

Index of Governance and Public Policy in Disaster Risk Management (iGOPP): National Report Belize

Environment, Rural Development and Risk Management Division

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EXECUTIVE SUMMARY

After the devastation caused by Hurricane Mitch in 1998, the need to improve national disaster risk and response was recognized by the Government of Belize (GOB). A core part of the government's response was the ratification of the Disaster Preparedness and Response Act as the primary legislation governing disaster risk management (DRM) in Belize. The Act established the National Emergency Management Organization (NEMO) in 1999 and assigned broad responsibilities for "coordinating the general policy of the government related to the mitigation of, preparedness for, response to and recovery from emergencies and disasters". In so doing, it defined the DRM functions of the National Emergency Coordinator, and some policy instruments including the Disaster Preparedness and Response Policy, National Disaster Preparedness Response Plan and National Emergency Operations Centre. Belize also joined other Caribbean countries in endorsing the Caribbean Disaster Emergency Management Agency (CDEMA) that was established in 1991. Its Disaster Preparedness and Response Act indicates that "The provisions of the Caribbean Disaster Emergency Response Agency Agreement in the Fourth Schedule shall have the force of law in Belize". This document applies the Index of Governance and Public Policy in Disaster Risk Management (iGOPP) to assess the degree to which these recent developments have enhanced the effectiveness of DRM in Belize. Gaps in the policy framework are evaluated and summarized according to categorical measurements of indices, and strategic recommendations are made to strengthen the policies and administrative practices needed to enhance DRM.

The overall finding of this assessment is that, despite recent strides to strengthen the DRM legislative framework, the Disaster Preparedness and Response Act is ambiguous in its definition of inter-agency and regional DRM responsibilities. The Act does not explicitly define DRM functions of other Ministries, Public Utilities Companies or regional management units (Districts, Cities, Towns and Villages). Instead there are informal City Emergency Management Offices (CEMO), District Emergency Management Offices (DEMO) and Village Emergency Management Offices (VEMO) that have been established in practice. This is also the case in other key legislations, including Integrated Water Resources Management (IWRM) and Environmental Impact Assessments (EIA) as these do not sufficiently consider DRM in their scope. Compounding the above is that the country does not have a disaster risk financial strategy document for establishing a policy for reducing its fiscal vulnerability against the occurrence of disasters.

In measuring Belize's capacity to <u>identify risk</u> in policy and legislative development agendas, the lack of explicit definition of inter-agency DRM responsibilities by Belize's successive governments has led to incipient progress in DRM, climate change adaptation (CCA). Other regulations have not yet identified statutory institutions to provide technical assistance, nor have they articulated guidelines at the regional and inter-agency levels for disaster risk analysis and/or to prepare studies on the expected impacts of climate change. In addition, there is no mandate for the creation and maintenance of DRM information systems or databases to document disaster impacts. Existing DRM regulations do not explicitly mention that Districts, Cities, Towns, sectors, or public services companies are responsible for conducting disaster risk analysis in their respective scopes of work.

Even though four sectors - agriculture, housing, transport and energy - have allocated resources for disaster risk reduction activities, Belize lacks regulations to guide the design and construction of

buildings, as well as other policies defining acceptable risk against natural hazards. There is no mandate for public entities to reduce the vulnerability of essential-services buildings or critical infrastructure. Moreover, policies do not define sanctions or penalties for the violation of regulations related to the design, construction or location of public and private infrastructure or buildings.

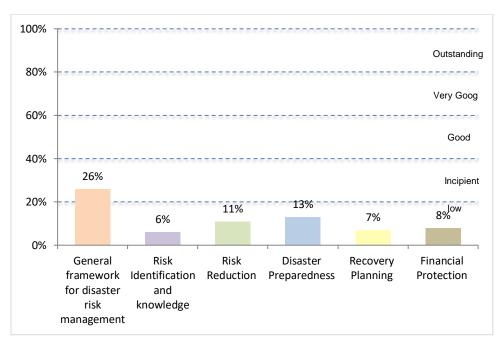
The regulatory framework governing <u>disaster preparedness</u> establishes a National Disaster Preparedness and Response Advisory Committee to set in motion disaster response actions. The Committee is chaired by the Prime Minister and is comprised of members from a wide range of governmental institutions. Their effectiveness is undermined by the aforementioned lack of official definition of responsibilities in DRM regulations as there is no explicit mandate on the responsibility of sectors, ministries and other statutory agencies to formulate emergency or contingency plans, or to operate early warning systems (EWS).

Regarding <u>recovery planning</u>, the Disaster Response and Preparedness Act establishes the National Disaster Preparedness and Response Advisory Committee, which must be consulted with during the development of the "National Disaster Preparedness Response Plan", which includes provisions to mobilize resources for disaster recovery. It is to be noted that this Plan is expected to address the mitigation of, preparedness for, response to, and recovery from emergencies and disasters in Belize.

There is no evidence that DRM regulations include <u>financial protection</u>. Instead, application of the iGOPP found evidence of the existence of risk retention and risk transfer instruments available to the country from binding agreements with regional instruments (CDEMA and the Caribbean Catastrophe Risk Insurance Facility (CCRIF)). In this context, Belize may evaluate additional financial risk retention and transfer instruments for reducing its fiscal vulnerability against the occurrence of disasters.

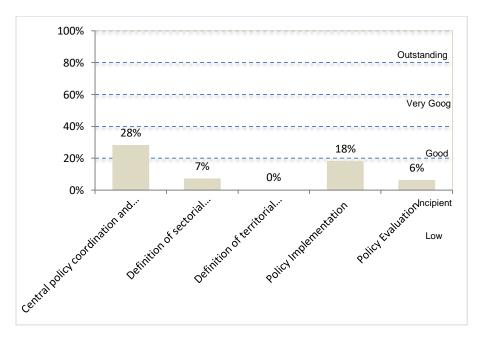
The results of the application of iGOPP in Belize (2017) show an overall level of advancement of 11.82%, which places the country within the "low" range according to the classification system used for this Index. The analysis of the results by components of public policy reform in DRM (see

Graph 1) shows that the highest level of progress corresponds to "General Framework" with 26% compliance, which places it in the "incipient" range. The other components of public policy reform to improve DRM show a "low" level of progress with "risk identification" at 6%, "risk reduction" at 11%, "disaster preparedness" at 13%, "recovery planning" at 7%, and "financial protection" at 8%.



Graph 1. iGOPP Belize Components of Public Policy Reform in DRM

When considering the different DRM processes in the public policy phases, Graph 2 shows "incipient" progress for the "central policy coordination and articulation" (28%). However, progress in the other processes are in the "low" range, with different compliance levels as follows: "definition of sectoral responsibilities" (7%), "definition of territorial responsibilities" (0%), "policy implementation" (18%), and "policy evaluation" (8%).



Graph 2. Public Policy Phases According to the iGOPP as Applied to Belize

Based on what was found with the application of iGOPP in Belize, the following actions to address shortcomings in DRM capacities are recommended:

Short-term

- Develop institutional structure and staffing complement congruent with the roles and responsibilities of NEMO.
- Document DRM regulations that are currently enforced by Belize's Ministries, public services institutions, as well as Districts, Cities and Towns.
- Update and enforce DRM tools such as the "Annual Report of National Coordinator", the "Disaster Preparedness and Response Policy", the "Belize National Hazard Mitigation Policy" and the "National Disaster Preparedness Response Plan" in order to mainstream DRM into inter-agency and territorial regulations.
- Elaborate a disaster risk financial strategy document for establishing a policy for reducing the fiscal vulnerability against the occurrence of disasters.
- Design and implement a financial instrument for identifying the budgetary allocations related to ex ante DRM programs.
- Evaluate the feasibility of creation of a fund for financing or co-financing ex ante DRM activities.
- Evaluate the creation of a fund for financing CCA activities.
- Design and implement an Information System for DRM.
- Encourage a wider spectrum of relevant statutory agencies to allocate resources to DRM activities that can be identified through budgetary instruments.
- Develop teaching and learning materials related to DRM and CCA to effectively integrate these issues into Belize's primary and/or secondary education curriculums.
- Encourage regulations that mandate public entities to reduce the vulnerability of essential buildings and indispensable or critical infrastructure.
- Promote regulations on the mandatory inclusion of disaster risk analysis in all phases of public investment projects.
- Advance legislation that explicitly considers climate change studies as a requirement for the approval of public investments.
- Design and implement a monitoring, vigilance or warning system able to trigger an alarm when natural hazards occur.
- Promote that NEMO evaluates the quality of its performance in the preparation and response processes.
- Evaluate risk transfer instruments, particularly in a scenario which excludes the purchase of insurance policies offered by CCRIF.

Medium- term

- Promote and implement a transparency framework applicable to DRM.
- Mainstream national policy instruments and national plans that guide the planning and allocation of resources that contribute to DRM and CCA (National Development Framework for Belize 2010-2030; National Climate Change Policy, Strategy and Action Plan to Address

- Climate Change in Belize; National Integrated Water Resources Management Policy (Including Climate Change) for Belize".)
- Create regulations and institutional frameworks to provide guidance and technical assistance at territorial and sectoral levels in relation to disaster risk analysis and climate change.
- Promote, in future updates of the national regulations for DRM, the explicit responsibility of the Districts, Cities, Towns, Sectors and Public Utility Companies to undertake disaster risk analyses within the scope of their functions and responsibilities.
- Create regulations and technical guidance tools to identify and reduce hazard exposure in Cities.
- Elaborate a national building code that includes considerations of main natural hazards.
- Promote, in future updates of the national regulations for DRM, the explicit responsibility of the Districts, Cities, Towns, Sectors and Public Utility Companies to ensure disaster risk reduction within the scope of their functions, responsibilities and legal framework.
- Advance the adoption of a strategic framework for post-disaster recovery.
- Promote updates to existing regulations to mandate the evaluation, revision or updating of development plans and land-use planning plans after a disaster.
- Create a national fund for supporting risk management activities, and rules establishing how to use it.
- Continue supporting micro-insurance for private dwellings.
- Design and implement a financial protection structure for the agriculture sector.
- Promote sectoral and public services regulations that establish recovery responsibilities, as well as the obligation to prepare recovery plans within the scope of their competencies.
- Evaluate the establishment of mandatory insurance for critical public infrastructure.

