Small Island Developing States (SIDS) Working Group Sessions Vision 2030: What Would it Take to Reduce Risk by 50%

Thursday, July 3, 2014 9:00 AM – 3:00 PM

Birkbeck University, University of London, Malet Street (Room MAL 415)

Breakout Groups Overview

Given their relative small size, limited financial and technical capacity as well as extreme vulnerability to disaster, Small Island Developing States (SIDS) face unique challenges when it comes to reducing vulnerabilities and risks associated with natural hazards and climate change. To this end, an all-day workshop titled, *Vision 2030: What Would it Take to Reduce Risk by 50%* was held on Thursday, July 3, 2014 – as part of the overall program of events under the 2014 Understanding Risk Forum in London.¹ The workshop was chaired by **Niels Holm-Nielsen**, Regional Disaster Risk Management Coordinator, Latin America and the Caribbean, World Bank and convened policymakers and technical experts from SIDS in the Caribbean, Pacific and Indian Oceans to discuss challenges and share experiences in overcoming the increasing risks and hazards associated with disaster and climate change.

A series of four working group sessions were held and moderated by experts at the nexus of international development, disaster risk management and climate change. The sessions focused on both physical risk and financial risk and are listed below. More details of the SIDS breakout groups can be found in the attached program, while the opening presentation on *Vision 2030: What Would it Take to Reduce Risk by 50%* is attached with these minutes.

- I. *Risk Information in Preparedness and Response* (Michael Bonte-Garpentin, Senior Disaster Risk Management and Climate Change Adaptation Specialist, World Bank)
- II. *Disaster Risk Financing: From Tools to Strategies* (Olivier Mahul, Program Manager, Disaster Risk Financing and Insurance Program, World Bank)
- III. *Planning and Designing Climate and Disaster Resilient Investments* (Sofia Bettencourt, Lead Adaptation Specialist, World Bank)
- IV. Public Financial Management of Disasters: From Resource Mobilization to Execution (Charlie Benson, Senior Disaster Risk Management and Disaster Risk Financing Specialist, Asia Development Bank)

Objective

The objective of the session summary note is to provide a reference for participants as well as policymakers and technical experts in SIDS to inform the following:

¹ This workshop as well as the series of SIDS-related events and participation of SIDS representatives during the Understanding Risk Forum in London (June 30 - July 4, 2014) were made possible with the generous support of the Africa Caribbean Pacific – European Union (ACP-EU) Natural Disaster Risk Reduction Program.

- 1. Future country-led follow-up correspondences and activities between participants and countries;
- 2. Upcoming dialogues with donors and international partners, with relation to SIDS-specific experiences and challenges;
- 3. Key takeaways country leaders and representatives can reflect on in light of the UR Forum held in London (from June 30 July 4, 2014) in actions moving forward.

These breakout group summary notes reflect information presented by participants and should not be referenced as an official opinion of countries represented. While countries at times are attributed for specific points raised, these are simply for reference purposes. Annex 1 lists the participants in each breakout group, with corresponding contact information.

Session (I): Risk Information in Preparedness and Response

Moderator: Michael Bonte

I. SESSION OVERVIEW

In many Small Island Developing States (SIDS) contexts, practical experience and scientific advancement have increased the ability to predict and reduce the impacts of many natural hazard events, particularly those that are climate related. Stronger disaster monitoring and forecasting linked to effective preparedness, early warning, and response can save many lives and reduce economic losses in countries hit by a disaster. Regional approaches on early warning and preparedness can be particularly effective due to the regional nature of some hazards and the limited capacity of countries. To this end, this session examined how the timely and accurate detection of natural hazard events relies on sharing of information amongst countries in real-time to increase the monitoring station footprint. The session further discussed overcoming in-country technical capacity constraints and began discussions on the uses of risk information for preparedness planning.

The following sections highlight examples of success and challenges expressed by participants during moderated discussion.

