

Index of Governance and Public Policy in Disaster Risk Management (iGOPP)

National Report for Belize

Sergio Lacambra Ginés Suarez Marcel Goyeneche Claudio Osorio Ana María Torres Ernesto Visconti Environment, Rural Development and Disaster Risk Management Division

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Sergio Lacambra Ginés Suarez Tsuneki Hori Marcel Goyeneche Claudio Osorio Ana María Torres Ernesto Visconti



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EXECUTIVE SUMMARY

The National Emergency Management Organization (NEMO) was established in 1999, 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 is the primary legislation governing DRM in Belize, which established the National Emergency Management Organization (NEMO) and 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". This act defines broad disaster risk management (DRM) functions to the National Emergency Coordinator, and some policy instruments (Disaster Preparedness and Response Policy; National Disaster Preparedness Response Plan and National Emergency Operations Centre), but in this Act, are not established DRM functions to other Ministries, Public Utilities Companies or territorial management units (Districts, Cities, Towns and Villages).

As others Caribbean countries, Belize makes part of the Caribbean Disaster Emergency Management Agency (CDEMA) established in 1991. The Disaster Preparedness and Response Act, indicate "The provisions of the Caribbean Disaster Emergency Response Agency Agreement in the Fourth Schedule shall have the force of law in Belize".

In relation to the <u>General Framework of Governance for DRM</u> the Disaster Response and Preparedness Act, which creates the NEMO, also allocate DRM responsibilities to Ministries and their departments, but it is not explicit about DRM responsibilities to territorial levels. However, in practice was revealed 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 establishes these instances and roles and responsibilities assigned to each. For other hand Belize's regulations for integrated water resources management and Environmental Impact Assessments (EIA) don't consider DRM in their scope. Finally, 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.

Regarding <u>risk identification</u>, the DRM and climate change regulation neither other regulations in the country designate any responsible institution to provide technical assistance and guidelines at territorial and sectorial levels for the disaster risk analysis and/or to prepare studies on climate change effect. Neither mandates the creation and maintenance of DRM information systems or database that collect the effects of disasters. On the other hand the national DRM regulations do not explicitly mention that Districts, Cities, Towns, sectors, or public services companies are responsible for conducting disaster risk analysis in the scope of work.

Concerning <u>risk reduction</u>, Belize lacks regulations to guide the design and construction of buildings, as well as other regulation 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. However, four sectors (agriculture, housing, transport and energy)

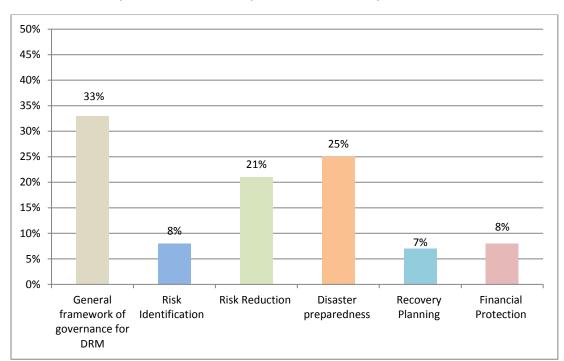
allocated resources for disaster risk reduction activities.

The regulatory framework governing the <u>disaster preparedness</u> establishes a National Disaster Preparedness and Response Advisory Committee, chaired by the Prime Minister and comprised of members coming a wide range of governmental institutions, between other functions to set in motion disaster response actions. However, the DRM regulations not consider an explicit mandate on the responsibility of the sectors, ministries and public services companies to formulate emergency or contingency plans, neither the operation of early warning systems.

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

Concerning the <u>financial protection</u> component there is no evidence about financial protection as part DRM regulations. 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 attending the attention, rehabilitation and reconstruction phases. About risk transfer instruments, Belize used to buy the insurance policy offered by CCRIF, but in 2017 the government decided not continues buying the mentioned insurance policy.

The results of the application of iGOPP in Belize (2017) show an overall level of advance of 17.24%, 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 33% compliance, which places it in the "incipient". Similarly, level of progress "incipient" show DRM policy reform components for "risk reduction" (21%) and "disaster preparedness" (25%). Finally, the components related to "risk identification" (8%), "recovery planning" (7%) and "Financial protection" (8%) show a "low" level of progress.



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

In relation to the results of the consideration of the different DRM processes in the public policy phases, as presented in

Graph 2 shows "incipient" progress for the "Central policy coordination and articulation" (39%). However, progress in the other processes are in the "low" range, with different compliance levels as follow "definition of sectoral responsibilities" (13%), "definition of territorial responsibilities" (8%), "policy implementation" (20%) and "policy evaluation" (6%).

50% 45% 39% 40% 35% 30% 25% 20% 20% 13% 15% 8% 10% 6% 5% 0% Definition of Policy Central policy Definition of **Policy Evaluation** sectorial implementation coordination and territorial responsibilities responsibilities articulation

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

Based on what is observed in the application of iGOPP in Belize, the following recommendations are presented:

Short-term

- Develop an institutional structure and adequately staff NEMO, according to its role & responsibility.
- To collect DRM regulations in force in the country applicable to Ministries, public services institutions, as well as Districts, Cities and towns.
- To 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 sectorial and territorial regulations.
- To design and implement a budgetary instrument for identifying the budgetary allocations related with ex ante DRM programs.
- To evaluate the creation of a fund enabled for financing or co-financing ex ante DRM activities.
- To evaluate the creation of a fund enabled for financing climate change adaptation activities.
- To design and implement an Information Systems for Disaster Risk Management.
- It is recommended that sectors will allocate resources to disaster risk identification activities that can be identified through budgetary instruments.
- To encourage regulations that mandate public entities to reduce the vulnerability of essential buildings, indispensable or critical infrastructure.
- To promote regulations on the mandatory inclusion of disaster risk analysis in all the phases
 of the public investment project.
- To promote legislation that mandates to consider climate change studies as requirements

- for the approval of public investments.
- It is recommended that sectors will allocate resources to disaster risk reduction activities that can be identified through budgetary instruments.
- To explicitly define the Accredited Disaster Notification Services in Belize.
- To design and implement a monitoring, vigilance or warning system able to trigger an alarm when natural hazard occurs.
- 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.
- To promote the NEMO to carry out evaluations on the quality of its performance in the preparation and response processes.
- To promote the adoption of a strategic framework for post-disaster recovery.
- To promote updates regulations to mandate the evaluation, revision or updating of development plans and land-use planning plans after a disaster.
- To create a national fund for supporting risk management activities, and the rules for establishing how to use it
- To continue supporting micro-insurance for private dwellings.
- To design and implement a financial protection structure for the agriculture sector.
- To evaluate risk transfer instruments, particularly in a scenario without buying the insurance policy offered by CCRIF.

