii. Developing synergies with existing Laws.
- xiii. Creating provisions regarding awareness and education.
- xiv. Developing compliance and enforcement mechanisms.

SECTION 4

4. ELEMENTAL STRATEGIES FOR INTEGRATED NATIONAL DISASTER MANAGEMENT

This section of this Policy presents ongoing and envisaged comprehensive DRM strategies, measures and initiatives. As noted in Section 1.2.11, numerous other documents have been developed and complement Section 4 of the Policy. The following elemental strategies are grouped into the following broad categories.

- **4.1** Risk Identification, Assessment and Evaluation (Cross Reference with HFA 2)
- **4.2** Risk Reduction Including Disaster Prevention and Mitigation (HFA 1,3 and 4)
- **4.3** DRM Nexus with Climate Change (HFA 4)
- **4.4** Early Warning, Preparedness, Response and Relief (HFA 1 and 5)
- **4.5** Rehabilitation, Recovery and Reconstruction (HFA 3)
- **4.6** Resource Mobilization and Financing Risk Management (HFA Key Strategy)

4.1 RISK IDENTIFICATION, ASSESSMENT, AND EVALUATION

Risk Identification, Assessment and Evaluation, includes elements such as risk assessments and maps, multi-risk: elaboration and dissemination, indicators on DRM and vulnerability, data & statistical loss information, scientific and technological development; data sharing, regional and emerging risk and climate modeling and forecasting; and identifying climate-related disaster risks. Within the context of a changing climate, efforts at all levels of DRM, within all disciplines and sectors related to DRM, need gain ongoing recognition of, and appreciation of, the predicted or potential impacts of climate change, as an ongoing process demanding continuous and high resolution surveillance. Appropriate key priority strategies of Risk Identification, Assessment, and Evaluation include the following.

4.1.1 Hazard zoning, vulnerability analysis, and multi-hazard framework through Geographical Information System (GIS) and maps.

- **4.1.2** Establishing a system of monitoring and evaluating risks including indicators on vulnerabilities, capacities, and management capabilities.
- **4.1.3** Establishing a risk assessment system guided by important objectives and principles that will aim to produce indicators that are transparent, robust, representative, replicable, comparable, and easy to understand.
- **4.1.4** Developing a national standard for conducting disaster risk assessments.
- **4.1.5** Linking risk analysis with development planning generally and also specifically with land use planning and regulations.
- 4.1.6 Identifying climate-related disaster risks. Within the context of a changing climate, efforts at all levels of DRM, within all disciplines and sectors related to DRM, need gain ongoing recognition of, and appreciation of, the predicted or potential impacts of climate change, as an ongoing process demanding continuous and high resolution surveillance.

4.2 <u>RISK REDUCTION INCLUDING DISASTER PREVENTION AND MITIGATION</u>

Disaster Prevention involves the outright avoidance of the adverse impact of hazards and to minimize related disasters. Depending on social and technical feasibility and cost/benefit considerations, investing in preventive measures may be justified in areas frequently affected by disasters. Disaster Mitigation is aimed at minimizing the destructive and disruptive effects of hazards and thus lessening the magnitude of any disaster. Strategies, measures and initiatives can be divided into structural and non-structural measures, and can be corrective or prospective in approach.

Strategies, measures, and initiatives related to *disaster prevention* include the following.

4.2.1 Effective land-use policy, planning and zoning systems.

- **4.2.2** Long-term permanent measures to foresee and avoid the negative effects of disasters.
- **4.2.3** Effective involvement and participation of stakeholders including the Central Housing and Planning Authority, Sea and River Defence Board, National Drainage and Irrigation Authority and Guyana Lands and Surveys Commission.
- **4.2.4** Strengthening the knowledge on disaster prevention and coping mechanisms adopted at various levels with special focus on protection of cultural heritage and structures.
- **4.2.5** Environmental protection to enable in both prevention and ensuring livelihood restoration of vulnerable groups.

A multi-pronged approach needs to be adopted to undertake *mitigation* measures in the following.