II. SUMMARY OF SESSION

Delegates representing SIDS in the Caribbean and Pacific shared experiences and identified priorities in enhancing resilience through the use of risk information in pre- and post- disaster response activities. Throughout the session, participants underscored the importance of the following:

- 1. Standardizing risk information software and equipment amongst countries to better ensure cross-regional data sharing and collaboration;
- 2. Partnering with local communities in a bottom-up and top-down approach to identify risks and prioritize investments;
- 3. Overcoming challenges related to inter-institutional coordination for risk identification, preparedness and response, which requires not only a comprehensive disaster risk management framework that provides a clear platform for coordination, but also the vision of a champion within a technical agency. Implementation should be carried out with the active engagement of the Ministry of Finance and relevant line ministries;
- 4. Incorporating risk information within a broader development framework, while stressing the importance of improving governance and the integration of risk into the planning of specific sectors.

The next section expands on the discussions of these key points.

II.A. Regional Coordination

Participants from the Caribbean and Pacific spoke on specific examples of regional initiatives connecting SIDS, particularly with relation to (a) early warning systems and (b) data management and sharing. For both themes, participants stressed the importance of standardizing equipment and software

across the region (in line with international standards) to enable system compatibility and interoperability. Often regional institutional arrangements, which promote common ICT strategies, can help in implementing such standards amongst participating countries. With relation to geospatial data management and sharing, regional level trainings as well as the development of a sub-regional community of practice were highlighted as useful stepping stones in promoting regional coordination.

In the case of the Eastern Caribbean, GeoNode² was highlighted as a successful sub-regional geospatial data sharing platform. The Pacific Tsunami User Group was identified as part of a regional disaster risk management regionalization strategy, which aims to share data and best practice experiences across the Pacific particularly for early warning applications. Such an effort helps put Pacific SIDS on a more equal footing with larger countries (e.g. Australia) to have sustainable and mutually beneficial regional exchanges.

Nevertheless, despite the clear benefits associated with regional data sharing, a number of participants underscored the challenges associated with standardization of equipment and software amongst countries across the regions. Regional organizations can play a critical role in such standardization, particularly when supported by country champions, as demonstrated by the Oceania Regional Seismic Network or the Melanesian Volcanological Network initiatives promoted by Vanuatu and New Caledonia in partnership with SPC, for example. As opposed to one-off engagements, projects implemented over the longer-term (and the associated hardware and training) were highlighted as beneficial, especially in helping ensure continuous update and use of data.

II.B. Local Partnership in Risk Identification

A number of participants discussed and highlighted the critical importance of involving local communities in identifying risks and prioritizing disaster vulnerability reduction investments, in ensuring long-term success and effectiveness. Experience has shown that local partnerships are effective in disseminating risk information (e.g. Community Disaster Committees in Saint Vincent and the Grenadines, Saint Lucia) as well as assembling an inventory of critical public assets (e.g. schools, roads) and siting disaster preparedness infrastructure (e.g. 'satellite warehouses' meant to facilitate response and recovery efforts in Saint Vincent and the Grenadines). Combining local knowledge with risk information can be particularly effective in identifying areas of highest physical risk – as well as in identifying areas suffering from high levels of other critical risks such as poverty. Local community involvement can also help insure long-term community ownership and lead to longer-term sustainability of an investment. As highlighted in Vanuatu, involving the community in project activities helped reduce the levels of vandalism of early warning systems equipment.

Belize highlighted one component of its National Climate Resilient Investment Plan, which involved the assessment of infrastructure assets. The socio-economic criticality and flood susceptibility was analyzed through a participatory approach to prioritize specific projects along the road network and infrastructures. Jamaica shared its experience in developing a ranking system of community risk levels in order to prioritize interventions.

² Website of the "Dominode", Dominica's Spatial Data Infrastructure (Geonode platform): http://dominode.net/

II.C. Institutional Coordination

As disaster risk information and emergency management initiatives often involve multiple line ministries, effective inter-institutional coordination is considered indispensable. Nevertheless, securing necessary data from all institutions involved in data and information gathering is often cited as a challenge – even in collecting data amongst various weather stations. To this end, centralization of data storage and management, analysis and monitoring was considered particularly effective in ensuring wide accessibility across sectors. When building consensus for investment in risk information, it is critical to have a strong champion within a technical agency (as well as a good cost-benefit analysis to justify the investment) as in the case of Vanuatu, where a strong interagency coordination mechanism was established for climate change and disaster risk management programming.

Participants underscored challenges due to financial limitations as well as the need to strengthen the linkages between investing in risk information and public planning and budgeting, thereby highlighting the importance of communicating potential impacts of disasters on public budgets. To this end, ensuring that the Ministry of Finance plays a key role in planning processes related to risk information initiatives is important especially when considering that proposed activities will eventually have to be financed from public budgets.