Medium- term

- To promote and implement a transparency framework applicable to DRM.
- To give normative character to 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".
- To create regulation and institutional framework to provide guidance and technical assistance at territorial and sectoral levels about disaster risk analysis and climate change.
- To 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.
- To elaborate a national building code, that includes considerations to main natural hazards.
- To 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.
- To promote sectorial and public services regulations that establish recovery responsibilities, as well as the obligation to prepare recovery plans within the scope of their competencies.
- To evaluate to establish as mandatory the insurance of critical public infrastructure.

Long-term

To design and implement a community centered Early Warning System (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 on the basis of 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. <u>General Framework of Governance for DRM</u> (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 sectorial 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 the 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, 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 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 to 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 sectorial 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. <u>Inclusion on the governmental agenda and in policy-making</u>

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 sectorial 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 sectorial 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.

Both dimensions (DRM and Governance/Public Policy) are shown on the iGOPP matrix structure,

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

in 5 columns that analyze the public policy phases, and on 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	1. 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 sectorial 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 the National Emergency Management Organization (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, in its content mitigation and recovery is considered along the Act, financial protection issues are considered from a regional (Caribbean) perspective.

The Disaster Preparedness and Response Act, define broad DRM functions to the National Emergency Coordinator, and some policy instruments (Disaster Preparedness and Response Policy; National Disaster Preparedness Response Plan; National Emergency Operations Centre and Special Area Precautionary Plan), but in this Act are not established DRM functions to other Ministries, Public Utilities Companies or territorial management units (Districts, Cities, Towns and Villages). NEMO's coordination with other public sector and institutions is done through official liaison officer designated by Ministries, Public Department or governmental/private Institutions.

Complementing the Disaster Preparedness and Response Act, there are some Subsidiary Laws³ related with special issues such as: Threatened Disaster Alert Mobilization regulations; Shelter bylaws and regulations; Hazard Inspectors 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 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 the 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 programs and projects to reduce vulnerability of the nation and people to natural and technological hazards. On the other hand Belize 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

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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 October, 2003

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

implement programs and projects to reduce vulnerability of the nation and people to natural and technological hazards.

The National Emergency Management Organization is part of "Ministry of Transport and NEMO" currently, in the past the NEMO National Coordinator had reported to other Ministries or directly to Prime Minister, whereby NEMO's reporting line depend of 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 and participation of some Ministries and Departments of Government and statutory bodies. The National Coordinator is the Secretary of this National Advisory Committee. For other hand, the Disaster Preparedness and Response Act allows to NEMO's National Coordinator in consultation with the National Advisory Committee, shall 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 are not supported official documentation that mention what Committees or subcommittees had been implemented, is observed in practice and some bibliography referenced about thirteen⁶ national committees.

The thirteen Operational Committees are as follows⁷:

- 1. Education, Information, Communication Warning Committee.
- 2. Search, Rescue and Evacuation Committee.
- 3. Restoration of Utilities and Access Committee.
- 4. Transport Committee.
- 5. Housing and Shelter Committee's.
- 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 elaborated by some National Committees mentioned above, such as the Foreign Assistance Committee Hazard Response Plan and the National Relief and Supplies Management Plan had been identified, but there are not documented evidence about its empowerment, enforcement and oversight by NEMO National Coordinator.

Likewise, territorial DRM organization are not mentioned explicitly in the Disaster Preparedness and Response Act – Chapter 145, either in other legal documents reviewed, however there are some references about 9 District Emergency Committees⁸ representing Belize, Corozal, Orange Walk,

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

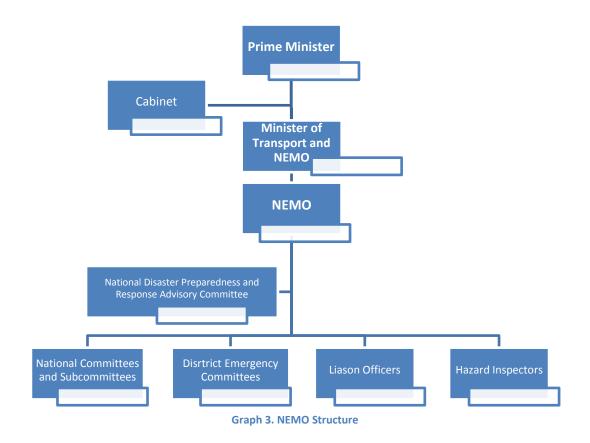
⁷ UNDP (2009) "Project: Strengthening of Disaster Preparedness and Emergency Response Capacity in Belize"

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

Cayo, Stann Creek, Toledo, Belmopan, San Pedro and Caye Caulker.

Despite the above the Disaster Preparedness and Response Act – Chapter 145, consider 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.



As others Caribbean countries, Belize makes part of the Caribbean Disaster Emergency Management Agency (CDEMA) established in 1991. In fact the section 28 of the Disaster Preparedness and Response Act – Chapter 145 of the Substantive Laws of Belize, revised edition 2011, indicate "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

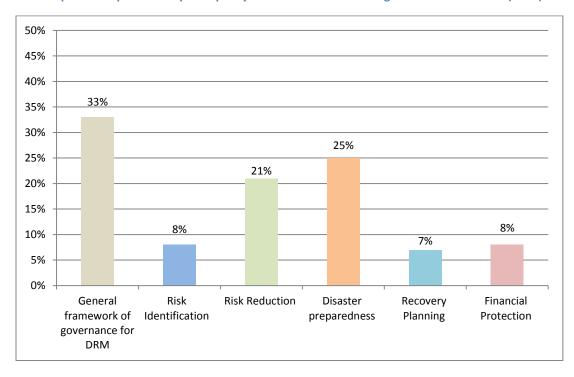
The results of the application of iGOPP in Belize (2017) show an overall level of advance of 17.24%, which places the country within the "low" range according to the classification system used for this index.

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 33% compliance, which places it in the "incipient" range. In the same range are sited the components of the DRM policy reform corresponding to "risk reduction" (21%) and "preparedness for the response" (25%). Finally, the components with the lowest levels of progress correspond to "Risk identification" (8%), "Post-Disaster Recovery Planning" (7%) and "Finance protection" (8%) that are in the "low" range.