- **4.2.6** Building mitigation measures into all development projects.
- **4.2.7** Encouraging and assisting mitigation programs and projects in accordance with set guidelines.
- **4.2.8** Indigenous knowledge and coping mechanisms to be given due importance in disaster mitigation measures.

In order to address the above measures the *structural mitigation* measures and initiatives include those as below.

4.2.9 Improving design, construction, maintenance, and repair of physical infrastructure.

4.2.10 Strengthening of critical infrastructures and lifeline buildings through retrofitting.

The non-structural strategies measures and initiatives are as follows.

- **4.2.11** Improving environmental policies and practices to dovetail with DRM.
- **4.2.12** Promoting economic independence through livelihood diversification and appropriate resistant crop variety promotions in hazard prone areas.
- **4.2.13** Proper land use planning, micro-zoning, and human settlement planning.
- **4.2.14** Develop techno-legal regimes through adoption of policy and norms.
- **4.2.15** Training and capacity building of various technical experts like engineers, architects, town planners, and construction workers.
- **4.2.16** Climate proofing investments and risk financing measures including environment protection measures.
- Vis a vi building wide-scoped and embracive awareness and education, a *culture of prevention and safety* will be furthered by the following strategies, measures and initiatives.
- **4.2.17** Designing and implementing a national public education campaign through both formal and informal channels in relation to all aspects of DRM.
- **4.2.18** Improving professional capabilities through institutionalized disaster management training utilizing national and regional educational programmes.
- **4.2.19** Strengthening collaboration among government and non-government agencies to more effectively underpin public awareness and education.

- **4.2.20** Ensuring the timeliness, accuracy, comparability, appropriateness, and accessibility of public awareness messages and the channels through which they are to be transmitted are accessible to the audience.
- **4.2.21** Ensuring that public awareness strategies and activities are constantly evaluated with appropriately developed and identified standards, protocols, and indicators.
- **4.2.22** Enhancing and supporting the role of mass media including media partnerships.
- **4.2.23** Ensuring the development and integration of a knowledge management framework for DRM, including but not limited to the use of ICTs to disseminate knowledge.
- **4.2.24** Public awareness, training, and education to promote a 'culture of prevention' as well as mitigation-related measures and to encourage local prevention activities.
- **4.2.25** Inclusion of DRM in the school education.
- **4.2.26** Use of all public media including print and electronic media for wider disaster risk awareness.

4.3 DRM NEXUS WITH CLIMATE CHANGE

Climate Change is impacting the glacial reserves, water balance, agriculture, forestry, and coastal eco systems. It will continue to affect the predictability and severity of natural disasters in Guyana. Thus Climate Change adaptation measures are required to continually adjust prevention, mitigation, and preparedness measures to reduce disaster risks. As a result of these inherent linkages this Policy will promote the following strategies, measures and initiatives.

- **4.3.1** Developing and sharing of institutional capacities.
- **4.3.2** Implementing disaster risk reduction as an adaptation strategy.

- **4.3.3** Utilizing the opportunity for collaboration provided by focusing collectively on DRM and climate change adaptation on addressing underlying vulnerabilities.
- **4.3.4** Overcoming the limitations posed by such intended collaboration, which include institutional barriers, different policy and financing frameworks, competing communication structures and agendas.
- **4.3.5** Scaling-up the use of existing DRM tools that have proven to be effective in dealing with climate-related events that will be exacerbated by climate change. These include vulnerability and risk assessments, early warning systems, land-use planning and building-code regulation, and institutional and legal capacities.
- **4.3.6** Improving capacities and services for knowledge transfer from science to practice and application to bridge gaps in risk management in climate-sensitive sectors.
- **4.3.7** Establishing mechanisms to provide sufficient funding and mobilize resources for adaptation to climate change and risk reduction.
- **4.3.8** Promoting knowledge of the synergies and differences in DRM and adaptation to climate change.
- **4.3.9** Exploring and implementing the mechanisms associated with Climate Smart Disaster Risk Management (CSDRM). Ensuring linkage of DRM with Climate Risk Management to address green growth and green infrastructure for mitigation measures.