Long-term

• Design and implement a community-centered EWS for climate and meteorological hazards.

I. INTRODUCTION

The Index of Governance and Public Policy in Disaster Risk Management (iGOPP) has been designed to evaluate the formal, and therefore provable, existence of a series of legal, institutional and budgetary conditions that are considered fundamental in order for the processes of disaster risk management to be implemented in a particular country.

The iGOPP does not replace or substitute other indicators related to the subject, but rather complements the different methodologies that exist for the comprehensive evaluation of risk and disaster risk management.

The practical use of the iGOPP consists in identifying the voids in the legal, institutional and budgetary framework that may exist in a particular country. It helps to focus a country's efforts (and the IDB's support, when applicable) on relevant aspects of governance aimed at strengthening the disaster risk management public policy options in the countries of Latin America and the Caribbean.

The iGOPP is a composite or synthetic indicator that allows for verifying whether a particular country possesses the appropriate governance conditions for implementing a public policy for comprehensive disaster risk management. The index makes it possible to quantify to what extent the actions, policies and reforms of the government and its institutions are consistent with the objectives, results and processes of disaster risk management.

The design of the iGOPP is based on two conceptual pillars:

- The Disaster Risk Management conceptual framework and its main processes
- The Governance conceptual framework and public policy phases

Disaster Risk Management (DRM) refers to all the processes to design, apply and evaluate strategies, policies and measures aimed at improving the understanding of disaster risk, to foster disaster risk reduction, retention and transfer, and to promote the continuous improvement of preparedness, response and recovery practices for disaster scenarios, with the explicit objective of increasing human safety, well- being, quality of life, resilience and sustainable development. It includes prospective, corrective and reactive risk management. DRM constitutes an indispensable development policy for ensuring territorial sustainability and security and collective rights and interests, and therefore is intrinsically associated with the planning of safe development and sustainable territorial environmental management in all levels of government.

Within the conceptual framework of the iGOPP, DRM is approached as a set of processes aimed at adopting and implementing policies, strategies and practices to reduce risk and its potential effects and is analyzed based on 6 components that are necessary in order for it to be effectively implemented. The selection of these components is based on the experience of the political reform processes developed by the Bank:

1. General Framework of Governance for DRM (GF): This refers to the regulatory

foundation suitable for the organization and coordination of DRM in each country, which includes both the specific regulations in DRM and the enabling territorial and sectoral regulations that guarantee their viability. Likewise, the availability of resources to implement the DRM processes, and the establishment of adequate data and citizen participation mechanisms, as well as mechanisms for the monitoring, evaluation and follow-up of said processes.

- 2. Risk Identification and Knowledge (RI): This is the process of DRM focused on the knowledge of the origins, causes, scope, frequency and possible evolution, among other aspects, of potentially dangerous phenomena, as well as of the location, causes, evolution and resistance and recovery capacity of the exposed socioeconomic elements. This process includes the preliminary analysis of the consequences and contains both objective and scientific interpretations as well as social and individual perception interpretations. The conceptual framework of the iGOPP references the existence of a regulatory, institutional and budgetary framework that facilitates the continuous development of risk analysis; a tool that makes it possible to identify risk factors and causes and evaluate the probable damages and losses to be caused by natural events.
- 3. Risk reduction (RR): This is the DRM process focused on minimizing vulnerabilities and risks in a society, to avoid (prevention) or limit (mitigation) the adverse impact of hazards, within the broad context of sustainable development. This process includes the prospective and corrective interventions of disaster risk, and in order for it to be appropriately implemented, it is necessary to have a good foundation of data on the risk conditions. The conceptual framework of the iGOPP references the existence of a regulatory, institutional and budgetary framework that enables the timely and appropriate intervention in the causes that generate the conditions of vulnerability.
- 4. <u>Disaster Preparedness</u> (DP): This is the DRM process whose objective is to plan, organize and test the society's response procedures and protocols in the event of a disaster, guaranteeing appropriate and timely assistance to affected persons, and facilitating the normalization of the essential activities in the zone affected by the disaster. Preparedness is carried out through the monitoring of events and the definition of risk scenes, the planning, organization, training, resources and simulation for actions of alert, evacuation, search, rescue, aid, and humanitarian assistance that must be made in case of an emergency. The conceptual framework of the iGOPP references the existence of a regulatory, institutional and budgetary framework that enables the implementation of mechanisms for a quick and appropriate response to an event or imminent event of an emergency situation.
- 5. Post-Disaster Recovery Planning (RC): Ex-ante process focused on preparation for a quick and appropriate reestablishment of acceptable and sustainable life conditions through the rehabilitation, repair or reconstruction of infrastructure, goods and services that were destroyed, interrupted or deteriorated in the affected area, and the reactivation or impulse of the economic and social development of the community under conditions of lower risk than what occurred before the disaster. The conceptual framework of the iGOPP references the existence of a regulatory, institutional and budgetary framework that enables the implementation of

mechanisms to reestablish means to life, basic services and infrastructure in such a way that reduces the improvisation, inefficiency and ineffectively in the post-disaster recovery processes.

6. <u>Financial Protection</u> (FP): This is the DRM process that seeks the optimal combination of financial mechanisms or instruments for the retention and transfer of risk in order to have expost access to timely economic resources, which improves the response capacity to disasters (smaller and recurrent events and large infrequent disasters) and protects the fiscal balance of the State¹. The conceptual framework of the iGOPP references the existence of a regulatory, institutional and budgetary framework that enables the design and implementation of a suitable structure for the retention and transfer of disaster risk.

On the other hand, **Governance** refers to the capacity to govern a public problem. This capacity manifests itself in the ongoing and stable management on behalf of the governments and administrations but also of the sectoral and private stakeholders of a country. As the capacity to govern a public problem increases, there should be an observable increase in the effectiveness of the adopted decisions and implemented policies, thus helping to prevent a greater number of negative consequences that result in the event of a disaster.

Within the conceptual framework of the iGOPP, governance is approached from the perspective of the phases of the public policy process, namely:

A. Inclusion on the governmental agenda and in policy-making

The inclusion on the policy agenda is largely a response to the degree of the public problem and to the political and level of political and social pressure exerted on the institutions. In order for the political leadership and social and economic pressure to give rise to substantive action, it may be necessary for the political realm to make significant progress toward defining the responsibilities of the different stakeholders involved in the analysis process. The iGOPP analyzes the agenda inclusion by verifying the existence of appropriate legal frameworks for DRM, or the inclusion of the subject in sectoral and territorial regulations. The iGOPP analyzes the inclusion on the agenda and formulation of public policy at three levels: (i) Central policy coordination and articulation; (ii) Definition of sectoral responsibilities; and (iii) Definition of territorial responsibilities.

B. Policy Implementation

The iGOPP analyzes evidence of implementation by verifying the actions taken or the availability of resources allocated to the parties responsible for implementing the DRM policy, in its different components and governmental levels.

C. Policy Evaluation

The iGOPP analyzes public policy evaluation by looking at the existence of monitoring and accountability mechanisms, as well as citizen participation and data mechanisms.

¹ Ghesquiere and Mahul, (2010). Financial Protection of the State against Natural Disasters, A Primer, The World Bank, Latin American and the Caribbean Region, Finance and Private Sector Development, Sustainable Development Network, September 2010.

Both dimensions (DRM and Governance/Public Policy) are shown on the iGOPP matrix structure, in 5 columns that analyze the public policy phases, and in 6 rows that analyze the components of the public policy reform process in DRM. This matrix structure is expressed in 30 cells that make up a variable number of binary indicators.

The index scoring goes from 0 to 100 and uses the following classification system:

%	Rating
91 - 100%	Outstanding
71 - 90%	Very good
41 - 70%	Considerable
21 - 40%	Incipient
0 - 20%	Low

Table 1. iGOPP, Classification and Codification

Public Policy Phases	Inclusion on the Governmental Agenda and in Policy-Making			2. Policy implementation	3. Policy evaluation
Components of public policy reform in DRM	Central policy coordination and articulation	Definition of sectoral Responsibilities	Definition of territorial Responsibilities	Evidence of Progress in Implementation	Monitoring, accountability and participation
General Framework of Governance for DRM (GF)	GF-1A	GF-1B	GF-1C	GF-2	GF-3
Risk identification (RI)	RI-1A	RI-1B	RI-1C	RI-2	RI-3
Risk reduction RR	RR-1A	RR-1B	RR-1C	RR-2	RR-3
Disaster preparedness (DP)	DP-1A	DP-1B	DP-1C	DP-2	DP-3
Planning of post disaster recovery (RC)	RC-1A	RC-1B	RC-1C	RC-2	RC-3
Financial Protection (FP)	FP-1A	FP-1B	FP-1C	FP-2	FP-3

II. INSTITUTIONAL FRAMEWORK

The National Emergency Management Organization (NEMO) was established in February 1999², responding to a recognized national need for greater coordination and efficiency in the risk management of and response to disasters, especially after the devastation left by Hurricane Mitch in 1998.

The Disaster Preparedness and Response Act (approved on 21st June 2000) is the primary legislation governing DRM in Belize. The Act established NEMO as a Department of Government, headed by a National Emergency Coordinator. It assigns broad responsibilities for "coordinating the general policy of the government related to the mitigation of, preparedness for, response to and recovery from emergencies and disasters". While the Act is skewed toward preparedness and response, mitigation and recovery are given some consideration in its content, and financial protection issues are considered from a regional (Caribbean) perspective.

The Disaster Preparedness and Response Act assigns broad DRM functions to the National Emergency Coordinator, alongside other policy instruments (Disaster Preparedness and Response Policy; National Disaster Preparedness Response Plan; National Emergency Operations Centre and Special Area Precautionary Plan). However, the Act does not designate DRM functions to other Ministries, Public Utilities Companies or territorial management units (Districts, Cities, Towns and Villages). NEMO's coordination with other public sector institutions is done through official liaison officers designated by Ministries, Public Departments or governmental/private Institutions.