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	33%
2	Risk identification and knowledge	8%
3	Risk reduction	21%
4	Disaster preparedness	25%
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)

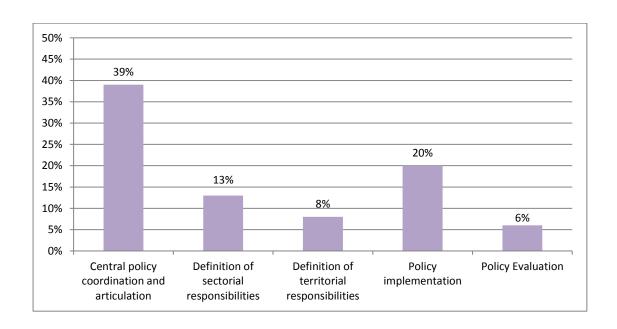


In relation to the results of the consideration of the different processes of the GRD in the of public policy phases, as can be seen in Table 3 and Graph 5 shows "incipient" progress for "Coordination and central articulation of the policy" (39%), which reflects the NEMO's leading role and the DRM progress made at the national level. However, progress in the other components "definition of sectoral responsibilities" (13%), "definition of territorial responsibilities" (8%), "policiy implementation" (20%) and "policy evaluation" (6%) are in the "low" range.

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

PUBLIC POLICY PHASES 39% 1 Central policy coordination and articulation 2 **Definition of Sectorial Responsibilities** 13% **Definition of territorial Responsibilities** 3 8% Policy implementation - Evidence of Progress in Implementation 4 20% **Policy Evaluation - Monitoring, accountability and participation** 5 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 the DRM organized by public policy phase: 1. Inclusion on the Governmental Agenda and in Policy-Making: 1.1. Central policy coordination and articulation, 1.2. Definition of sectorial responsibilities, 1.3 Definition of territorial responsibilities; 2. Policy implementation: 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)

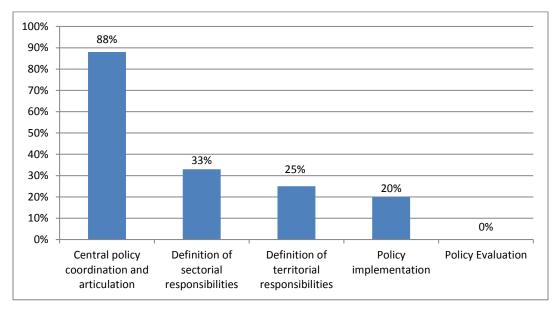
The aspects related to the "General Framework of Governance for DRM" and their inclusions on the governmental agenda are in the "Incipient" range, being the highest achievement for the six components of public policy reform in DRM evaluated, reaching a compliance rate of 33%.

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, which achieves of 88% of the evaluated conditions, which corresponds to an "very good" level. On the other hand, the components of "Definition of Sectorial Responsibilities" (33%) and "Definition of Territorial Responsibilities" (25%) show a "considerable" level of progress. Finally, the components with the lowest levels of progress correspond to "Policy implementation" (20%) and "Policy evaluation" (0%) that 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	88%
2	Definition of Sectorial Responsibilities	33%
3	Definition of Territorial Responsibilities	25%
4	Policy implementation - Evidence of Progress in implementation	20%
5	Policy Evaluation - 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 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 country's primary legislation for DRM is contained in Disaster Response and Preparedness Act Chapter¹⁰ 145, of the Substantive Laws of Belize, revised edition 2011, which created the NEMO and contained provisions that address disaster risk management comprehensively, including all DRM components.

1.1. Central policy coordination and articulation (GF-1A): The Disaster Response and Preparedness Act Chapter¹¹ 145, which creates the NEMO, also allocate DRM responsibilities to Ministries and their departments, but it is not explicit about DRM responsibilities to territorial levels. However, in practice was revealed 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 establishes these instances and 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 the "Emergency Operations Centers and Shelters".

At the moment of iGOPP application in Belize, the NEMO's National Coordinator reports to the Minister of Transport and NEMO. The Prime Minister leadership on DRM processes comes through an advisory committee, focusing on policy review and during a threatened disaster alert, therefore the general coordination of national DRM processes do not correspond to a highest policy level. There is evidence that in the past, year 2000, NEMO National Coordinator reported directly to Primer Ministry of Belize.

Belize has several plans, strategies and policy documents that had been drafted and elaborated without a legal endorsement of them such as "Belize National Hazard Mitigation Policy", "National Development Framework for Belize 2010-2030" and "National Climate Change Policy, Strategy and Action Plan to Address Climate Change in Belize", therefore these documents couldn't considered as official regulations to verify some iGOPP conditions related with linkages between DRM, climate change or national development goals.

1.2. Definition of Sectorial Responsibilities (GF-1B): The Belize's regulations for integrated water resources management doesn't consider DRM at all. Nevertheless the "National Integrated Water Resources Management Policy (Including Climate Change) for Belize"¹³, established climate change adaptation as a purpose of this policy, but this policy doesn't has a legal endorsement.

¹⁰ To see indicator GF-1A-1

¹¹ To see indicator GF-1A-1

¹² To see indicator GF-1A-2

¹³ To see indicator GF-1B-2

On other hand, while the of Environmental Protection Act Chapter 328¹⁴, of the Substantive Laws of Belize, revised edition 2011, state that Environmental Impact Assessments (EIA) are an exercise of disaster preparedness, the regulations and procedures manuals that guide the EIAs don't explicitly integrate disaster risk analysis in their scope.

1.3 Definition of territorial Responsibilities (GF-1C): Belize has a system of local government comprising of two city councils – Belmopan City and Belize City - seven town councils and a number of village and community councils. The two cities, the town councils and the village councils each have their own Act. These Acts, with exception of Belize City Council Act, enables the governing body to conduct territorial management according to their status. But in these regulations, there is no specific mention about alliances or agreements between territorial management units in general, and no mention of alliances for disaster risk management either.

The "National Integrated Water Resources Management Policy (Including Climate Change) for Belize"¹⁵ mention "Watersheds and their surface and subterranean linkages to the marine environment are the basic functional units for achieving Integrated Water Resources Management", therefore it recognizes an approach of basin eco-region for environmental management or water resources. Nonetheless, the above approach to water resource management is not reflected in the National Integrated Water Resources Act Chapter 222:01 of the Substantive Laws of Belize, revised edition 2011.

2. <u>Policy implementation:</u> - Evidence of progress in the implementation (GF-2): According to the "Disaster Preparedness and Response Act", "There shall be a Department of Government named the National Emergency Management Organization…". There is evidence of resources 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 "Integrated Disaster Risk Management Plan" 16.

The iGOPP found the Program "Climate Change and Sustainable Development" for allocating resources to climate change activities 17.