Belize discussed the integration of climate resilient plans into a National Climate Resilience Investment Plan,³⁴⁵ a multi-sectoral process led by the Prime Minister and the Ministry of Planning, which included wide participation of public and private sector actors, and included consultation and analyses (with gender sensitivity taken into account). From this process, 16 priority actions were identified (based on socio-economic criticality and flood susceptibility), one of which being vulnerability reduction of the road network.

III. NEXT STEPS

A number of participants highlighted gaps in their early warning systems (for flooding and other hazards) as well as disaster preparedness and response infrastructure. In addition, financing staff as well as continued budget for operations and maintenance of such infrastructures was considered another challenge in ensuring long-term sustainability of investments. Delegates discussed how partnerships with international development organizations and donors could help in this regard, especially when support involves technical assistance and training. Technical assistance in long-term budget planning was identified as one theme which would be beneficial.

³ Presentation on NCRIP: https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Belize_PPCR-SC_Presentation_110113%20MFC.pdf

⁴ Video on the NCRIP: https://www.youtube.com/watch?v=ZnFINRcnmms

⁵ GFDRR "Story of Impact": https://www.gfdrr.org/sites/gfdrr.org/files/documents/GFDRR_Stories%200f%20Impact%20Belize%20Final.pdf

Session (II): Disaster Risk Financing: From Tools to Strategies

Moderator: Olivier Mahul

I. SESSION OVERVIEW

Increasingly, tailored financial products provide developing countries with new opportunities for thinking about proactive financial protection against disasters. Experiences, however, showed that standalone financial instruments cannot solve all the challenges associated with the impact of disasters and must be integrated into a comprehensive disaster risk management strategy. Comprehensive national disaster risk financing strategies bring together multiple policy areas to strengthen the financial resilience of key beneficiaries in the country. They should also integrate disaster-related contingent liabilities into existing disaster risk and fiscal risk management agendas. Such a comprehensive strategy can secure access to post-disaster financing before an event strikes to ensure rapid cost-effective liquidity and support cost effective recovery while minimizing disruptions to the budget. This session explored effective ways to develop such financial protection strategies and shared experiences of countries that have started to look beyond relying on individual financial instruments.

II. SUMMARY OF SESSION

Delegates representing SIDS in the Caribbean, Indian Ocean, and Pacific shared experiences and identified priorities in building financial resilience against the economic and fiscal impacts from disasters. While many complementary views emerged of the objectives of risk financing and financial protection, the common themes were that sovereign risk financing is needed to address residual risk from natural disasters that cannot be prevented or reduced. The delegates identified the following points as priority actions to improve financial resilience:

- 1. Collecting risk information to enable strategic financial decision making;
- 2. Developing comprehensive financial protection strategies, which will consider all layers of disaster risk;
- 3. Considering disaster funds or national emergency funds, guided by a strong regulatory framework, to enable rapid disbursement of funds for response and recovery post-disaster;
- 4. Insuring public assets and critical infrastructure to reduce contingent liability on the government.

The next section expands on the discussions of these key points.

II.A. Risk Information

Accurate risk information, such as exposure data, hazard data, and loss data, are crucial to enable strategic financial decision making. This empowers officials in governments to take informed decisions on an ideal risk layering strategy, by understanding likely loss and the cost-benefit tradeoffs based on financial instruments. Credible information on the inventory of public assets, which includes factors such as replacement values, is also a key requirement for insurance of public assets and to access international reinsurance and capital markets.

Many countries however lack the resources to invest in the needed risk assessments, and inventories of public and private assets are often incomplete or not accessible.

II.B. Comprehensive financial protection strategies

Although many of the countries present participate in risk pooling mechanisms (CCRIF and PCRAFI), they noted that these risk transfer mechanisms were not sufficient to address all the disaster risk financing needs. Countries are increasingly looking to holistically address all layers of fiscal disaster risks. Comprehensive DRFI strategies will enable the country to identify affordable, effective financial protection options based on a concrete understanding of the country's fiscal exposure.