4.4 EARLY WARNING, PREPAREDNESS, RESPONSE AND RELIEF

The framework document of 2013 (Revised), entitled *National Early Warning Systems in Guyana*, portrays in detail, the many aspects, elements, challenges and strategic objectives of Early Warning for the country. Additionally, the document

outlines the context and rationale for early warning, as well as presenting cross cutting issues, national capacities and future perspectives. Presented below are some of the key recommendations for more robust early warning in Guyana, brought forth from the ongoing national multi-sector and multi-stakeholder processes to date.

- **4.4.1** Support, in terms of political will and resources, at all levels of government and the national stakeholder community at large, for sustained early warning systems at all levels in Guyana.
- **4.4.2** Further up-scaling of partnerships with low lying states and SIDS.
- **4.4.3** Expanding the base of volunteerism for early warning in Guyana.
- **4.4.4** Up-scaled nexus with early warning and the private sector in Guyana, especially with insurance and re-insurance bodies.
- **4.4.5** Developing evidenced based, quantitative economic reports outlying the predicted costs of action versus costs of inaction regarding early warning in Guyana.
- **4.4.6** Strong, bottom up, and community-based early warning systems, considering local culture and indigenous knowledge need to be developed.
- **4.4.7** Local level communications protocols and detailed plans developed, with standardized data across the country.
- **4.4.8** Up-scaling to optimal use of media and especially ICT based social media in Early Warning.
- **4.4.9** Multi-discipline, multi-sector, multi-stakeholder forum needed for more coordinated and integrated Early Warning dialogue and action.

- **4.4.10** Linking with Climate Change efforts needs advancing.
- **4.4.11** Early Warning Systems will need to continue to have the capacity to evolve to cover all types of hazards and changing contexts.
- **4.4.12** Early Warning Institutional Framework needs to be furthered especially in terms of refining roles and TOR's for all related bodies.
- **4.4.13** Early Warning needs to be advanced in the education system, especially in terms of developing early warning plans for schools nationwide, including Early Warning in the education curriculum, and aligning with related campaigns, nationally and internationally.

Disaster Preparedness is a precautionary measure to help the population and institutions to respond and cope with the potential impact of a disaster. Effective disaster preparedness is based on a comprehensive and continuous assessment of vulnerabilities and risks to create awareness of the most likely hazards, their magnitude, and the elements at risk. The DRM Policy aims at putting in place a strategy that will ensure preparation of periodic sectorial and integrated contingency plans at all levels and appropriate activation mechanism. Effective preparedness action is based on sound analysis of disaster risks and sound early warning systems. To this end, the disaster preparedness strategies, measures, and initiatives include the following.

- **4.4.14** Preparedness Planning at all levels to tackle unforeseen situations with standard operating procedures for each roles.
- **4.4.15** Strengthening the emergency operations centres at all levels for fail-safe information sharing.
- **4.4.16** Defining in advance, clear communication processes and warning protocols for different disaster situations.

- **4.4.17** Implementing a system of comprehensive and continuous assessment of preparedness related vulnerabilities and risks.
- **4.4.18** Developing of evacuation and rescue plans, manuals, and standard operating procedures.
- **4.4.19** Procuring, stockpiling of relief requisites including keeping/maintaining inventory of potential sources of such requisites.
- **4.4.20** Medical Preparedness and Mass Casualty Management Training, Simulations and Mock Drills to ensure readiness.
- **4.4.21** Up-scaled Corporate Social Responsibilities and Public-Private Partnership (PPP).
- **4.4.22** Up-scaled Media Partnership for wider awareness generation and timely information sharing.

Disaster Response is predominantly focused on immediate and short-term needs and is sometimes called "disaster relief" and must above all be effective and appropriate. Prompt and effective response minimizes loss of life and property. All arrangements need to be taken up to ensure integrated, synergized, and proactive approach in dealing with any eventualities. This is possible through early warning, fail-safe communication, and anticipatory deployment of response teams. Thus a well planned strategy; measures and initiatives to disaster response will include those as below.