Complementing the Disaster Preparedness and Response Act are some Subsidiary Laws³ related to special issues such as: Threatened Disaster Alert Mobilization regulations; Shelter by-laws and regulations; Hazard Inspector regulations; and National Disaster Preparedness and Response Advisory Committee regulations. However, there are other key documents, without legal country endorsement, such as: Belize's National Hazard Mitigation Policy drafted in 2004, and Belize's National Hazard Mitigation Plan drafted in 2006, both with the support of Government of Belize, the Caribbean Disaster Emergency Response Agency (CDERA) and the Caribbean Development Bank (CDB).

The main goals of Belize's National Hazard Mitigation Policy⁴ are: i) To enhance sustainable social and economic development and environmental management through the integration of hazard risk reduction into national development processes; and ii) To build the capacity of national institutions to more effectively implement programmes and projects to reduce vulnerability of the nation and people to natural and technological hazards. On the other hand, Belize's National Hazard Mitigation Plan's goals are i) To enhance sustainable social and economic development, and environmental management through the integration of hazard risk reduction into national development processes; and ii) To build the capacity of national institutions to more effectively implement programmes and projects to reduce vulnerability of the nation and people to natural and technological hazards.

² UNDP (2009), "Project: Strengthening of Disaster Preparedness and Emergency Response Capacity in Belize"

³ Disaster Preparedness And Response Act - Chapter 145 - Revised Edition 2003 Showing the Subsidiary Laws as at 31st Oct, 2003

⁴ Government of Belize (2004), "Belize's National Hazard Mitigation Policy – Final Draft"

NEMO is currently part of the "Ministry of Transport and NEMO", however in the past, NEMO's National Coordinator reported to other Ministries or directly to the Prime Minister, whereby NEMO's reporting line depended on ministerial arrangements and delegations implemented in each government.

The NEMO National Coordinator works closely with the National Disaster Preparedness and Response Advisory Committee chaired by the Prime Minister with the participation of some Ministries, Departments of Government and statutory bodies. The National Coordinator is the Secretary of this National Advisory Committee. Further, the Disaster Preparedness and Response Act allows NEMO's National Coordinator, in consultation with the National Advisory Committee, to establish committees and subcommittees⁵ "charged with particular responsibilities, whether defined by geographical area or otherwise, in relation to the response to emergencies and disasters in Belize". Although there is no supporting official documentation that mentions what committees or subcommittees have been established, they have been observed in practice and approximately thirteen⁶ national committees have been bibliographically referenced.

The thirteen Operational Committees are as follows⁷:

- 1. Education, Information, Communication and Warning Committee.
- 2. Search, Rescue and Evacuation Committee.
- 3. Restoration of Utilities and Access Committee.
- 4. Transport Committee.
- 5. Housing and Shelter Committee.
- 6. Medical Care and Public Health Committee.
- 7. Relief and Supplies Management Committee.
- 8. Damage Assessment and Needs Analysis Committee.
- 9. Foreign Assistance Committee.
- 10. Human Resources Management Committee.
- 11. Recovery Committee.
- 12. The Environment Committee.
- 13. Mitigation and Infrastructure Work Committee.

National Plans have been elaborated by some National Committees mentioned above, such as the Foreign Assistance Committee Hazard Response Plan and the National Relief and Supplies Management Plan, but there is no documented evidence on their empowerment, enforcement and oversight by the NEMO National Coordinator.

Likewise, territorial DRM organization is not mentioned explicitly in the Disaster Preparedness and Response Act – Chapter 145, neither in other legal documents reviewed, however there are some references regarding 9 District Emergency Committees⁸ representing Belize, Corozal, Orange Walk, Cayo, Stann Creek, Toledo, Belmopan, San Pedro and Caye Caulker.

⁵ Disaster Preparedness and Response Act - Chapter 145 - Revised Edition 2011 (Part III - National Advisory Committee, Policy Review and Plan, Section 6, subsection (5))

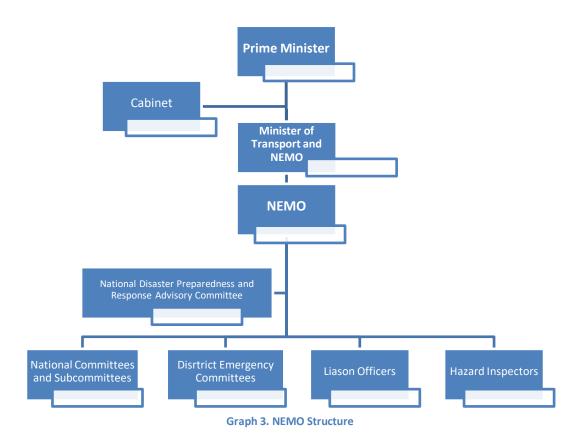
⁶ World bank, GFDRR (2010) Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes Belize

⁷ UNDP (2009) "Project: Strengthening of Disaster Preparedness and Emergency Response Capacity in Belize"

⁸ OAS (circa 2010) "Caribbean Emergency Legislation Project (CELP) - CEPL Profile Belize"

Despite the above-mentioned issues, the Disaster Preparedness and Response Act – Chapter 145 considers under Section 11 that "every Permanent Secretary and Head of a Department of Government shall ensure that there is at all times a public officer of his Ministry or Department designated as the liaison officer" for communication with the NEMO National Coordinator. Other appointments are considered in the Disaster Preparedness and Response Act – Chapter 145 such as hazard inspectors, shelter managers and shelter officers⁹.

Considering the NEMO structure described above, the same is presented in the Graph 3.



Along with other Caribbean countries, Belize is part of the Caribbean Disaster Emergency Management Agency (CDEMA) which was established in 1991. In fact, Section 28 of the Disaster Preparedness and Response Act – Chapter 145 of the Substantive Laws of Belize (Revised Edition 2011) indicates that "the provisions of the Caribbean Disaster Emergency Response Agency Agreement in the Fourth Schedule shall have the force of law in Belize". The fourth schedule presents the full text of the "Agreement Establishing the Caribbean Disaster Emergency Response Agency (CDERA)".

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⁹ See Disaster Preparedness and Response Act – Chapter 145, Section 11, Subsection 2.

III. BREAKDOWN BY COMPONENT

The results of the application of iGOPP in Belize (2017) show an overall level of advancement of 11.82%, which places the country within the "low" range according to the classification system used for this index.

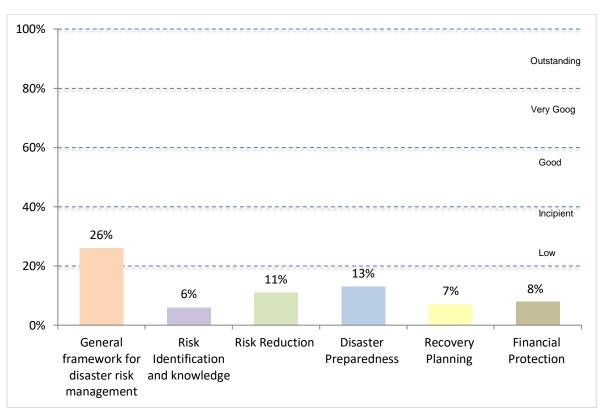
As shown in Table 2 and

Graph 4, the public policy reform component in DRM, which shows the highest level of progress, corresponds to the "General Framework" with 26% compliance, which places it in the "incipient" range. The other components of public policy reform in DRM, i.e. "Risk Identification" (6%), "Risk Reduction" (11%), "Disaster Preparedness" (13%), "Recovery Planning" (7%) and "Financial Protection" (8%), all show a "low" level of progress.

Table 2. Components of public policy reform in DRM according to the iGOPP. Belize (2017)

COMPONENTS OF PUBLIC POLICY REFORM IN DRM		
1	General Governance Framework for DRM	26%
2	Risk Identification and Knowledge	6%
3	Risk Reduction	11%
4	Disaster Preparedness	13%
5	Post-Disaster Recovery Planning	7%
6	Financial Protection	8%

Graph 4. Components of public policy reform in DRM according to the iGOPP. Belize (2017)



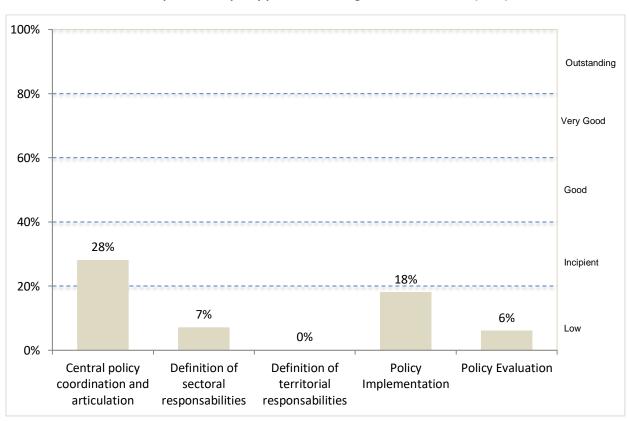
In relation to the results of the consideration of the different processes of DRM in public policy phases, as can be seen in Table 3 and Graph 5, "incipient" progress has been shown for "Central policy coordination and articulation" (28%), reflecting NEMO's leading role and DRM progress made

at the national level. However, progress in other components such as "Definition of sectoral responsibilities" (7%), "Definition of territorial responsibilities" (0%), "Evidence of progress in implementation" (18%), and "Monitoring, accountability and participation" (6%) are in the "low" range.

Table 3. Public policy phases according to the iGOPP. Belize (2017)

	PUBLIC POLICY PHASES		
		200/	
1	Central policy coordination and articulation	28%	
2	Definition of sectoral responsibilities	7%	
3	Definition of territorial responsibilities	0%	
4	Evidence of progress in implementation	18%	
5	Monitoring, accountability and participation	6%	

Graph 5. Public policy phases according to the iGOPP Belize (2017)



The following shows a qualitative analysis of the indicators for each component of DRM

organized by public policy phase: <u>1. Inclusion on the Governmental Agenda and in Policy- Making</u>: 1.1. Central policy coordination and articulation, 1.2. Definition of sectoral responsibilities, 1.3 Definition of territorial responsibilities; <u>2. Policy Implementation</u>: 2.1 Evidence of Progress in Implementation; and 3. Policy Evaluation: 3.1. Monitoring, accountability and participation.

a. General framework of governance for disaster risk management (GF)

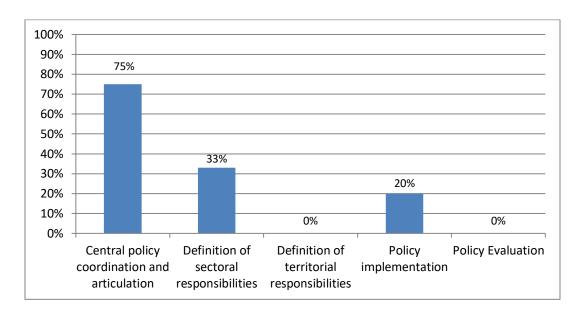
The aspects related to the "General Framework of Governance for DRM" and their inclusions on the governmental agenda are in the "incipient" range, being the highest ranked of the six components of public policy reform in DRM evaluated, with a compliance rate of 26%.