In building comprehensive financial protection strategies, it is important for countries to understand the different roles of various financial instruments and how they relate. The need for comprehensive risk management also extends beyond the risk financing agenda and delegates highlighted the emerging practice of a dedicated public official, such as a National Chief Risk Officer, or department for risk management, often situated within the Ministry of Finance, as an interesting concept.

Delegates from Jamaica highlighted the important contribution of the CCRIF, which is based on parametric insurance, to provide payments during a critical time in the first 14 days. It was pointed out that governments often lack sufficient understanding of the benefits and limitations of the product to make fully informed decisions, including choosing right attachment point (before it was 1 in 15 years return period, now it is 1 in 10 years return period). Better understanding of risk pooling products and their uses was highlighted by many of the delegates.

II.C. Disaster Funds or National Emergency Funds

Disaster and emergency funds were highlighted by some SIDS representatives as a key mechanism to support emergency response, recovery and reconstruction without compromising country's fiscal balance and budget. Disaster funds are a key component of a risk layering strategy, complementing risk transfer and contingent credit to address the major damage and destruction which can occur from smaller but more frequent events.

Participants highlighted the need for strong legal and operational frameworks and manuals to govern resource accumulation and spending, specifying questions such as the source and amount of financing, eligibility for the use of funds (by whom, for what, in response to what) as well as governance and oversight arrangements. In particular, such a fund should be off-budget and independent of political considerations.

In particular, delegates from Jamaica, Madagascar and Tonga explained how their emergency funds operated; in all cases, the fund was off budget and used for emergency response, preparedness and mitigation. Funds are audited by regular basis and politicians aren't allowed to use it for other purposes. Jamaica explained that the fund had a clear operations manual, which outlines how funds are accessed. In addition, funds are replenished through voluntary donations by the population as well as by building fees and other levies. Madagascar's fund is about US\$1 million and the council that determines the use of the

fund is in the Office of the Prime Minister (about 80-85% of the fund should be used for reconstruction of schools, governmental buildings and the remaining 15-20% for the response by providing humanitarian aid to affected people). Tonga has a similar fund, for which the budget was as high as US\$7.5 million but is now reduced to US\$5 million.

II.D. Insurance of public assets

Sufficient insurance of public assets was identified as a key priority to reduce the contingent liability of the government, maintain fiscal space, support rapid reconstruction following disasters and minimize their economic impact. Delegates noted that some of their countries already have insurance programs in place for public assets; however, often these cover only limited key public buildings.

Challenges identified included a lack of asset information, a lack of resources to acquire the required risk information and to pay for insurance premiums, a lack of risk management culture, often insurance is restricted to public buildings but excludes the contents or the old buildings, and often the legal and regulatory framework provides further challenges. A further question was how to account for insurance as an asset on the budget even though the payout is uncertain.

III. NEXT STEPS

Delegates highlighted the need to share experiences and good practices across countries, in particular sharing on building the required risk information, setting up disaster funds, and better complementing existing financial instruments to build comprehensive financial protection strategies.

In addition, delegates discussed how international support could provide the necessary expertise, knowledge, and investments for data collection and international knowledge exchange. Furthermore, countries expressed interest in participating in technical assistance programs to determine the best risk financing strategies through a better understanding of their liabilities, fiscal environment, and disaster risk. In addition, they discussed the need for better communication tools to convey the importance of risk protection investments to politicians and constituents.

Session (III): Planning and Designing Climate and Disaster Resilient Projects and Investments

Moderator: Sofia Bettencourt

I. SESSION OVERVIEW

Given the high level of vulnerability of SIDS to climate change and disaster, there is no doubt that public planning, development and investment processes should integrate elements which ensure more resilient structures, land use planning and infrastructure. Yet translating this principle into practice is easier said than done: given the limited budgets of many SIDS national governments, it is often difficult to commission the technical analyses needed to ensure climate and risk information are considered in national development plans or project designs. Limited technical capacity further makes it difficult to gather and manage such information, and by default of their small size, SIDS have difficulty finding the appropriate contractors, planners, and engineers who can effectively incorporate climate and disaster risk (and the inherent uncertainties) into development planning and project design. There are also institutional and donor constraints that tend to favor the production of stand-alone documents, rather than the process of mainstreaming resilience into national development plans, programs, and projects. Nevertheless, despite these issues, there are several important lessons learned and examples of success to be shared among the SIDS community. Discussions will focus on practical examples of building resilience in key sectors such as infrastructure (e.g. retrofitting, climate and disaster resilient design, and spatial and territorial planning), agriculture (e.g., climate smart agriculture, index-based weather insurance), and community-driven development (e.g., food and water security, gender informed income generation, and flood risk and coastal zone management).