- **4.4.23** Developing rapid and effective response mechanisms.
- **4.4.24** Supporting the improvement of response times of all stakeholders responding to the aftermath of a disaster.

- **4.4.25** Ensuring uniform methods and guidelines for conducting initial on-site assessments of both damage and needs when significant events or disasters occur or are threatening to occur.
- **4.4.26** Ensuring effective prioritization of response efforts.
- **4.4.27** Developing a framework for comprehensive reviews to be conducted routinely after all significant events and events classified as disasters.
- **4.4.28** Securing the consistent application of standard operating procedures and other response planning tools.
- **4.4.29** Vital role of national, sub-national and community level response mechanisms through regular information flow.
- **4.4.30** Ensuring Standard Operating Procedures for various departments/ministries during the response period.
- **4.4.31** Regular information flow for necessary support required during the response phase.
- **4.4.32** Effective functioning of the Control centre for collection, compilation, and upward and downward information dissemination.
 - **Relief** is no longer perceived as a gratuitous assistance or provision of emergency relief supplies. It is viewed as an overarching system of facilitation of assistance to the disaster victims to ensure holistic social safety and security of the affected population. Thus effective disaster relief includes the following.
- **4.4.33** Setting up of temporary relief camps and management of relief supplies.
- **4.4.34** Reviewing of standard of reliefs.
- **4.4.35** Provision of intermediate shelters.

- **4.4.36** Special provision of assistance to the most vulnerable, including the very young, elderly, infirmed, the institutionalized, and those with special needs or disabilities.
- **4.4.37** Ensuring proper WASH and overall health management care for both human and animal populations.

4.5 REHABILITATION, RECOVERY AND RECONSTRUCTION:

This includes rehabilitation of the affected areas, communities and households; reconstruction of damaged and destroyed critical infrastructure; and recovery from losses sustained during the disaster event, combined with the development of increased resistance to future similar occurrences. The approach to reconstruction and recovery process has to be comprehensive so as to convert adversity into opportunity. Incorporating disaster resilient features to "Build Back Better" will be the guiding principle of an effective recovery and reconstruction process. Recovery normally carries in two phases: a) Early Recovery and b) long term recovery. These two phases are interlinked and it goes hand in hand in the entire reconstruction process. Strategies, measures, and initiatives in support of disaster recovery will include those as below.

4.5.1 Encouraging timeliness of recovery related actions

4.5.2 Ensuring that sufficient time is allocated to recovery efforts.

- **4.5.3** Establishing realistic timeframes based on an understanding of the capacities of the affected communities.
- **4.5.4** Making sure that information provided and produced from assessments is accurate and produced in a timely manner.

- **4.5.5** Supporting the use of donor conferences as part of the mechanism for mobilizing international aid and humanitarian assistance and clarifying roles, relationships and responsibilities.
- **4.5.6** Preparing comprehensive, flexible, and adaptable Rehabilitation & Reconstruction Plans and strategies.
- **4.5.7** Exploring and supporting strategies to build back better.
- **4.5.8** Utilizing Damage Assessments and Needs Assessments in the affected area as critical tools to prioritize restoration, reconstruction, and rehabilitation measures within the shortest possible time.
- **4.5.9** Strengthening community resilience through the development of strategies for community participation and input into recovery efforts.

4.6 RESOURCE MOBILIZATION AND FINANCING RISK MANAGEMENT (HFA KEY STRATEGY):

A robust and viable financial allocation is key to success DRM program implementations at all levels. Decision-making and coordination and its implications for finding and budgetary allocations are closely linked to and affected by the institutional system. There are several sources of funding, which include government funding from the consolidated fund, private sector funding as well as agency funding. Funding will therefore be influenced by the source from which the funding emanates. This Policy therefore supports the following measures and initiatives with regard to decision making and coordination regarding funding and budgetary allocations. These will include those such as those mentioned below.