The country does not have a disaster risk financial strategy document for establishing a policy for reducing its fiscal vulnerability against the occurrence of disasters¹⁸. In addition, iGOPP did not find budget categories/instruments for allocating resources to ex ante DRM activities¹⁹. On the other hand, iGOPP found that there is not a fund for financing or co-financing ex-ante risk management

¹⁴ To see indicator GF-1B-3

¹⁵ To see indicator GF-1C-2

¹⁶ To see indicator GF-2-2

¹⁷ To see indicator GF-2-4

¹⁸ To see indicator GF-2-1

¹⁹ To see indicator GF-2-3

activities²⁰, nor climate change adaptation activities²¹. On the other hand, the country does not have budgetary instruments to encourage the sectors²² or territorial level²³ to implement activities in disaster risk management.

Regarding the source of resources used for buying risk transfer instruments, the budget was the source of resources for paying CCRIF insurance policy²⁴.

3. <u>Policy evaluation:</u> The Belize's DRM regulations make no reference to legal, financial, operational or goal oversight, either within NEMO or by another authority. Likewise, no legislative instruments were found establishing a transparency framework applicable to DRM or other governmental actions, neither mechanism of civil society participation on DRM activities or processes.

There is no evidence of any assessment report on compliance with DRM regulations having taken place by relevant audit authorities, neither by NEMO.

b. Risk Identification and knowledge (RI)

The risk identification component shows a "low" advance in Belize, being the lowest achievement for the six components of public policy reform in DRM evaluated by iGOPP, reaching a compliance rate of 8%.

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

²⁰ To see indicator GF-2-5

²¹ To see indicator GF-2-6

²² To see indicator GF-2-10

²³ To see indicator GF-2-9

²⁴ To see indicator GF-2-7

Table 5 and Graph 7, where all the public police phases considered reaches level of progress "low", however the aspects related to "Policy Implementation" (20%) and "Policy Evaluation" (17%) had the highest level of compliance of the indicators considered in iGOPP, followed by aspect related of "Definition of Sectorial Responsibilities" (6%).

Aspects related with "Central policy coordination and articulation" (0%) and "Definition of territorial Responsibilities" (0%) not accomplished verify 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 Sectorial Responsibilities	6%
3	Definition of territorial Responsibilities	0%
4	Policy Implementation - Evidence of Progress in Implementation	20%
5	Policy Evaluation - Monitoring, accountability and participation	17%

25% 20% 20% 17% 15% 10% 6% 5% 0% 0% 0% Definition of Definition of **Policy Evaluation** Central policy Policy implementation coordination and sectorial territorial articulation responsibilities responsibilities

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 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: 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, iGOPP shows little progress in Belize's in this area. Only is reported progress in the definition of sectorial responsibilities.

About the 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): The DRM and climate change regulation neither other regulations in the country designate any responsible institution to provide technical assistance and guidelines at territorial and sectorial levels for the disaster risk analysis and/or to prepare studies on climate change effect. Nonetheless, the Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development recently established National Climate Change Office, but its role and responsibilities needs to be formally defined.

Likewise, iGOPP had not identified any regulation in country that mandates the creation and maintenance of DRM information systems, neither database that collect the effects of disasters.

1.2. Definition of Sectorial Responsibilities (RI-1B): No normative evidence was found that defined essential buildings, indispensable or critical infrastructure of the country. Likewise, the DRM regulations in Belize are not explicitly defined the responsibility of the sectors and public services companies to carry out disaster risk analysis within the scope of their competencies. The iGOPP found evidence of the definition of these responsibilities only for the environmental sector regulations²⁵.

The National Meteorological Service of Belize is in charge of climate and meteorological studies, surveillance and forecast, but no regulation were found to establish that climate or hydrological threats must consider the frequency of occurrence associated with the intensity levels of the events. On the other hand, iGOPP not identified a national institution in charge linked to the study of geological threats in the country.

- 1.3 Definition of territorial Responsibilities (RI-1C): The National DRM regulations in Belize doesn't establish that cities, towns and villages territorial are responsible for disaster risk assessment in their respective territories. The Disaster Response and Preparedness Act, only outline of the National Disaster Preparedness Response Plan lists the requirement to include procedures related to disaster preparedness and response of local government. Likewise, there are no regulatory frameworks that establish the obligation to identify risk areas in cities.
- 2. <u>Policy implementation</u>: Evidence of progress in the implementation (RI-2): iGOPP found that only one sector (energy) of the 10 key sectors of the country allocated resources for disaster risk identification activities²⁶. The Program "Geology and Petroleum" reflects allocation of resources for "Establish a work station for seismic processing and interpretation, well log analysis and interpretation and data management"²⁷.

Regarding public utilities companies, Belize Telemedia Limited in the context of the insurance program they have, annually made risk analysis on its infrastructure for preparing the inspection meetings of the insurance and reinsurance companies that made their own risk analysis. Belize Water Services regularly conducts profiling studies for the Belize River, including salinity measurements to track the effects of raising sea levels. Not evidence of disaster risk analysis was

²⁵ To see indicator RI-1B-8

²⁶ To see indicators RI-2-3 to RI-2-11

²⁷ To see indicator RI-2-12

found at the other utilities companies. Important to mention that for the case of energy companies, the supply and transition of energy in Belize depends on other countries.

Despite the above the subject of disaster risk is integrated into Social Studies Primary School Curriculum in the lower and middle division.

3. <u>Policy evaluation:</u> Although no regulations were identified that required making information on climate change and risk identification available and establishing mechanisms for that purpose, the Disaster Response and Preparedness Act assign to NEMO the responsibility to inform the citizens about disaster risk trough public information and education campaigns²⁸.

For other hand, considering Auditor General's reports available no evidence has been found of an assessment report regarding disaster risk information generation and its availability,

c. Risk Reduction (RR)

The risk reduction component shows an "incipient" advance in Belize, reaching a compliance rate of 21%.

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

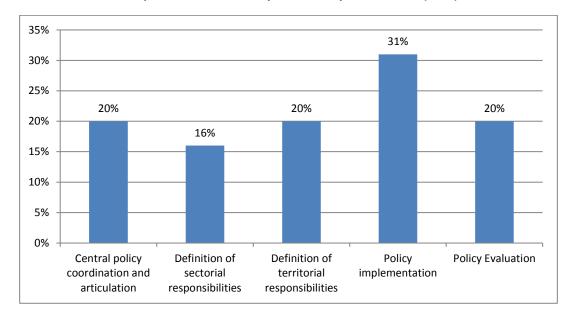
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²⁸ See indicator RI-3-6

Table 5 and Graph 78, the "Evidence of Progress in Implementation" shows the high level of achievement reaching of 31% of the evaluated conditions, which corresponds to an "incipient" level. The rest of the public police phases considered in the iGOPP reaches level of progress "low", where the aspects related to "Central policy coordination and articulation" (20%), "Definition of Territorial Responsibilities" (20%) and "Monitoring, accountability and participation" (20%) had the same level of compliance of the indicators considered in iGOPP, followed by aspect related of "Definition of Sectorial Responsibilities" (16%).