In the analysis of the public policy by phases of this component, as shown in Table 1 and Graph 6, the "Central policy coordination and articulation" stands out, achieving 75% of the evaluated conditions, which corresponds to a "very good" level. Additionally, the components of "Definition of sectoral responsibilities" (33%) and "Definition of territorial responsibilities" (0%) show a "considerable" level of progress. Finally, the components with the lowest levels of progress correspond to "Evidence of Progress in Implementation" (20%) and "Monitoring, accountability and participation" (0%) which are in the "low" range.

Table 4. General Framework for Governance of DRM by Public Policy Phases. Belize (2017)

	GENERAL FRAMEWORK OF GOVERNANCE FOR DRM		
1	Central policy coordination and articulation	75%	
2	Definition of sectoral responsibilities	33%	
3	Definition of territorial responsibilities	0%	
4	Evidence of progress in implementation	20%	
5	Monitoring, accountability and participation	0%	

Graph 6. General Framework for Governance of DRM by Public Policy Phase. Belize (2017)



The following is a description of the most significant achievements of the iGOPP analysis for this component as they relate to the three main public policy phases: 1. Inclusion on the governmental agenda and in policy making, 2. Policy implementation, and 3. Policy evaluation, at the different levels addressed by the iGOPP.

1. Inclusion on the Governmental Agenda and in Policy Making: The country's primary legislation for DRM is contained in the Disaster Response and Preparedness Act Chapter¹⁰ 145 of the Substantive Laws of Belize (Revised Edition 2011), which created NEMO and contains provisions that address DRM comprehensively, including all DRM components.

1.1. Central policy coordination and articulation (GF-1A): The Disaster Response and Preparedness Act Chapter¹¹ 145 also allocates DRM responsibilities to Ministries and their Departments, but it is not explicit about DRM responsibilities at the territorial level. However, in practice, there is the existence of City Emergency Management Offices (CEMO), District Emergency Management Offices (DEMO) and Village Emergency Management Offices (VEMO). Nevertheless, no legislative documents have been found which formally establish these instances and the roles and responsibilities assigned to each.

Likewise, the Disaster Response and Preparedness Act¹² stipulates four DRM policy tools, namely the "Annual Report of National Coordinator", the "Disaster Preparedness and Response Policy Review", the "National Disaster Preparedness Response Plan" and "Emergency Operations for Centers and Shelters".

At the moment of iGOPP application in Belize, NEMO's National Coordinator reported to the Minister of Transport and NEMO. The Prime Minister's leadership on DRM processes comes through an

¹⁰ See indicator GF-1A-1

¹¹ See indicator GF-1A-1

¹² See indicator GF-1A-2

advisory committee, focusing on policy review and being actively exercised during a threatened disaster alert. Thus, the general coordination of national DRM processes does not correspond to the highest policy level. There is evidence that in the past, more specifically in 2000, NEMO's National Coordinator reported directly to the Prime Minister of Belize.

The National Development Framework for Belize 2010-2030¹³, through its Healthy Environment section, recognizes the link between development planning and DRM. Furthermore, the Framework commits to the protection of the population's wellbeing with an ex ante and ex post approach to disasters.

Belize has several plans, strategies and policy documents that had been drafted and elaborated without a legal endorsement, such as the "Belize National Hazard Mitigation Policy" and "National Climate Change Policy, Strategy and Action Plan to Address Climate Change in Belize". As such, these documents were not considered as official regulations to verify some iGOPP conditions related to linkages between DRM, climate change or national development goals.

1.2. Definition of Sectoral Responsibilities (GF-1B): Belize's regulations for integrated water resources management do not consider DRM. Nevertheless, the "National Integrated Water Resources Management Policy (Including Climate Change) for Belize"¹⁴, established climate change adaptation as a purpose of the policy, but this policy does not have a legal endorsement.

On other hand, the Environmental Protection Act Chapter 328¹⁵ of the Substantive Laws of Belize (Revised Edition 2011), states that Environmental Impact Assessments (EIA) are an exercise of disaster preparedness as the regulations and procedures manuals¹⁶ that guide the EIAs explicitly mention the risks to human wellbeing and infrastructure. Furthermore, it links possible disaster risk mitigation measures with the outcomes of EIAs.

1.3 Definition of Territorial Responsibilities (GF-1C): Belize has a system of local government comprising two city councils (Belmopan City and Belize City), seven town councils and a number of village and community councils. The city councils, town councils and village councils each have their own Act. These Acts, with exception of the Belize City Council Act, enable the governing body to conduct territorial management according to their status. However, these regulations do not specifically mention alliances or agreements between territorial management units and make no mention of alliances for DRM.

The National Integrated Water Resources Act¹⁷ includes several key definitions associated with watersheds, such as "aquifer", "Controlled Area", "gathering ground", "ground water", "recharge area" and "water resources", but the management and protection of each of these elements are addressed

¹³ See indicator GF-1A-5

¹⁴ See indicator GF-1B-2

¹⁵ See indicator GF-1B-3

¹⁶ See indicator GF-1B-3

¹⁷ See indicator GF-1C-2

individually, without an explicit reference defining a water resource as a whole as the territorial bases for their management.

2. <u>Policy Implementation</u>: Evidence of progress in implementation (GF-2): There is evidence of resource allocation to NEMO for a program "to provide for actions related to the work of NEMO which is responsible for the mitigation, preparation, response, recovery and rehabilitation of all hazards in accordance with the Disaster and Recovery Act 2000" that includes resources for an Integrated Disaster Risk Management Plan¹⁸.

The iGOPP found that the budget of the program "Climate Change and Sustainable Development" is allocating resources for climate change activities¹⁹.

The country does not have a disaster risk financial strategy document for establishing a policy for reducing its fiscal vulnerability against the occurrence of disasters²⁰. In addition, iGOPP did not find budget categories/instruments for allocating resources to ex ante DRM activities. On the other hand, iGOPP found that there is no fund for financing or co-financing ex-ante risk management activities²¹ or climate change adaptation activities²². Further, the country does not have budgetary instruments to encourage the sectoral²³ or territorial levels²⁴ to implement activities in DRM.

Regarding the source of resources used for buying risk transfer instruments, the budget directly financed the purchase of CCRIF insurance policies²⁵.

3. <u>Policy evaluation:</u> Belize's DRM regulations make no reference to legal, financial, operational or goal oversight, either within NEMO or any other authority. Likewise, no legislative instruments were found establishing a transparency framework applicable to DRM or other governmental actions, nor mechanisms for civil society participation in DRM activities or processes.

There is no evidence of any assessment report on compliance with DRM regulations having been prepared by relevant audit authorities or by NEMO.

b. Risk Identification and knowledge (RI)

The risk identification component shows a "low" level of advancement in Belize, being the lowest achievement of the six components of public policy reform in DRM evaluated by iGOPP, reaching a compliance rate of 6%.

As for the specific progress of the different phases of public policy, shown in

Table 5 and Graph 7, all the public policy phases considered showed a "low" level of progress,

¹⁸ See indicator GF-2-2

¹⁹ See indicator GF-2-4

²⁰ See indicator GF-2-1

²¹ See indicator GF-2-5

²² See indicator GF-2-6

²³ See indicator GF-2-10

²⁴ See indicator GF-2-9

²⁵ See indicator GF-2-7

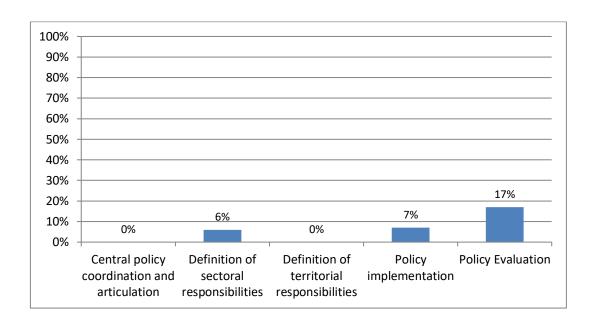
reaching the following levels: "Definition of Sectoral Responsibilities" (6%), "Evidence of Progress in Implementation" (7%) and "Monitoring, accountability and participation" (17%).

Aspects related to "Central policy coordination and articulation" (0%) and "Definition of territorial Responsibilities" (0%) were not verified by any of the indicators considered by the iGOPP.

Table 5. Risk Identification by Public Policy Phase. Belize (2017)

	RISK IDENTIFICATION	
1	Central policy coordination and articulation	0%
2	Definition of Sectoral Responsibilities	6%
3	Definition of territorial Responsibilities	0%
4	Evidence of Progress in Implementation	7%
5	Monitoring, accountability and participation	17%

Graph 7. Risk Identification by Public Policy Phase. Belize (2017)



The following is a description of the most significant achievements of the iGOPP analysis for this component as they relate to the three main public policy phases: 1) Inclusion on the governmental agenda and in policy making, 2) Policy implementation at the different levels addressed by the iGOPP, and 3) Policy evaluation.

1. Inclusion on the Governmental Agenda and in Policy-Making: Regarding the inclusion of the identification and knowledge of disaster risk in the political agenda of the government and in the formulation of the policy, the iGOPP shows little progress in this area. Progress was only reported in the definition of sectoral responsibilities.

In relation to central policy coordination and articulation and the definition of territorial responsibilities in terms of risk identification, the country does not show progress according to the indicators established by the iGOPP. The three specific components of this phase of public policy are discussed below.