4.6.1 Implementing incentive structures to encourage implementation of DRM measures.

- **4.6.2** Examining and analyzing Government capacity to react in the aftermath of a major disaster and, in particular, Government capacity to finance relief and reconstruction needs after disasters.
- **4.6.3** Ensuring that Government and institutions have dedicated adequate resources to effectively and efficiently discharge their disaster related functions and legislative responsibilities.
 - **4.6.4** Ensuring that there is coordination among institutions regarding the allocation and disbursement of resources for DRM measures.
 - **4.6.5** Ensuring that there are sufficient and effective budgetary allocations, finances, resources, and dedicated funds allocated to support both DRM activities.
 - **4.6.6** Ensuring accountability, impartiality, efficiency and transparency principles are integrated into procedures for accessing and allocating the funds together with a clear decision-making mechanism, in line with the elements of the institutional system designed to address DRM.
 - **4.6.7** Ensuring that budgets are credible and that the resources promised for DRM activities are actually delivered and used for the intended purposes within a given time-frame.
 - **4.6.8** Ensuring that disaster funding mechanisms are designed and implemented so as to provide continued and sustainable funds for both pre-disaster and post- disaster activities. In particular, a National Disaster Risk Management Fund should be put in place.
 - **4.6.9** Ensuring provisions and mechanisms are established in the form of supplemental or contingency funding methods and avenues to provide additional funding to support disaster response activities for natural disasters that exhaust the primary funds.

- **4.6.10** Implementing a comprehensive accounting and reporting mechanism that covers both off- and on-Government budget contributions in DRM phases and activities.
- **4.6.11** Developing and integrating reliable systems of monitoring and evaluation for funds utilized in the DRM process.
- **4.6.12** Adopting appropriate and supporting legislative measures to secure the integrity of primary funding sources thereby preventing funds from being re-allocated for other purposes and to prevent misappropriation and mismanagement of disaster funds.
- **4.6.13** Developing a system and models to assess financial vulnerabilities and needs.
- **4.6.14** Supporting the utilization of financial risk analysis and assessment tools as a basis for the determination of the extent, adequacy and allocation of funds for DRM activities.
- **4.6.15** Utilizing the information from needs assessments in the aftermath of a disaster as the basis for calculating the financial requirement for recovery activities.
- **4.6.16** Appropriately resourcing communities against types and levels of disaster risks.
- **4.6.17** Utilizing private sector funding mechanisms where necessary to fill the gaps that exist for disaster funding.
- **4.6.18** Ultimately, a paradigm shift is required for business to fully integrate the value associated with managing disaster risks and climate adaptation.
- **4.6.19** National and international private sector profiting in Guyana need to consider compensation, as CSR, if their business increases economic or social risks to the population or downgrades resource quality.

- **4.6.20** Designing and reviewing insurance packages, and health and educational access schemes to cover damage due to disasters.
- **4.6.21** Exploring and establishing cost-effective pre-disaster funds, bonds and other financing sources and mechanisms.
- **4.6.22** Exploring and utilizing risk pooling frameworks including the Caribbean Catastrophe Risk Insurance Fund (CCRIF).
- **4.6.23** Developing, promoting and implementing enterprise recovery mechanisms, and a system of remedial measures to address financial impacts of disasters.
- **4.6.24** National Disaster Response and Mitigation Funds: A national Disaster Response fund me be constituted towards meeting expenses for emergency response, relief and rehabilitation. Appropriate ministries may recommend to the finance ministry for dedicated resource allocations for meeting the dire need of immediate recovery efforts.
- **4.6.25** Responsibilities of the Central Ministries and Departments: All central ministries and departments will prepare their DRM Plans including the financial projections and support those plans. Necessary budgetary allocations will be made as a part of the annual action/budgetary plans.
 - *International Financial Humanitarian Assistance* continues to play an important role in DRM in Guyana. Strategies, measures, and initiatives related to international Financial Assistance would include the following.
- **4.6.26** Examining, assessing, and analyzing the motivations and incentives guiding the provision, types and channels of international financial assistance related to DRM.
- **4.6.27** Avoiding the negative impacts associated with anticipation and receipt of international financial assistance related to DRM.