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

RISK REDUCTION 1 Central policy coordination and articulation 20% 2 Definition of Sectorial Responsibilities 16% 3 Definition of Territorial Responsibilities 20% 4 Policy Implementation - Evidence of Progress in Implementation 31% 5 Policy evaluation - Monitoring, accountability and participation 20%



Graph 8. Risk Reduction 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 shows low advances in each of the components this policy which highlights some regulatory gaps to include disaster risk reduction effectively on the Governmental Agenda.
- 1.1. Central policy coordination and articulation (RR-1A): The IGOPP did not identify regulations that establish competencies in an articulated way between disaster risk reduction and adaptation to climate change 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" considering DRM and climate change articulations.

Belize lacks regulations to guide the design and construction of buildings, as well as other regulation 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 Sectorial Responsibilities (RR-1B): There was no evidence that DRM normative framework of the GRD assigns responsibilities to sectors and public service companies to reduce the risk of disasters within the scope of their competencies²⁹. There was also no evidence in the normative frameworks of the sectors considered in the iGOPP that defines their responsibilities in disaster risk reduction matters³⁰.

The Environmental Protection Act, assigns disaster risk reduction responsibilities to the Environmental Department, but it doesn't include specific goals related to environmental management related to disaster risk reduction³¹.

As noted above, Belize does not have national regulations to buildings design and construction. On the other hand, due to the location of Belize, the seismic hazard in the country is low, so there is no seismic-resistant design code. The lack of such regulations for design and construction limits risk reduction measures from a prospective risk approach³².

Belize does not have a public investment system. iGOPP did not find evidence of normativity that order to carry out a disaster risk analysis in the pre-investment phase³³. On the other hand, no evidence of normativity that mandated a disaster risk analysis in other phases of the project cycle other than the pre-investment phase was found³⁴. In addition, there was not evidence of normativity that stipulated to carry out climate change studies in the pre-investment phase³⁵. Important to mention that all multilateral agencies are requiring to include DRM and Climate Change considerations for developing investment projects funded for them, but this practice has not reflected in normativity.

This is in line with "Strategic Planning, Public Investment Management and Monitoring & Evaluation Systems in Belize", IDB, Draft Technical Note (2013), that established that "Belize's PET 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".

1.3 Definition of territorial Responsibilities (RR-1C): The Disaster Response and Preparedness Act, only assigns responsibilities to the National Coordinator, some of which relate to disaster risk reduction. Nevertheless, this responsibility is not further specified for cities, towns and villages³⁶. In the same way regulations about functions of cities, towns and villages in Belize no establish competences for the reduction of the risk of disasters.³⁷

²⁹ To see indicator RR-1B-1

³⁰ To see indicator RR-1B-7 to RR-1B-16

³¹ To see indicator RR-1B-6

³² To see indicator RR-1B-3 and RR-1B-5

³³ To see indicator RR-1B-17

³⁴ To see indicator RR-1B-19

³⁵ To see indicator RR-1B-18

³⁶ To see indicator RR-1C-1

³⁷ To see indicator RR-1C-2

Belize's regulations on development planning and land use don't consider explicit provisions for the zoning of areas at risk³⁸

The IGOPP did not find national regulations about integral improvement of human settlements and relocation of human settlements located in risk areas³⁹.

2. <u>Policy implementation:</u> - Evidence of progress in the implementation (RR-2): The iGOPP found that only four sectors (agriculture, housing, transport and energy) of the 10 key sectors of the country allocated resources for disaster risk reduction activities⁴⁰. Regarding the agricultural sector, it was found evidence of allocation of resources under Ministry of Agriculture, Fisheries, Forestry, to the Programs "Climate Change and Sustainable Development" and "Enhancing Belize's Resilience to Adapt to the Effects of Climate Change"⁴¹.

Regarding the housing sector, it was found evidence of allocation of resources under Ministry of Housing and Urban Development to the "Flood Relief Program"⁴². Important to mention that Ministry of Finance, Public Service, Public Utilities and Energy also allocated resources to risk reduction activities through the Program "Housing Assistance - Flood Relief".

Regarding the transport sector, it was found evidence of allocation of resources under Ministry of Works, Transport and National Emergency Management Organization 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" mentioned, "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" 43.

Regarding the energy sector, there is evidence of resources allocation under Ministry of Finance, Public Service, Public Utilities and Energy for the Program "Energy Resilience for Climate Adaptation Project (ERCAP)"⁴⁴.

Even there is not evidence about allocation of resources to perform disaster risk reduction activities by Ministry of Education, Youth, Sports and Culture, it is important to mention that the Office of Emergency Management allocate resources this sector through the Program "Increase community"

³⁸ To see indicator RR-1C-3

³⁹ To see indicator RR-1C-4 and RR-1C-5

 $^{^{\}rm 40}$ To see indicators RR-2-1, RR-2-3, RR-2-5, RR-2-6, RR-2-8 and RR-2-9

⁴¹ To see indicator RR-2-2

⁴² To see indicator RR-2-4

⁴³ To see indicator RR-2-7

⁴⁴ To see indicator RR-2-10

awareness regarding vulnerability reduction actions in schools..."

Regarding public utilities companies, iGOPP did not find evidence about allocation of resources to risk reductions activities by none of the public utilities companies. Important to mention that for the case of energy companies, the supply and transition of energy in Belize depends on other countries⁴⁵.

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 environmental impact assessments⁴⁶.

The regulations that control the formulation of development planning and land use, as well as those related with watershed planning and management, don't assign responsibilities for monitoring, evaluation and updates these plans⁴⁷ 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 can't be established

For other hand, considering Auditor General's reports available no evidence has been found of an assessment report regarding on the implementation of risk reduction measures during the construction phase of infrastructure⁴⁸.

d. Disaster preparedness (DP):

The disaster preparedness component shows an "incipient" advance in Belize, corresponding to the second highest achievement for the six components of public policy reform in DRM evaluated by iGOPP, reaching a compliance rate of 25%. This shows the 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 of 75% of the evaluated conditions, which corresponds to an "very good" level. On the other hand, the components of "Definition of Sectorial Responsibilities" (24%) and "Evidence of Progress in Implementation" (27%) show an "incipient" level of progress.