1.1. Central policy coordination and articulation (RI-1A): Belize's DRM, climate change or other related regulations do not designate any responsible institution to provide technical assistance and guidelines at territorial and sectoral levels for disaster risk analysis and/or to prepare studies on climate change effects²⁶. Nonetheless, the Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development recently established a National Climate Change Office, but its role and responsibilities needs to be formally defined.

Likewise, iGOPP has not identified any regulation in country that mandates the creation and maintenance of DRM information systems or databases that collect the effects of disasters²⁷.

1.2. Definition of Sectoral Responsibilities (RI-1B): No normative evidence was found that defined

²⁶ See indicator RI-1A-1 and RI-1A-2

²⁷ See indicator RI-1A-3 and RI-1A-4

essential buildings, indispensable or critical infrastructure in the country²⁸. Likewise, the DRM regulations in Belize do not explicitly define the responsibility of the sectors and public services companies to carry out disaster risk analysis within the scope of their competencies²⁹. The iGOPP found evidence of the definition of these responsibilities only for environmental sector regulations³⁰.

The National Meteorological Service of Belize is in charge of climate and meteorological studies, surveillance and forecast, but no regulation was found to establish that climate or hydrological studies must consider the frequency of occurrence associated with the intensity levels of the events³¹. Further, the iGOPP did not identify a national institution in charge of the study of geological threats in the country³².

- 1.3 Definition of territorial Responsibilities (RI-1C): National DRM regulations in Belize do not establish that cities, towns and villages are responsible for disaster risk assessment in their respective territories³³. However, the National Disaster Preparedness Response Plan includes procedures related to disaster preparedness and response for local government. There are no regulatory frameworks that establish the obligation to identify risk areas in cities³⁴.
- 2. <u>Policy implementation:</u> Evidence of progress in implementation (RI-2): The iGOPP found that none of the 10 key sectors of the country allocated resources for disaster risk identification activities³⁵.

Regarding public utilities companies, Belize Telemedia Limited³⁶, in the context of their insurance program, annually conducts a risk analysis on its infrastructure in preparation for inspection meetings of the insurance and reinsurance companies that made their own risk analysis. No evidence of disaster risk analysis was found at other utilities companies. It must be mentioned that in the case of energy companies, the supply and transition of energy in Belize depends on other countries.

The subject of disaster risk was integrated into the prior Social Studies Primary School Curriculum in the lower and middle division (primary or secondary levels). However, during interviews with the Ministry of Education, Youth, Sports and Culture, a newer version of the Primary School Curriculum was referenced (2012), stating an expanded approach to disaster risk subjects, but access to these newer curricula was not possible in order to verify these iGOPP conditions³⁷.

3. Policy evaluation: Although no regulations were identified that required making information on

²⁸ See indicator RI-1B-18

²⁹ See indicator RI-1B-3 and RI-1B-4

³⁰ See indicator RI-1B-8 to RI-1B-17

³¹ See indicator RI-1B-2

³² See indicator RI-1B-1

³³ See indicator RI-1C-1

³⁴ See indicator RI-1C-3

³⁵ See indicators RI-2-3 to RI-2-12

³⁶ See indicator RI-2-15

³⁷ See indicator RI-2-1 and RI-2-2

climate change and risk identification available and establishing mechanisms for that purpose, the Disaster Response and Preparedness Act gives NEMO the responsibility to inform citizens about disaster risk through public information and education campaigns³⁸.

However, evaluated Auditor General's reports showed no evidence of an assessment report regarding disaster risk information generation and its availability.

c. Risk Reduction (RR)

The risk reduction component shows "low" advancement in Belize, reaching a compliance rate of 11%. In relation to the specific progress of the different phases of public policy, shown in

Table 5 and Graph 7, "Evidence of Progress in Implementation" shows the highest level of achievement, meeting 31% of the evaluated conditions, followed by "Monitoring, accountability and participation" (20%) at an "incipient" level.

The "Definition of Sectoral Responsibilities" (5%) reaches a "low" level of progress. Other aspects related to "Central policy coordination and articulation" (0%) and "Definition of territorial Responsibilities" (0%) were not verified by any of the indicators considered by the iGOPP.

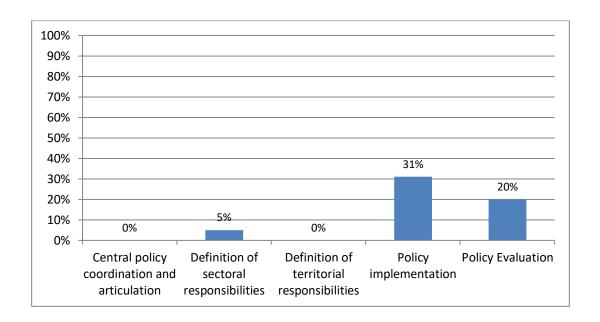
Table 6. Risk Reduction by Public Policy Phase. Belize (2017)

	RISK REDUCTION	
1	Central policy coordination and articulation	0%
2	Definition of Sectoral Responsibilities	5%
3	Definition of Territorial Responsibilities	0%
4	Evidence of Progress in Implementation	31%
5	Monitoring, accountability and participation	20%

Graph 8. Risk Reduction by Public Policy Phase. Belize (2017)

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³⁸ See indicator RI-3-6



The following is a description of the most significant achievements of the iGOPP analysis for this component as they relate to the three main public policy phases: 1) Inclusion on the governmental agenda and in policy making, 2) Policy implementation, and 3) Policy evaluation, at the different levels addressed by the iGOPP.

- 1. Inclusion on the Governmental Agenda and in Policy-Making: The iGOPP shows low advancement in the definition of sectoral responsibilities in disaster risk reduction. Moreover, there are no advances in the other components of this policy, highlighting some regulatory gaps in the effective inclusion of disaster risk reduction on the Governmental Agenda.
- 1.1. Central policy coordination and articulation (RR-1A): The iGOPP did not identify regulations that establish competencies for articulation between disaster risk reduction and climate change adaptation for territorial and sectoral entities. However, the National Environmental Policy and Strategy 2014-2024, which is not a normative document, includes the strategy "4.3 A Resilient Belize" which considers DRM and climate change articulations.

Belize lacks regulations to guide the design and construction of buildings as well as other regulations that define acceptable risk against natural hazards, mandate public entities to reduce the vulnerability of essential buildings or critical infrastructure, or stipulate penalties for the violation of regulations related to the design, construction or location of public and private infrastructure or buildings.

1.2. Definition of Sectoral Responsibilities (RR-1B): There was no evidence that any DRM normative framework assigns responsibilities to sectors and public service companies to reduce the risk of disasters within the scope of their competencies³⁹. There was also no evidence in the normative

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³⁹ See indicator RR-1B-1

frameworks of the sectors considered in the iGOPP that defines their responsibilities in disaster risk reduction matters⁴⁰.

The Environmental Protection Act assigns some disaster risk reduction functions to the Environmental Department as part of its EIA responsibilities, however it does not include specific goals for environmental management related to disaster risk reduction⁴¹.

As noted above, Belize does not have national regulations for building design and construction. Due to the location of Belize, the seismic hazard for the country is low and as such, there is no seismic-resistant design code. The lack of such regulations for design and construction limits risk reduction measures from a prospective risk approach⁴².

Belize does not have a public investment system, and the iGOPP team did not find evidence of normativity that orders the conduct of disaster risk analyses in the pre-investment phase⁴³. On the other hand, no evidence of normativity that mandates a disaster risk analysis in other phases of the project cycle was found⁴⁴. In addition, there was no evidence of normativity that stipulates the conduct of climate change studies in the pre-investment phase⁴⁵. It must be mentioned that all multilateral agencies require the inclusion of DRM and climate change considerations when developing investment projects funded by them, but this practice was not reflected in normativity.

This is in line with IDB's "Strategic Planning, Public Investment Management and Monitoring & Evaluation Systems in Belize" Draft Technical Note (2013) which indicates that "Belize's PRODEV Evaluation Tool reports that "ex-ante investment project evaluation does not exist" and "only those projects endowed with financing from donor countries and multilateral organizations are submitted for this kind of appraisal" ⁴⁶.

1.3 Definition of territorial Responsibilities (RR-1C): The Disaster Response and Preparedness Act only assigns responsibilities to NEMO's National Coordinator, some of which relate to disaster risk reduction. However, this responsibility is not further specified for cities, towns and villages⁴⁷. In the same way, regulations concerning the functions of cities, towns and villages in Belize do not establish competencies for the reduction of risk for disasters⁴⁸.

Belize's regulations on development planning and land use do not consider explicit provisions for the zoning of areas at risk⁴⁹.

The iGOPP did not find national regulations on integral improvement of human settlements and relocation of human settlements located in at risk areas⁵⁰. The existing regulations concern the

⁴⁰ See indicator RR-1B-7 to RR-1B-16

⁴¹ See indicator RR-1B-6

⁴² See indicator RR-1B-3 and RR-1B-5

⁴³ See indicator RR-1B-17

⁴⁴ See indicator RR-1B-19

⁴⁵ See indicator RR-1B-18

⁴⁶ See indicator RR-1B-18

⁴⁷ See indicator RR-1C-1

⁴⁸ See indicator RR-1C-2

⁴⁹ See indicator RR-1C-3

⁵⁰ See indicator RR-1C-4 and RR-1C-5

improvement of houses, mainly through financial support related to housing purchase, construction or repair, and target individual applicants. They do not focus on improving human settlements as part of a comprehensive neighborhood enhancement scheme.

2. <u>Policy Implementation:</u> Evidence of progress in implementation (RR-2): The iGOPP found that only four sectors (environment, agriculture, transport and energy) of Belize's 10 key sectors allocated resources for disaster risk reduction activities⁵¹. Regarding the environmental sector, there was evidence of the allocation of resources under the Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development to the Programs "Climate Change and Sustainable Development" and "Enhancing Belize's Resilience to Adapt to the Effects of Climate Change"⁵².

Regarding the agricultural sector, there was evidence of the allocation of resources under the Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development to the Programs "Climate Change and Sustainable Development" and "Enhancing Belize's Resilience to Adapt to the Effects of Climate Change" 53.