- **4.6.28** Pursuing the effective utilization of international financial assistance in predisaster measures and activities.
- **4.6.29** Strategies, measures, and initiatives in support of international Humanitarian Assistance.
- **4.6.30** Designing and implementing a comprehensive framework for the initiation of international humanitarian assistance.
- **4.6.31** Ensuring that there is effective timing and coordination of international humanitarian assistance.
- **4.6.32** Ensuring that international humanitarian assistance is provided in an equitable, consistent, and predictable manner.
- **4.6.33** Ensuring that core minimum standards and indicators are adopted in all sectors impacted upon by international Humanitarian Assistance, including standards and indicators related to community participation, coordination and collaboration, and assessments.
- **4.6.34** Designing a regime of privileges, immunities, and exemptions for international and regional organizations, institutions, and individuals providing international humanitarian assistance.
- **4.6.35** Supporting a comprehensive framework of instruments and protocols for coordination among entities providing humanitarian assistance.

SECTION 5

5. CROSS CUTTING CAPACITY BUILDING FOR FURTHERING DRM

5.1 CAPACITY DEVELOPMENT:

Capacity Development is an integral part of Disaster Risk Management program and planning which entails human resource development at all levels. This process comprises of awareness generation, education, training, research, and development including upgrading existing knowledge. Capacity development relates to the processes through which people, systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions. Strategies and measures involve those as below.

- **5.1.1** Ensuring that human capacity assessments are conducted among all stakeholders.
- **5.1.2** Utilizing the results of human capacity assessments as the basis of strengthening human capacity to address DRM activities.
- **5.1.3** Developing, implementing, and ensuring training in community-based DRM systems for both community leaders and members of communities. These measures will be based on a sound understanding of local capacities, knowledge and social factors that may affect the way communities respond to initiatives.
- **5.1.4** Assessing, identifying, and focusing the needs of vulnerable communities and groups, including persons with disabilities.
- **5.1.5** Promoting research and development in all areas of DRM.

- **5.1.6** Promoting the recruitment, training, accreditation and participation of volunteers in DRM.
- **5.1.7** Identification of knowledge-based institutions with proven performance and further utilization of the same for better usage of existing knowledge and institutions.
- **5.1.8** Adoption of traditional global best practices and knowledge.
- **5.1.9** Disaster Management training for professionals.
- **5.1.10** Training on various life saving skills.
- **5.1.11** Training of artisans, professional groups in creating cadre of DRM professionals at various specialized fields.
- **5.1.12** Certification courses for future DRM professionals in various preparedness and mitigations approaches and integrating DRM into holistic development and Climate Change Adaptations (CCA).

5.2 KNOWLEDGE MANAGEMENT:

Knowledge Management (KM) is an emerging and ever-changing field. Information and Knowledge Management enhances integration, sharing and delivery of knowledge; it is a cross-cutting – not a stand alone – function. Well-managed knowledge systems contribute to improved performance and outcomes. Knowledge networks are built on shared information, people-to-people connection, and collaboration. Knowledge Management synthesizes the technocentric practices to strengthen the process of informed decision making. There is a need to create a network of knowledge institutions in the field of DRM to share their experiences and knowledge. This will embrace be a wider scope of good

practices and will also ensures learning from past mistakes and challenges. Thus knowledge management will ensure the following.

- **5.2.1** Synergy between science, technology, and application of best practices and lessons learnt and better scientific application of the same.
- **5.2.2** Proper usage of knowledge institutions for specialized research and dissemination.
- **5.2.3** Knowledge dissemination through information and communication technology.
- **5.2.4** Documentation of best practices and sharing those in wider forums and creating knowledge portals for wider dissemination.

5.3 RESEARCH AND DEVELOPMENT:

Research and Development is an integral part of the holistic disaster management. It guides various actions in a timely and concise manner in a cost effective manner. This also enlightens regional and international collaboration needs through networking and sharing of the research outcomes. It works towards ensuring a proactive approach to enhance mutual benefits and synergy through effective research outcomes for timely planning for Disaster Risk Management. Research and development will aim at ensuring the following.