II. SUMMARY OF SESSION

Delegates representing SIDS in the Caribbean and Pacific shared experiences and identified priorities in planning and designing projects and investments which are more resilient to disaster and climate change. Throughout the session, participants underscored the importance of the following:

- 1. Conducting work in a deliberative approach can be effective when prioritizing investments, especially in building the necessary consensus for successful project implementation and uptake;
- 2. Employing a forward and backward approach to climate and disaster resilient planning and investment, by utilizing risk information to both retrofit existing and build new infrastructure;
- 3. Investing in champions at the planning level, especially in terms of time and staffing, is particularly important.

The next session expands on the discussions of these key points.

II.A. Risk-Informed Development Paths and Public Investments

By default of their topography and limited geographic size, many SIDS face challenges associated with urban growth and territorial expansion on land which is particularly hazard prone. Participants discussed challenges associated with settlements in low-lying areas susceptible to flooding, storm surge, landslide, tsunami and hurricane winds. Coupled with sea level rise, growing water scarcity and increased intensity of events, participants underscored how climate change is representing an added level of complexity with regards development planning and disaster risk management. To this end, participants discussed the benefits of employing a holistic approach to planning, which integrate multiple physical and social considerations, but most importantly the utilization of hazard and risk information and data in decision-making. Participants further discussed the importance of integrating risk into both a backward and forward approach to investment and decision-making, whereby public investments are used to both retrofit existing infrastructure and proactively build infrastructure more resilient to disaster and climate change.

The importance of effective inter-institutional coordination was underscored, whereby the ministry charged with public budget management (e.g. Ministry of Finance) works in close consultation and equal partnership with the ministries charged with planning and works (e.g. Ministry of Planning, Ministry of Infrastructure). Saint Lucia highlighted from their experience the importance of aligning objectives between national agencies and between sectors in the early stages of the planning process. While often easier said than done, the importance of defining a common objective amongst agencies was noted as effective, especially by developing a macro plan with corresponding line items in budgets, timelines and collective goals that are integrated into medium term development plans. Developing baseline indicators against which progress can be measured was further highlighted as important.

II.B. Policy Change for Nationwide Disaster Resilience

Participants highlighted a common trend in urban environments, especially with regards illegal settlements in hazard-prone environments. From a policy perspective, such spaces were considered especially challenging – in terms of enforcing building codes and garnering enough political will to implement required disaster risk management interventions or execute needed relocation activities, for example. While not a silver bullet, participants noted that technical assistance to government entities and civil servants could provide some relief in terms of updating outdated building codes and devising methods of effective building inspection and enforcement of regulations. And while implementing International Building Codes (IBCs) are particularly important as a way to benchmark safe building standards, participants nevertheless highlighted the importance of implementing such standards through a locally consultative process to better ensure wide uptake and relevance to the local context.

The session further discussed the needed incentives to institute responsible behavioral change. The Solomon Islands discussed a system of providing incentives to public servants for better inspection coupled with civil penalties for corrupt inspections. Saint Lucia highlighted the benefit of learning from other successful examples of behavior change (as done in public health campaigns) as well as utilizing social marketing to help promote safe practices.

II.C. Local Partnership in Risk Reduction

When implementing projects, community partnerships can be particularly useful in leveraging local knowledge to identify risks as well as uncovering opportunities to reduce multiple risks (e.g. physical, socio-economic, gender). However, simply partnering with communities is often not sufficient as such an engagement also requires a degree of training and capacity to better ensure a more effective

partnership. Technical assistance in project management and procurement can be useful in this regard. Participants further highlighted the importance of educating local communities to cultivate an awareness of planning, zoning laws and regulation as well as the benefits of enforcing such measures. Robust partnership with local communities further entails developing appropriate community participation methodologies and processes. Stress-testing future scenarios using current risk information and disseminating such analysis to local communities is one way in which local consensus can be built in implementation of risk reduction activities. With regards prioritization of investments, Jamaica discussed a ranking system integrated within vulnerability analyses of communities.