Regarding the transport sector, there was evidence of the allocation of resources under the Ministry of Works, Transport and NEMO for the Program "Flood Mitigation Project (Belize City)" and "Flood Relief Program". In addition, the "Progress Report for Fourth Road (Santa Elena/San Ignacio By-Pass) Project" indicates that "the Santa Elena/San Ignacio Bypass project comprises the improvement of approximately 3.2 km of existing highways in the twin towns of San Ignacio and Santa Elena, construction of approximately 1km of new highway on a fill embankment between the northern end of Joseph Andrews Drive in San Ignacio and the Macal River, construction of a new three span high level bridge over the Macal River; and the construction of a flood relief channel and river bank scour protection work.... Flood alleviation measures are included in the project to reduce to an acceptable level the afflux, caused by the construction of the new road embankment, and to ensure that the increase in flood flow velocity through the main river channel will not cause excessive scouring of the river bed or erosion to the river banks"⁵⁴.

Regarding the energy sector, there is evidence of resource allocation under the Ministry of Finance, Public Service, Public Utilities and Energy for the Program "Energy Resilience for Climate Adaptation Project (ERCAP)"⁵⁵.

There is no evidence on the allocation of resources to perform disaster risk reduction activities by Ministry of Education, Youth, Sports and Culture. It is important to mention that the country does allocate budgetary resources to NEMO to perform disaster risk reduction activities at the school level for "increasing community awareness regarding vulnerability reduction actions in schools".

Regarding public utilities companies, iGOPP did not find evidence about the allocation of resources to risk reduction activities by any of the public utilities companies. It is important to mention that in the case of energy companies, the supply and transition of energy in Belize depends on other

⁵¹ See indicators RR-2-3 to RR-2-6, RR-2-8 and RR-2-9

⁵² See indicator RR-2-1

⁵³ See indicator RR-2-2

⁵⁴ See indicator RR-2-7

⁵⁵ See indicator RR-2-10

countries⁵⁶.

3. <u>Policy evaluation:</u> The Environmental Protection Act provides specific criteria and penalties for any person polluting water resources or marine life, disposing of man-made structures without a permit, or failure to carry out EIAs⁵⁷.

The regulations that control the formulation of development planning and land use, as well as those related to watershed planning and management, do not assign responsibilities for monitoring, evaluation and updates of these plans⁵⁸. In the absence of regulations for the inclusion of disaster risk reduction in the planning and land use definition processes, regulations governing their monitoring, evaluation and update cannot be established.

Further, considering available Auditor General's reports, no evidence has been found of an assessment report regarding the implementation of risk reduction measures during the construction phase of infrastructure⁵⁹.

d. Disaster preparedness (DP):

The disaster preparedness component shows "low" advancement in Belize, corresponding to the second highest achievement of the six components of public policy reform in DRM evaluated by iGOPP with a compliance rate of 13%. This shows an emphasis on reactive risk management.

In the analysis of the public policy by phases of this component, as shown in Table 1 and Graph 6, the "Central policy coordination and articulation" achieves 38% of the evaluated conditions, and "Evidence of Progress in Implementation" (27%), both reaching an "incipient" level.

On the other hand, aspects related to "Definition of Sectoral Responsibilities" (0%), "Definition of Territorial Responsibilities" (0%) and "Monitoring, accountability and participation" (0%) were not verified by any of the indicators considered by the iGOPP.

 $^{^{\}rm 56}$ See indicators RR-2-11 to RR-2-13

⁵⁷ See indicator RR-3-1

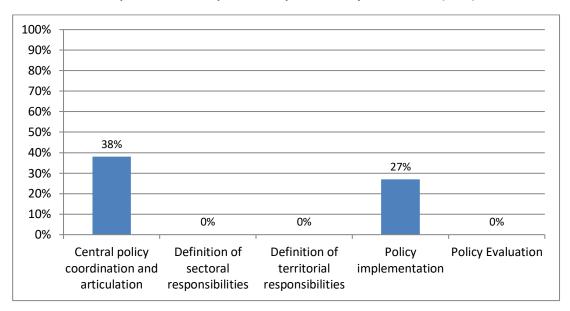
⁵⁸ See indicators RR-3-3 and RR-3-4

⁵⁹ See indicator RR-3-5

Table 7. Disaster Preparedness by Public Policy Phase. Belize (2017)

	DISASTER PREPAREDNESS	
1	Central policy coordination and articulation	38%
2	Definition of Sectoral Responsibilities	0%
3	Definition of Territorial Responsibilities	0%
4	Evidence of progress in implementation.	27%
5	Monitoring, accountability and participation	0%

Graph 9. Disaster Preparedness by Public Policy Phase. Belize (2017)



The following is a description of the most significant achievements of the iGOPP analysis for this component as they relate to the three main public policy phases: 1) Inclusion on the governmental agenda and in policy making, 2) Policy implementation, and 3) Policy evaluation, at the different levels addressed by the iGOPP.

- 1. Inclusion on the Governmental Agenda and in Policy-Making: This policy phase shows "incipient" advancement in Belize, where the main policy developments are in the area of central policy coordination and articulation for this DRM process. The three policy phases are analyzed based on the iGOPP findings.
- 1.1. Central policy coordination and articulation (DP-1A): The Disaster Response and Preparedness Act establishes a National Disaster Preparedness and Response Advisory Committee, chaired by

the Prime Minister and comprising members from a wide range of governmental institutions⁶⁰. While the Act recognizes the Committee, it does not specify its roles and responsibilities to enable it to conduct inter-institutional preparedness and response processes.

The mentioned Act also considers that a threatened disaster alert requires firstly, to convene the National Disaster Preparedness and Response Advisory Committee. However, the scope of outlined actions is solely limited to informing the Prime Minister and do not provide guarantees of the existence of a clear mechanism for crisis management⁶¹.

On the other hand, the Disaster Response and Preparedness Act empowers NEMO's National Coordinator to annually produce a National Disaster Preparedness Response Plan which calls for the establishment of procedures related to disaster response and preparedness. Furthermore, the National Coordinator shall establish and maintain a National Emergency Operation Center⁶². This Act clearly stipulates the requirements for the execution of damage assessments and needs analysis in case of disaster. However, no other provisions mandate that humanitarian assistance actions must be based on these assessment and analysis results⁶³.

The iGOPP did not find DRM regulations that indicate that drills or simulations have to be planned and carried out at national level; however, some drills were mandated in cities and sectors⁶⁴.

The Belize Constitution Act includes provisions for the declaration of a state of emergency by the Prime Minister, including the definition of an emergency, authorized bodies to trigger such and the activation of temporary regime measures⁶⁵.

While the Disaster Response and Preparedness Act requires that the National Disaster Preparedness Response Plan contain "procedures for cooperation with international organizations and governments of countries outside Belize during a threatened disaster alert or in the event or the aftermath of a disaster emergency", iGOPP did not find evidence of this within the National Disaster Preparedness Response Plan in order to validate regulations and mechanisms for the coordination of international assistance and mutual help in case of disaster⁶⁶.

1.2. Definition of Sectoral Responsibilities (DP-1B): There was no evidence within DRM regulations of an explicit mandate regarding the responsibility of the sectors, Ministries and entities providing public services to formulate emergency or contingency plans or regarding the operation of early warning systems⁶⁷. As such, none of the 10 sectors prioritized by the iGOPP have defined in their sectoral regulatory frameworks their responsibility to carry out disaster preparedness activities⁶⁸. Further, the iGOPP could not verify that the country has regulations that establish compulsory

⁶⁰ See indicator DP-1A-1

⁶¹ See indicator DP-1A-2

⁶² See indicator DP-1A-3

⁶³ See indicator DP-1A-6

⁶⁴ See indicator DP-1A-7

⁶⁵ See indicator DP-1A-4

⁶⁶ See indicator DP-1A-8

⁶⁷ See indicators DP-1B-1 and DP-1B-2

⁶⁸ See indicators DP-1B-3 to DP-1B-12

emergency response plans in case of oil spills, combustion or pollution, nor emergency plans related to transportation, handling or processing of hazardous substances⁶⁹.

1.3 Definition of Territorial Responsibilities (DP-1C): The iGOPP found no evidence of regulations governing emergency preparedness and response or coordination mechanisms in districts, cities, towns or villages. However, there were references concerning the existence of DEMOs, CEMOs, and VEMOs, purportedly bestowed with disaster preparedness and response coordination powers. Nonetheless, regulations creating and defining these structures could not be identified⁷⁰.

Further, there are no regulations establishing subsidiary assistance criteria between the different government levels, stipulating competencies in disaster preparedness, or mandating the formulation of emergency plans at different territorial levels⁷¹.

2. <u>Policy Implementation</u> - *Evidence of progress in implementation (DP-2):* There is evidence of resource allocation to NEMO for a Program "to provide for actions related to the work of NEMO which is responsible for the mitigation, preparation, response, recovery and rehabilitation of all hazards in accordance with the Disaster and Recovery Act 2000" that includes resources for hurricane preparedness⁷².

Regarding allocation of resources to the national firefighter service for disaster preparedness and to forest fire prevention and control, iGOPP found allocation of resources for the National Fire Services whose program objective is "to provide enhanced services through quick response teams with equipped firefighting equipment, readily available to render necessary service to save lives and property". Key programs, strategies and activities include "[equipping] the department with more efficient equipment for their safety and increased performance of the department, [increasing] education campaigns to the public and training in fire prevention and safety ...". In addition, iGOPP found that the mentioned Program includes an output indicator related to the number of bush fires.

The iGOPP did not find evidence about the existence of emergency, contingency or continuity of operations or an equivalent plan for the 10 key sectors of the country⁷³. Regarding allocation of resources to disaster preparedness, of the 10 key sectors, only the Ministry of Works, Transport and NEMO allocates resources for "*Hurricane Preparedness (Conferences & Workshop)*".

The iGOPP found that Belize Telemedia Limited has a Disaster Management Plan which was revised in June 2016⁷⁴. No comprehensive evidence about the mentioned plans was found for Belize Water Services Limited⁷⁵ and Belize Electricity Limited⁷⁶.