Aspects related with "Definition of Territorial Responsibilities" (0%) and "Monitoring, accountability and participation" (0%) not accomplished verify any of the indicators considered by the iGOPP, that are in the "low" range.

⁴⁵ To see indicators RR-2-11 to RR-2-13

⁴⁶ To see indicator RR-3-1

⁴⁷ To see indicators RR-3-3 and RR-3-4

⁴⁸ To see indicator RR-3-5

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

DISASTER PREPAREDNESS

1	Central policy coordination and articulation	75%
2	Definition of Sectorial Responsibilities	24%
3	Definition of Territorial Responsibilities	0%
4	Policy Implementation - Evidence of progress in implementation.	27%
5	Policy Evaluation - Monitoring, accountability and participation	0%

90% 80% 75% 70% 60% 50% 40% 27% 30% 24% 20% 10% 0% 0% 0% Central policy Definition of Definition of Policy **Policy Evaluation** coordination and sectorial territorial implementation articulation responsibilities responsibilities

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 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: this policy phase shows an incipient advance 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 comprised of members coming a wide range of governmental institutions, between other functions to set in motion disaster response actions⁴⁹.

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⁴⁹ To see indicator DP-1A-1

The mentioned act, also considered that a threatened disaster alert requires firstly, to convene the National Disaster Preparedness and Response Advisory Committee, which is chaired by the Prime Minister and whose members come from other sectors, and secondly, set up Emergency Operations Centers, which reaffirm existence of a mechanism for crisis management at the highest national political level⁵⁰.

For other hand, The Disaster Response and Preparedness Act, establish to the National Coordinator is responsible to produce annually 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 Center⁵¹. Likewise, this act clearly stipulates the requirement for the execution of damage assessments and need analysis in case of disaster; nevertheless, no other provisions state the obligation that humanitarian assistance actions must be based on this assessment and analysis results⁵².

The iGOPP didn't find DRM regulations that consider that drills or simulations have to be planned and carried out at national level; however some drills had been done in cities and sectors⁵³.

The Belize Constitution Act include provisions for the declaration of a state of emergency by the Prime Minister authorized bodies to trigger such and the activation of temporary regime measures, but the these are not mentioned explicitly⁵⁴.

The Disaster Response and Preparedness Act, integrate the "Agreement Establishing the Caribbean Disaster Emergency Response Agency", also this act mention that the National Disaster Preparedness Response Plan shall include "agreement procedures for cooperation with international organizations and governments of countries outside Belize during a threatened disaster alert under section 27 of this Act or in the event or the aftermath of a disaster emergency" 55.

1.2. Definition of Sectorial Responsibilities (DP-1B): There was no evidence within the DRM regulations an explicit mandate on the responsibility of the sectors, ministries and entities providing public services to formulate emergency or contingency plans, neither the operation of early warning systems⁵⁶. In spite of the above, of the 10 sectors prioritized by the iGOPP, the water and sanitation, telecommunications and energy sectors define in their sectorial regulatory frameworks their responsibility to carry out disaster preparedness activities⁵⁷. On the other hand, the iGOPP couldn't verify that the country has regulations that establish that there must be emergency response plans in case of oil spill, combustion or pollution, neither emergency plans related with transportation,

⁵⁰ To see indicator DP-1A-2

⁵¹ To see indicator DP-1A-3

⁵² To see indicator DP-1A-6

⁵³ To see indicator DP-1A-7

⁵⁴ To see indicator DP-1A-4

⁵⁵ To see indicator DP-1A-8

⁵⁶ To see indicators DP-1B-1 and DP-1B-2

⁵⁷ To see indicators DP-1B-3 to DP-1B-12

handling or processing of hazardous substances⁵⁸

1.3 Definition of territorial Responsibilities (DP-1C): The IGOPP found no evidence in the regulations governing emergency preparedness and response; consider coordination mechanisms in districts, cities, towns or villages, however exists references about the existence of District Emergency Management Offices (DEMO), City Emergency Management Offices (CEMO), and Village Emergency Management Offices (VEMO), allegedly bestowed with disaster preparedness and response coordination powers, nevertheless, regulations creating and defining these structures couldn't be identified⁵⁹.

In the absence of the above, there are not regulations establishing subsidiary assistance criteria between the different government levels and mandate the formulation of emergency plans at different territorial levels⁶⁰.

2. <u>Policy implementation</u> - Evidence of progress in the implementation (DP-2): As previously mentioned, according to the "Disaster Preparedness and Response Act", "There shall be a Department of Government named the National Emergency Management Organization…". There is evidence of resources 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 Preparedness"⁶¹.

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 Fires Services", whose program objective is "To provide enhanced services through quick response teams with equipped fire fighting equipment, readily available to render necessary service to save lives and property", that includes as Key Programs Strategies/Activities "Equip the department with more efficient equipment for their safety and increased performance of the department, Increase education campaigns to the public and training in fire prevention and safety ...". In addition, iGOPP found that the mentioned Program include an output indicators related with "Number of bush fires".

The iGOPP did not find evidence about the existence of emergency, contingency or continuity of operations or equivalent plan for the 10 key sectors of the country⁶². Regarding allocation of resources to disaster preparedness, from 10 key sectors, only Ministry of Works, Transport and National Emergency Management Organization allocates resources for "*Hurricane Preparedness* (*Conferences & Workshop*)".

The iGOPP found that Belize Telemedia Limited has the "2016 BTL's Disaster Management Plan –

⁵⁸ To see indicators DP-1B-16 and DP-1B-17

⁵⁹ To see indicator DP-1C-1

⁶⁰ To see indicators DP-1C-2 and DP-1C-3

⁶¹ To see indicator DP-2-1

⁶² To see indicators DP-2-4 to DP-2-12

Revised Edition, June 2016"⁶³. Not comprehensive evidence about the mentioned plans was found for Belize Water Services Limited⁶⁴ and Belize Electricity Limited⁶⁵. Important to mention that in Belize the supply and transition of energy depends on other countries.

3. <u>Policy evaluation:</u> The iGOPP did not find regulations establishing civil society, social and non-governmental organization participation mechanisms in the disaster preparation⁶⁶ activities, neither evidence on community participation mechanism activated during a nationally declared disaster situation which international assistance was requested⁶⁷.

For other hand, considering NEMO and Auditor General's reports available no evidence has been found about assessment report regarding on disaster preparedness⁶⁸.

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

e. Recovery Planning (RC)

The recovery planning shows a "low" advance in Belize, reaching a compliance rate of 22%. 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 the countries are not yet reflected in the frameworks national and institutional regulations.