- **5.3.1** Identify trans-disciplinary concerns through talent pool and addressing various concerns at national and sub-national levels.
- **5.3.2** Bring synergy among various key players into holistic planning and effective and comprehensive risk reduction strategy.
- **5.3.3** Assess various short, medium, and longer-term interventions looking into the impact of disaster and ensuring timely and effective risk reduction measures.

5.4 MONITORING AND EVALUATION:

The monitoring and evaluation system adopted for this Policy will be designed to provide feedback to stakeholders, to ensure accountability and transparency, and to facilitate appropriate decisions on future implementation and review of this Policy. Strategies, measures and initiatives to be utilized are described below.

- **5.4.1** Developing, applying, and monitoring robust indicators for Policy objectives, strategies, and initiatives.
- **5.4.2** Using the experience gained from monitoring to inform the assessment of this Policy.
- **5.4.3** Utilizing indicators to measure the outcomes of this Policy and set benchmarks.
- **5.4.4** Ensuring that indicators reflect the effectiveness of policies, strategies, and initiatives and inform further policy development.
- **5.4.5** Utilizing internationally accepted minimum standards, principles, and indicators for monitoring and evaluating specific Policy actions and initiatives, for example in the area of international Humanitarian Assistance.
- **5.4.6** Ensuring effective review and periodic updating of the entire Policy.
- **5.4.7** Utilizing appropriate baselines and monitoring information as a vital component of Disaster Risk Management policies and programs.

SECTION 6

6. THE WAY FORWARD

- 6.1 A robust commitment, and its further policy implementation, is essential in order to build trust and commitment among its population in enforcement of a DRM Policy for Guyana. The enactment of this policy represents a new journey in Disaster management policy, planning and program in Guyana. It is an instrument that hopes to build the overarching edifice within which specific actions need to be taken by various institutions and individuals at all levels.
- 6.2 The policy endeavours to capture, in essence an enabling environment which heralds the onset of a different approach in dealing with disasters that have, in the past taken a heavy toll of lives and properties and crippled economic base of the communities. It also illustrates realization of the fact that disasters not only cause a setback to economic and developmental growth, but also seriously affect the national security environment. Further, in the context of a changing climate, with associated impact, DRM maintains pivotal in maintaining development progress to date, and further advancing economic, social and environmental development goals.
- 6.3 This Policy has articulated the vision for DRM in Guyana, in a constantly evolving world faced with varying and increasing types of disasters. Its implementation will result in an improved quality of life for all Guyanese, through practices, strategies, plans, actions, initiatives and interventions, which are proactive and holistic and involve a multi-hazard oriented approach. This Policy will ensure the involvement and participation of all stakeholders, directed at reducing vulnerability, exposures to hazards and building resilience. The implementation of this Policy will guarantee a protected, safe, secure and disaster resilient Guyana.

- 6.5 The next steps will involve the expression of political commitment in the form of the Foreword to this Policy. The Government through Cabinet members would be made aware of the Policy and their endorsement would be secured.
- 6.6 Ensuring that stakeholders pay particular attention to their roles and responsibilities in DRM in Guyana, circulation of this Policy will be made to all stakeholders for comment and input, particularly on the proposed strategies and initiatives identified in the various sections of the Policy.

ANNEX I

GLOSSARY OF TERMS

- 'Biological hazard'-Process or phenomenon of organic origin or conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Guyana has experienced aspects of these in the past. Examples of biological hazards include outbreaks of epidemic diseases (Malaria), plant or animal contagion (mealy bug), insect or other animal plagues and infestations.
- **'Capacity'**—The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals;
- 'Capacity Assessment' The analysis of current capacities against desired future capacities;
- 'Capacity Development' A concept that extends the term of capacity building to encompass all aspects of creating and sustaining capacity growth over time. It is defined as the process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions;
- 'Climate Smart Disaster Risk Management' An integrated social development and
 disaster risk management approach that aims simultaneously to tackle changing disaster
 risks, enhance adaptive capacity, address poverty, exposure, vulnerability and their structural
 causes and promote environmentally sustainable development in a changing climate;
- 'Disaster' A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources;
- 'Disaster Deficit Index' Measures country risk from a macroeconomic and financial
 perspective according to possible catastrophic events. It requires the estimation of critical
 impacts during a given period of exposure, as well as the country's financial ability to cope
 with the situation;