⁶⁹ See indicators DP-1B-16 and DP-1B-17

⁷⁰ See indicator DP-1C-1

⁷¹ See indicators DP-1C-2 to DP-1C-4

⁷² See indicator DP-2-1

⁷³ See indicators DP-2-4 to DP-2-12

⁷⁴ See indicator DP-2-15

⁷⁵ See indicator DP-2-13

⁷⁶ See indicator DP-2-14

3. <u>Policy evaluation</u>: The iGOPP did not find regulations establishing civil society, social and non-governmental organization participation mechanisms in the disaster preparation⁷⁷ activities, neither evidence on community participation mechanisms activated during a nationally declared disaster situation where international assistance was requested⁷⁸.

Further, considering available NEMO and Auditor General's reports, no evidence has been found about assessment reports in relation to disaster preparedness⁷⁹.

The Disaster Response and Preparedness Act considers the "Disaster Preparedness and Response (Shelter) Regulations", which outlines a series of shelter-related dispositions. However, it refers to the responsibilities of sheltered persons and not to their rights. In fact, no explicit reference or similarity exists with any norms or standards normally used within the humanitarian sector. Therefore, no evidence was found on the adoption of quality standards for assistance related to water, sanitation, nutrition and temporary shelter.

e. Recovery Planning (RC)

Recovery planning shows "low" advancement in Belize, reaching a compliance rate of 7%. This is partly explained by the fact that processes related to recovery planning are relatively incipient in all countries of the region, and in many cases, the recovery planning actions undertaken by countries are not yet reflected in frameworks or national and institutional regulations.

In the analysis of the public policy by phases of this component, shown in

Table 5 and Graph 7, the "Central policy coordination and articulation" (38%) corresponds to an "incipient" level of progress.

The other aspects related to "Definition of Sectoral Responsibilities" (0%), "Definition of territorial Responsibilities" (0%), "Evidence of progress in implementation" (0%) and "Monitoring, accountability and participation" (0%) were not verified by any of the indicators considered by the iGOPP and reach a "low" level of progress.

⁷⁷ See indicator DP-3-1

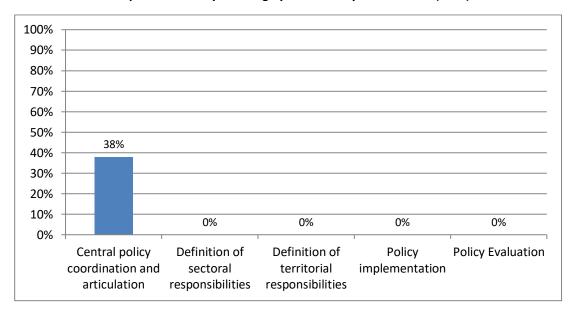
⁷⁸ See indicator DP-3-6

⁷⁹ See indicators DP-3-2 to DP-3-2

Table 8. Recovery Planning by Public Policy Phase. Belize (2017)

RECOVERY PLANNING		
1	Central policy coordination and articulation	38%
2	Definition of Sectoral Responsibilities	0%
3	Definition of Territorial Responsibilities	0%
4	Evidence of progress in implementation.	0%
5	Monitoring, accountability and participation	0%

Graph 10. Recovery Planning by Public Policy Phase. Belize (2017)



The following is a description of the most significant achievements of the iGOPP analysis for this component as they relate to the three main public policy phases: 1) Inclusion on the governmental agenda and in policy making, 2) Policy implementation, and 3) Policy evaluation, at the different levels addressed by the iGOPP.

- 1. Inclusion on the Governmental Agenda and in Policy-Making: Only the aspect of "Central policy coordination and articulation" shows a level of "incipient" progress for this phase of policies. Therefore, there is a wide range of actions to continue advancement in aspects considered in these policy phases, which are presented below.
- 1.1. Central policy coordination and articulation (DP-1A): The National Coordinator, as NEMO's Director, is defined in the Disaster Response and Preparedness Act as responsible for disaster recovery in Belize⁸⁰. The same regulation establishes the National Disaster Preparedness and

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⁸⁰ See indicator RC-1A-1

Response Advisory Committee, which must be consulted during the development of the National Disaster Preparedness Response Plan, which makes provisions to mobilize resources for disaster recovery⁸¹. It is notable that this plan is expected to address the mitigation of, preparedness for, response to, and recovery from emergencies and disasters in Belize⁸².

The iGOPP did not find regulations that establish the recovery of livelihoods as a purpose of postdisaster recovery, or mandate studies on disaster causes to guide recovery processes in order to prevent the rebuilding of risk conditions⁸³.

- 1.2. Definition of Sectoral Responsibilities (DP-1B): For the 10 sectors considered in the iGOPP, no normative evidence was found that defines the sectoral responsibility to carry out recovery preparation activities within the scope of their competencies⁸⁴.
- 1.3 Definition of territorial Responsibilities (DP-1C): The iGOPP did not identify regulations which guide the evaluation, revision or updating of development plans or land management plans after a disaster, in the affected districts, cities and towns.
- 2. <u>Policy implementation:</u> Consistent with the fact that it was not possible to identify regulations that require the formulation of post-disaster recovery plans, it was not possible to obtain evidence that any of the 10 key sectors considered by the iGOPP have elaborated ex post disaster recovery plans⁸⁵.
- 3. <u>Policy evaluation</u>: No national regulations establishing the participation of civil society in post-disaster recovery processes⁸⁶ were identified, neither information mechanisms for the affected population or community participation for recovery in any of the last disaster situations officially declared at the national level⁸⁷.

f. Financial Protection (FP):

Belize's iGOPP results for the FP component evidenced "low" advancement with 8% of the fulfilled conditions, recording the lowest achievement of the six components of public policy reform in DRM evaluated by iGOPP.

According to Table 9 and Graph 11, the analysis evidenced a heterogeneous advance in the different phases of public policy. The component "Evidence of progress in implementation" achieves 23% of the evaluated conditions, which corresponds to an "incipient" level. The other components are in the "low" range, where "Central policy coordination and articulation" shows an advance of

82 See indicator RC-1A-6

⁸¹ See indicator RC-1A-3

⁸³ See indicators RC-1A-2 and RC-1A-4

⁸⁴ See indicators RC-1B-1 to RC-1B-10

⁸⁵ See indicators RC-2-1 to RC-2-10

⁸⁶ See indicator RC-3-1

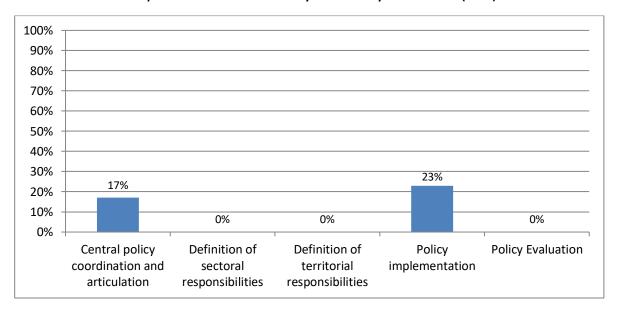
⁸⁷ See indicators RC-3-3 and RC-3-4

17% and "Definition of sectoral responsibilities" (0%), "Definition of territorial responsibilities" (0%) and "Monitoring, accountability and participation" (0%) were not verified by any of the indicators considered by the iGOPP.

Table 9. Financial Protection by Public Policy Phase. Belize (2017)

FINANCIAL PROTECTION		
1	Central policy coordination and articulation	17%
2	Definition of Sectoral Responsibilities	0%
3	Definition of Territorial Responsibilities	0%
4	Evidence of progress in implementation.	23%
5	Monitoring, accountability and participation	0%

Graph 11. Financial Protection by Public Policy Phase. Belize (2017)



The following is a description of the most significant achievements of the iGOPP analysis for this component as they relate to the three main public policy phases: 1) Inclusion on the government agenda and in policy making, 2) Policy implementation, and 3) Policy evaluation, at the different levels addressed by the iGOPP.

1. Inclusion on the Governmental Agenda and in Policy-Making: The iGOPP reveals some progress and identifies some gaps in this policy phase. The relevant aspects of the analysis are mentioned for the three levels evaluated.

1.1. Central policy coordination and articulation (FP-1A):

No evidence of financial protection as component of DRM was found in the Disaster Preparedness and Response Act. However, the mentioned Act includes provisions for participation in CDEMA

which has an Emergency Assistance Fund to be "...used solely to defray expenses incurred in connection with the rendering of assistance in the event of a disaster occurring in a Participating State". Consequently, Belize may access a fund with provisions for financing emergent expenses in disaster situations⁸⁸. Notably, there are no legal provisions for establishing the annual percentage of resources to allocate to the Emergency Assistance Fund⁸⁹.

Moreover, no evidence was found regarding development funds authorized to finance disaster management activities⁹⁰. Neither was there evidence of normativity that mandates the formulation of a disaster risk retention and transfer structure⁹¹.

The iGOPP also identified the absence of a mandate related to the estimation of catastrophic risk reserves for non-homogenous/special assets and homogenous/uniform assets to be sustained by probabilistic risk assessment models defined or certified by the sector's regulating entity⁹².

1.2. Definition of Sectoral Responsibilities (FP-1B):

There is no progress in this policy phase. The iGOPP evidenced that there are no regulations that establish the State's fiscal responsibility surrounding disaster risk⁹³, nor did it identify regulations that assign competencies to the Ministry of Finance for financial protection against disaster risk⁹⁴. In addition, there are no regulations that establish that sectoral entities must cover their public assets with insurance policies⁹⁵, nor regulations on incentives for private housing insurance against disaster risk⁹⁶. It is important to mention that the Office of the Supervisor of Insurance and Private Pensions mentioned that by modifying fees to be paid for micro-insurance business are facilitating private initiatives of insurance companies that offer micro-insurance policies to the low-income population.

1.3 Definition of territorial Responsibilities (FP-1C):

There is no progress in this policy phase. iGOPP evidenced that there are no regulations that establish that territorial entities must cover their public assets with insurance policies⁹⁷, neither are there regulations that mandate the implementation of structures for financial protection from disasters at the territorial level⁹⁸. In addition, the country's capital city does not have a fund for financing or co-financing disaster management activities⁹⁹.