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

⁶³ To see indicator DP-2-15

⁶⁴ To see indicator DP-2-13

⁶⁵ To see indicator DP-2-14

⁶⁶ To see indicator DP-3-1

⁶⁷ To see indicator DP-3-6

⁶⁸ To see indicators DP-3-2 to DP-3-2

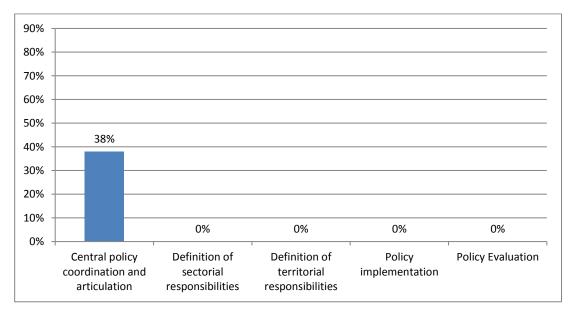
Table 58 and Graph 710, the "Central policy coordination and articulation" (38%) corresponding to an "incipient" level of progress.

The others aspects related with "Definition of Sectorial Responsibilities" (0%), "Definition of territorial Responsibilities" (0%), "Evidence of progress in implementation" (0%) and "Monitoring, accountability and participation" (0%) not accomplished verify any of the indicators considered by the iGOPP, reaching a level of progress "low".

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

	RECOVERY PLANNING	
1	Central policy coordination and articulation	38%
2	Definition of Sectorial Responsibilities	0%
3	Definition of Territorial Responsibilities	0%
4	Policy evaluation - Evidence of progress in implementation.	0%
5	Policy Implementation - 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 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: 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 advancing 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 the responsible for disaster recovery in Belize⁶⁹. The same regulation stablishes the "National Disaster Preparedness and Response Advisory Committee", which must be consulted during the development of the "National Disaster Preparedness Response Plan", which takes provisions to mobilize resources for disaster recovery.⁷⁰ It is to note that this plan is expected to address the mitigation of, preparedness for, response to, and recovery from emergencies and disasters in Belize⁷¹.

iGOPP did not find regulations that establish the recovery of livelihoods as a purpose of post-disaster recovery, neither mandate to conduct studies on disaster causes to guide recovery processes in order to prevent the rebuilding of risk conditions⁷².

- 1.2. Definition of Sectorial Responsibilities (DP-1B): For the 10 sectors considered in the iGOPP, no normative evidence was found that defines the sectorial responsibility to carry out recovery preparation activities within the scope of their competencies⁷³.
- 1.3 Definition of territorial Responsibilities (DP-1C): The iGOPP did not identify regulation 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 ex post disaster recovery plans elaborated⁷⁴.
- 3. <u>Policy evaluation</u>: It was not identified national regulations establishing the participation of civil society in post-disaster recovery processes⁷⁵, neither information mechanism for the affected population or community participation for recovery in any of the last disaster situations officially declared by the national level⁷⁶.

⁶⁹ To see indicator RC-1A-1

⁷⁰ To see indicator RC-1A-3

⁷¹ To see indicator RC-1A-6

⁷² To see indicators RC-1A-2 and RC-1A-4

⁷³ To see indicators RC-1B-1 to RC-1B-10

⁷⁴ To see indicators RC-2-1 to RC-2-10

⁷⁵ To see indicator RC-3-1

⁷⁶ To see indicators RC-3-3 and RC-3-4

f. Financial Protection (FP):

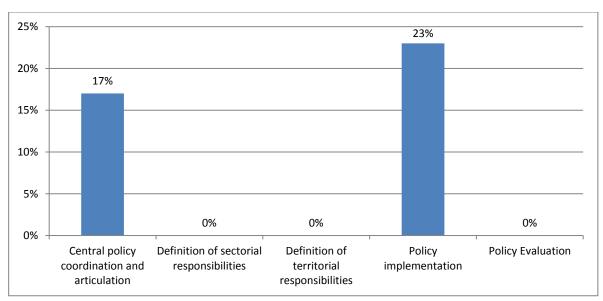
Belize's iGOPP results for FP component evidenced a "Low" advance, with 8 % of the fulfilled conditions, recording the lowest achievement for the six components of public policy reform in DRM evaluated by iGOPP.

According to Table 9 and Graph 11 the analysis evidenced a heterogeneous advance of the different phases of public policy. The component "Evidence of progress in implementation" achieves of 23% of the evaluated conditions, which corresponds to an "incipient" level. The others components are in the "low" range, where "Central policy coordination and articulation" shows and advance of 17% and "Definition of sectorial responsibilities" (0%), "Definition of territorial responsibilities" (0%) and "Monitoring, accountability and participation" (0%) not accomplished verify 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 Sectorial 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):

Not evidence about financial protection as component of DRM was found at the "Disaster Preparedness and Response Act". But, the mentioned Act includes provision for being part of the Caribbean Disaster Emergency Response Agency Agreement (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 procedures for financing emergent expenses in disaster situations⁷⁷, in a context where according to WB (2012) "The capacity of the Caribbean countries individually to absorb the financial impact of such disasters is limited by a number of factors. Their small geographic size prevents diversification of their risk. The modest scale of their fiscal revenues makes establishing a financial reserve unaffordable ...". Important to mention there are not legal provisions for establishing the annual percentage of resources to allocate to the Emergency Assistance Fund⁷⁸.

On the other hand, no evidence was found about development funds authorized to finance disaster management activities⁷⁹. Neither was there evidence of normativity that mandates the formulation of a disaster risk retention and transfer structure⁸⁰.

iGOPP also allows to identify the absence of a mandate related with 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 entity⁸¹.

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

There is no progress in this policy phase. iGOPP evidenced there are not regulations that establish the State's fiscal responsibility surrounding disaster risk⁸², neither that assign competencies to the Ministry of Finance for financial protection against disaster risk⁸³. In addition, there are not regulations that establish that sectorial entities must cover their public assets with insurance policies⁸⁴, neither regulation on incentives for private housing insurance against disaster risk⁸⁵. Important to mention that the Office of the Supervisor of Insurance & Private Pensions mentioned that by modifying fees to be paid for micro-insurance business they are facilitating private initiatives of insurance companies that are offering insurance policies (micro-insurance) to low income population.