- 'Disaster Mitigation' The lessening or limitation of the adverse impacts of hazards and related disasters;
- 'Disaster Preparedness' The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions;
- 'Disaster Prevention' The outright avoidance of adverse impacts of hazards and related disasters. Prevention (i.e. disaster prevention) expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance;
- 'Disaster Recovery' Disaster recovery (including rehabilitation and reconstruction) focuses on the decisions and actions taken after a disaster to restore lives and livelihoods, services, infrastructure and the natural environment;
- 'Disaster Response (Relief)' The provision of emergency services and public assistance during or immediately after a disaster. This is recognized as a critical phase of the disaster management cycle. Response aims to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected;
- 'Disaster Risk Management (DRM)' The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster;
- 'Disaster Risk Reduction (DRR)' -The concept and practice of reducing disaster risks
 through systematic efforts to analyze and manage the causal factors of disasters, including
 through reduced exposure to hazards, lessened vulnerability of people and property, wise
 management of land and the environment, and improved preparedness for adverse events;
- **Exposure**' People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses;
- 'Financial assistance' Any form of loan, grant, cash or other monetary disbursement targeted towards DRM efforts.
- 'Gender mainstreaming' A strategy to assess the implications for both men and women, of any planned actions, policies or programmes in all areas and at all levels;
- 'Geological hazard' Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and

economic disruption, or environmental damage. Though limited in past experience, Guyana is vulnerable to geological hazards. Generally geological hazards include internal earth processes, such as earthquakes, landslides, surface collapses, and debris or mud flows. Hydro-meteorological factors are important contributors to some of these processes. Tsunamis are difficult to categorize, although they are triggered by undersea earthquakes and other geological events, they are essentially an oceanic process that is manifested as a coastal water-related hazard;

- 'Hazard' A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
- 'Humanitarian assistance' Describes goods, services provided in DRM activities, designed to alleviate human suffering in emergency situations, independent of race, citizenship, gender and other political consideration
- 'Hydro-meteorological hazard' Process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Hydro-meteorological hazards experienced and which can be experienced in Guyana can include thunderstorms, surges, floods including flash floods, drought, and heat waves. Hydro-meteorological conditions also can be a factor in other hazards such as landslides, fires, epidemics, and in the transport and dispersal of toxic substances;
- 'Local Disaster Index' Identifies the social and environmental risks resulting from more recurrent lower level events (which are often chronic at the local and sub-national levels);
- 'Natural hazard' Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage;
- 'Prevalent Vulnerability Index' A series of indicators that characterize prevalent vulnerability conditions reflected in exposure in prone areas, socioeconomic weaknesses and lack of social resilience in general;
- 'Public awareness' The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards;

- 'Resilience' The ability of a system, community, or society exposed to hazards to resist, absorb, accommodate and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions. Resilience means the ability to "resile from" or "spring back from" a shock. The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organising itself both prior to and during times of need;
- 'Risk' The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions. Conventionally risk is expressed by the notation: Risk = Hazards x Vulnerability;
- 'Risk Management Index' Brings together a group of indicators that measure a country's risk management performance. The Risk Management Index is the first systematic and consistent international technique developed to measure risk management performance;
- 'Risk Transfer' The process of formally or informally shifting the financial consequences
 of particular risks from one party to another whereby a household, community, enterprise or
 state authority will obtain resources from the other party after a disaster occurs, in exchange
 for ongoing or compensatory social or financial benefits provided to that other party;
- 'Sustainable development' Development that meets the needs of the present without compromising the ability of future generations to meet their own needs;
- 'Technological hazard' A hazard originating from technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Several hazards experienced in Guyana can be described under this heading. Examples of technological hazards include industrial pollution, toxic wastes, dam failures, transport accidents, factory explosions, fires, and chemical spills. Technological hazards also may arise directly as a result of the impacts of a natural hazard event;
- 'Vulnerability' The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

ANNEX: II

MAP OF GUYANA