2. Policy implementation: Evidence of progress in the implementation (FP-2):

Regarding risk retention instruments, Belize may access the Emergency Assistance Fund of CDEMA. In addition, resources of the budget are used in case of the occurrence of disasters for

⁸⁸ See indicator PF-1A-1

⁸⁹ See indicator F-1A-2

⁹⁰ See indicator F-1A-6

⁹¹ See indicator F-1A-3

⁹² See indicators F-1A-4 and F-1A-5

⁹³ See indicator F-1B-1

⁹⁴ See indicator F-1B-2

⁹⁵ See indicator F-1B-3

⁹⁶ See indicator F-1B-4

⁹⁷ See indicator F-1C-1

⁹⁸ See indicator F-1C-2

⁹⁹ See indicator F-1C-3

attending the attention, rehabilitation and reconstruction phases. In addition, the World Bank loan to Belize for a Climate Resilient Infrastructure Project includes a "Contingent Emergency Response" component that "will provide support for immediate response to an eligible crisis or emergency, as needed"¹⁰⁰.

Additionally, iGOPP found that Belize does not have a national fund for financing emergency expenses in disaster situations, nor a fund for financing or co-financing risk management activities¹⁰¹.

Regarding risk transfer instruments, Belize previously bought the insurance policy offered by CCRIF, but the iGOPP mission (June 2017) was informed that in 2017, the government decided not to continue buying the mentioned insurance policy. Notably, during the decision process for buying the mentioned insurance policy, the government used estimations of Probable Maximum Loss (PML) from catastrophic events for different return periods¹⁰² and the expected annual losses elaborated by CCRIF¹⁰³.

As previously mentioned, the insurance of public assets is not mandatory in Belize. As such, iGOPP did not find evidence of the existence of standards for the insurance of public assets ¹⁰⁴, concessions ¹⁰⁵, or guidelines in this regard for the territorial entities ¹⁰⁶.

Moreover, neither Belmopan nor Belize City has a financial protection structure in the event of disaster¹⁰⁷. Additionally, they do not have a disaster risk transference instrument for a portfolio of assets within its fiscal responsibility. Resources for supporting the occurrence of disasters at the territorial level will come from territorial budgets, but the majority from the budget at the national level.

The other financial instruments used by the country are grants and loans.

The iGOPP shows that there are no ex ante financial instruments to encourage economic recovery in areas affected by disasters¹⁰⁸. Further, iGOPP evidences the non-existence of a financial protection structure for the agricultural sector¹⁰⁹. Currently, private companies are evaluating the feasibility of offering micro-insurance to small farmers, but data is a restriction for developing this insurance product.

3. Policy evaluation: Monitoring, Accountability and Participation (FP-3)

iGOPP reveals the absence of control, accountability and participation in this component as no indicator has been fulfilled. In other words, there is an absence of mechanisms for assessing compliance with financial protection mechanisms, the use of the probabilistic risk assessment model

¹⁰⁰ See indicator F-2-11

¹⁰¹ See indicator F-2-7

¹⁰² See indicator F-2-2

¹⁰³ See indicator F-2-3

¹⁰⁴ See indicator F-2-4

¹⁰⁵ See indicator F-2-5

¹⁰⁶ See indicator F-2-7

¹⁰⁷ See indicator F-2-1

¹⁰⁸ See indicator F-2-14

¹⁰⁹ See indicator F-2-15

in the rate estimation of insurance policies (because it is not mandated by the regulations), and the application of financial protection assessment.

IV. CONCLUSIONS

The following summarizes some key elements of the analysis of iGOPP results for Belize:

- 1. The key DRM regulation is the Disaster Preparedness and Response Act which describes functions and responsibilities of NEMO's National Director as well as considers some DRM policy tools, but it falls short of setting up a national DRM system that considers and allocates roles and responsibilities to different sectors, public institutions and local governments. Moreover, responsibilities within DRM regulations, as well as regulations from other sectors, allocate responsibilities to the National Coordinator instead of NEMO as an institution. Consequently, NEMO's organizational structure under the National Coordinator is ambiguous and is not conducive to the establishment of a functional organizational structure that is able to comply with all its responsibilities.
- 2. The reporting responsibilities of the National Coordinator regarding overall DRM programming are not clearly defined. The regulatory framework currently has the National Coordinator reporting to the Minister of Transport and NEMO, to the Disaster Preparedness Advisory Committee, and to the Prime Minister, depending on the circumstances.
- There are few DRM regulations and DRM technical guidance available for public consultation and guidance, which hinders DRM mainstreaming into public and private sector institutions.
- 4. Several key draft documents related to DRM and climate change have been developed, however these need to be made official by Belizean authorities in order to guide planning processes and resource allocation.
- 5. The Disaster Preparedness and Response Policy Review and the National Disaster Preparedness Response Plan, both mentioned in the Disaster Preparedness and Response Act – Chapter 145, have not been recently updated and are not linked with other sectoral policies and plans.
- 6. The absence of a centralized risk information system, sourcing existing information from all sectors and driving the different sectoral planning processes and public investment projects, prevents a comprehensive approach to DRM.
- NEMO's Operational Committees are focused on disaster preparedness and response but must expand their scope of work to other DRM processes; namely risk identification and risk reduction at a minimum.

8. Concerning the financial protection component, there is no evidence of financial protection as part of DRM regulations. The iGOPP found evidence of the existence of risk retention and risk transfer instruments available to the country from binding agreements with regional instruments (CDEMA and CCRIF). In this context, Belize may evaluate additional financial risk retention and transfer instruments for reducing its fiscal vulnerability against the occurrence of disasters.

V. RECOMMENDATIONS FOR POLITICAL REFORM

DRM Component	Short-term (1-4 years)	Medium- term (4-8 years)	Long-term (8+ years)
a. General governance	framework for L	ORM (GF)	
Promote and implement a transparency framework applicable to DRM.		Х	
Develop an institutional structure and adequately staff NEMO, according to its role and responsibility.	Х		
Collect DRM regulations in force in the country applicable to Ministries, public services institutions, as well as Districts, Cities and towns.	Х		
Update and enforce DRM tools such as "Annual Report of National Coordinator", the "Disaster Preparedness and Response Policy"; the "Belize National Hazard Mitigation Policy" and the "National Disaster Preparedness Response Plan" in order to mainstream DRM into sectoral and territorial regulations.	X		
Give normative character to national policy instruments and national plans that guide the planning and allocation of resources that contribute to DRM and CCA. Such as: National Climate Change Policy, Strategy and Action Plan to Address Climate Change in Belize; National Integrated Water Resources Management Policy (Including Climate Change) for Belize.		X	
Elaborate a disaster risk financial strategy document for establishing a policy for reducing the fiscal vulnerability against the occurrence of disasters.	Х		
Design and implement a budgetary instrument for identifying the budgetary allocations related with ex ante DRM programs	Х		
Evaluate the creation of a fund enabled for financing or co-financing ex ante DRM activities	Х		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 years)	Long-term (8+ years)
a. General governance	framework for l	DRM (GF)	
Evaluate the creation of a fund enabled for financing climate change adaptation activities	Х		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 years)	Long-term (8+ years)
b. Risk identification	and knowledg	e (RI)	
Create regulation and institutional framework to provide guidance and technical assistance at territorial and sectoral levels about disaster risk analysis and climate change.		Х	
Design and implement an Information Systems for Disaster Risk Management, which includes set up and maintenance of database on disasters damage.	Х		
Design and implement a community centered Early Warning System (EWS) for climate and meteorological hazards.			х
Promote, in future updates of the national regulations of DRM, the explicit responsibility of the Districts, Cities and Towns, Sectors and Public Utility Companies to undertake the disaster risk analysis within the scope of their functions and responsibilities.		X	
Create regulations and technical guidance tools to identify and reduce hazard exposure in cities.		Х	
Elaborate teaching and learning materials regards DRM and CC to integrate effectively these issues in the Belize's educational curricular to primary and/or secondary levels.	Х		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 years)	Long-term (8+ years)
b. Risk identification	n and knowledg	e (RI)	
It is recommended that sectors will allocate resources to disaster risk identification activities that can be identified through budgetary instruments	Х		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 years)	Long-term (8+ years)
c. Risk Red	uction (RR)		
Encourage regulations that mandate public entities to reduce the vulnerability of essential buildings, indispensable or critical infrastructure.	Х		
Elaborate a national building code, that includes considerations to main natural hazards in Belize.		Х	
Promote, in future updates of the national regulations of DRM, the explicit responsibility of the Districts, Cities and Towns, Sectors and public utility companies to assume the disaster risk reduction within the scope of their functions, responsibilities and legal framework.		X	
Promote regulations on the mandatory inclusion of disaster risk analysis in all the phases of the public investment project	х		
Promote legislation that mandates to consider climate change studies as requirements for the approval of public investments	Х		
It is recommended that sectors will allocate resources to disaster risk reduction activities that can be identified through budgetary instruments	Х		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 ears)	Long-term (8+ years)
d. Disaster prep	paredness (DP))	
Promote, in future updates of the national regulations of DRM, the explicit responsibility of the Districts, Cities and Towns, Sectors and Public Utility Companies to develop emergency or contingency plans, as well as other emergency preparedness initiatives related.		X	
Design and implement a monitoring, vigilance or warning system able to trigger an alarm when natural hazard occurs.	Х		
It is recommended that sectors will allocate resources to response preparedness activities that can be identified through budgetary instruments and that they will develop sectoral contingency plans in the event of disasters	Х		
Promote the NEMO to carry out evaluations on the quality of its performance in the preparation and response processes.	Х		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 ears)	Long-term (8+ years)
e. Recovery F	Planning (RC)		
Promote the adoption of a strategic framework for post-disaster recovery	Х		
Promote sectoral and public services regulations that establish recovery responsibilities, as well as the obligation to prepare recovery plans within the scope of their competencies.		Х	
Promote updates regulations to mandate the evaluation, revision or updating of development plans and land-use planning plans after a disaster.	×		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 ears)	Long-term (8+ years)
f. Financial Pı	rotection (FP):		
Create a national fund for supporting risk management activities, and the rules for establishing how to use it	Х		
Continue supporting micro-insurance for private dwellings	Х		
Design and implement a financial protection structure for the agriculture sector	Х		
Evaluate risk transfer instruments, particularly in a scenario without buying the insurance policy offered by CCRIF	Х		
Evaluate to establish as mandatory the insurance of critical public infrastructure		Х	