⁷⁷ To see indicator PF-1A-1

⁷⁸ To see indicator F-1A-2

⁷⁹ To see indicator F-1A-6

⁸⁰ To see indicator F-1A-3

 $^{^{81}}$ To see indicators F-1A-4 and F-1A-5

⁸² To see indicator F-1B-1

⁸³ To see indicator F-1B-2

⁸⁴ To see indicator F-1B-3

⁸⁵ To see indicator F-1B-4

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

There is no progress in this policy phase. iGOPP evidenced there are not regulations that establish that territorial entities must cover their public assets with insurance policies⁸⁶, neither are regulations that mandate the implementation of structures for financial protection from disasters for the territorial level⁸⁷. In addition, the country's capital city has not a fund for financing or co-financing disaster management activities⁸⁸.

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 attending the attention, rehabilitation and reconstruction phases. In addition, the WB loan to Belize for a Climate Resilient Infrastructure Project includes a "Contingent Emergency Response", that "will provide support for immediate response to an eligible crisis or emergency, as needed"⁸⁹.

Additionally, iGOPP found that Belize has not a national fund for financing emergency expenses in disaster situations, nor a fund for financing or co-financing risk management activities⁹⁰.

Regarding risk transfer instruments, Belize used to buy the insurance policy offered by CCRIF, but iGOPP mission (June 2017) was informed that in 2017 the government decided not continue buying the mentioned insurance policy. Important to mention that for the taking decision process for buying the mentioned insurance policy the government used estimative of Probable Maximum Loss (PML) from catastrophic events for different return periods⁹¹ and the expected annual losses elaborated by CCRIF⁹².

On the other hand, as previously mentioned the insurance of public assets is not mandatory. In same sense, iGOPP does not find evidence of the existence of standards for the insurance of public assets⁹³, of concessions⁹⁴, or guidelines in this regard for the territorial entities⁹⁵.

On the other hand, neither Belmopan, nor Belize City has a financial protection structure in the event of disaster⁹⁶. Neither have they had a disaster risk transference instrument for a portfolio of assets of its fiscal responsibility. Resources for supporting the occurrence of disasters at territorial level will come from budget from territorial and national level.

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

⁸⁶ To see indicator F-1C-1

⁸⁷ To see indicator F-1C-2

⁸⁸ To see indicator F-1C-3

⁸⁹ To see indicator F-2-11

⁹⁰ To see indicator F-2-7

⁹¹ To see indicator F-2-2

⁹² To see indicator F-2-3

⁹³ To see indicator F-2-4

¹⁰ See mulcator F-2-4

⁹⁴ To see indicator F-2-5

⁹⁵ To see indicator F-2-7

⁹⁶ To see indicator F-2-1

The iGOPP shows that there are not ex ante financial instruments to encourage economic recovery in areas affected by disasters⁹⁷. On the other hand, iGOPP evidences the not existence of a financial protection structure for the agricultural sector⁹⁸. Currently, private companies are evaluating 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, since no indicator has been fulfilled. In other words, there is absence of mechanisms for assessing compliance with financial protection mechanisms, the use of the probabilistic risk assessment model in the rate estimative of insurance policies (because it is not mandated by the regulations), and the application of financial protection assessment.

⁹⁷ To see indicator F-2-14

⁹⁸ To see indicator F-2-15

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 describe functions and responsibilities of NEMO's National Director as well as consider some DRM policy tools, but it falls short of setting up a DRM national system that considers and allocates roles and responsibilities to different sectors, public institutions and local governments. Moreover, responsibilities within the DRM regulations as well as regulations form other sectors; allocate responsibilities to the National Coordinator himself, instead of NEMO as an institution. Consequently, NEMO organizational structure is under the National Coordinator is ambiguous and not conducive for the establishment of a functional organizational structure, able to comply with all its responsibilities.
- 2. The reporting responsibilities of the National Coordinator regarding the overall DRM programing 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 difficult DRM mainstreaming into public and private sector institutions.
- 4. Several key draft documents related with DRM and climate change have been developed, however these need to be made official by Belize 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 contained in the Disaster Preparedness and Response Act Chapter 145, have not been recently updated and are not linked with other sectorial policies and plans.
- The absence of a centralized risk information system, sourcing existing information from all sectors and driving the different sectorial planning processes and public investment projects, prevents a comprehensive approach to DRM.
- 7. NEMO's Operational Committees are focused on disaster preparedness and response, being able to expand the scope of work to other DRM processes, at least to risk identification and risk reduction.

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	DRM (GF)	
To promote and implement a transparency framework applicable to DRM.		Х	
Develop an institutional structure and adequately staff NEMO, according to its role & responsibility.	Х		
To collect DRM regulations in force in the country applicable to Ministries, public services institutions, as well as Districts, Cities and towns.	Х		
To 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 sectorial and territorial regulations.	Х		
To give normative character to 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"		X	
To design and implement a budgetary instrument for identifying the budgetary allocations related with ex ante DRM programs	Х		
To evaluate the creation of a fund enabled for financing or co-financing ex ante DRM activities	Х		
To evaluate the creation of a fund enabled for financing climate change adaptation activities	X		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 years)	Long-term (8+ years)
b. Risk identification	and knowledg	e (RI)	
To create regulation and institutional framework to provide guidance and technical assistance at territorial and sectoral levels about disaster risk analysis and climate change.		Х	
To design and implement an Information Systems for Disaster Risk Management	Х		
To design and implement a community centered Early Warning System (EWS) for climate and meteorological hazards.			Х
To 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.		Х	
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	luction (RR)		
To encourage regulations that mandate public			
entities to reduce the vulnerability of essential	X		
buildings, indispensable or critical infrastructure.			
To elaborate a national building code, that		Х	
includes considerations to main natural hazards.		X	

DRM Component	Short-term (1-4 years)	Medium- term (4-8 years)	Long-term (8+ years)
c. Risk Red	uction (RR)		
To 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.		Х	
To promote regulations on the mandatory inclusion of disaster risk analysis in all the phases of the public investment project	×		
To 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	X		

DRM Component	Short-term (1-4 years)	Medium- term (4-8 ears)	Long-term (8+ years)
d. Disaster prep	paredness (DP))	
To explicitly define the Accredited Disaster Notification Services in Belize	Х		
To 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.		Х	
To 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	Х		
To 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)		
To promote the adoption of a strategic framework for post-disaster recovery	Х		
To promote sectorial and public services regulations that establish recovery responsibilities, as well as the obligation to prepare recovery plans within the scope of their competencies.		Х	
To 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 Pr	rotection (FP):		
To create a national fund for supporting risk management activities, and the rules for establishing how to use it	Х		
To continue supporting micro-insurance for private dwellings	Х		
To design and implement a financial protection structure for the agriculture sector	Х		
To evaluate risk transfer instruments, particularly in a scenario without buying the insurance policy offered by CCRIF	Х		
To evaluate to establish as mandatory the insurance of critical public infrastructure		Х	