III. NEXT STEPS

While select participants highlighted a need to conduct a comprehensive review of building codes and regulations followed by amendment and / or enactment of new legislations and regulations, the session also discussed challenges associated with limited local capacity for compliance (e.g. building inspectors for remote locations, tradespeople trained in safe construction standards, etc) as well as clear alternatives for safe low-cost housing construction. At times such measures may entail relocation of squatters and / or land titling on resettled land.

Participants further noted the importance of increasing capacity in the public sector to properly inspect, regulate and enforce safe building practices. To this end, funding and technical assistance would be needed to better learn how to integrate risk information into planning and decision-making processes. In addition, capacity building of local communities (e.g. project management, procurement) would further be useful in ensuring effective partnerships with local actors in the planning and implementation of projects and investments.

Session (IV): Public Financial Management of Disasters: From Resource Mobilization to Execution

Moderator: Charlie Benson

I. SESSION OVERVIEW

Even when a Ministry of Finance is able to rapidly mobilize resources following a disaster, this may be quickly rendered ineffective in the absence of a well-functioning system to appropriate and to execute these resources. Public financial management systems must be put in place to ensure effective response at every step of the resources mobilization, appropriation, and execution chain. The effectiveness of the response can be severely limited by the weakest point in this string of action. Policy makers from SIDS countries discussed challenges in public financial management, the integration of disaster risks in public financial management as well as fiscal and debt risk management. For example, following a disaster the public financial management system must balance policy makers' concerns for fast disbursement with the public's and donor's need for transparency and accountability. In addition, participants focused on the need to strengthen cost-benefit analysis to support investing in risk reduction and resilience.

II. SUMMARY OF SESSION

Delegates representing SIDS in the Caribbean, Indian Ocean, and Pacific shared experiences and identified priorities in building on advances in mobilizing resources to respond to natural disasters to look towards the public financial implications of this. In particular delegates identified as priorities:

- 1. Importance of planning and foresight;
- 2. Strengthening public financial management for post-disaster expenditures;
- 3. Improving cost-benefit of disaster risk financing and disaster risk management investments.
- 4. Disaster impacts on poverty and targeted social protection to enable quick response.

The next section expands on the discussions of these key points.

II.A. Importance of Planning Ahead

Delegates raised the importance of planning ahead for disasters, to be able to respond more effective and efficient (see points below on budget reallocation) as well as to use the political opening momentum for investments in DRM which usually follows a disaster to implement financial protection mechanisms. Political pressures and competing priorities often present a hurdle to improve public financial management of disasters. Delegates from Grenada emphasized the importance to be prepared to use the political opening created when a disaster strikes and move quickly with implementing new policies and laws. International organizations play and important role to support countries prepare these policies. Delegates also pointed out that technical recommendations from outside the country can help in politics.

II.B. Strengthening Public Financial Management to be Fast, Transparent and Accountable, and Retain Flexibility

To respond to a disaster, governments often fall back on unplanned budget reallocations. Delegates highlighted the need to make public financial management systems fast and transparent yet retain flexibility to respond to disasters. Planning in advance for budget reallocation and sources of post-disaster expenditure helps countries minimize disruptions.

In Belize every ministry is asked to identify 5% of non-critical expenditures in the budget which can be reallocated in case of a disaster. This forces ministries to prioritize in advance and not during an emergency under high pressure and with limited time. In the Seychelles a government-wide discussion takes place to approve budget reallocation. Importantly, social programs are protected and will not be affected. Delegates from Saint Lucia highlighted that while the Ministry of Finance has flexibility to reallocate funds, often there is not much to reallocate as much of the country's capital budget is financed through grants and loans which cannot be redirected, highlighting the need for a comprehensive financial protection strategy which includes the mobilization of emergency funds.

Tonga relies primarily on a national emergency fund (through a contingency budget line of US\$ 500,000 mandated by law). If the emergency is exhausted the government falls back on a dedicated account to receive donor resources for response. Tonga highlighted the importance of flexibility in emergency expenditure, which for example is exempt from procurement regulations enabling much faster purchase of required goods during an emergency. In addition, the government of Tonga has seconded a staff member from the Ministry of Finance to the National Emergency Management Office to facilitate emergency expenditure. Jamaica also has specific emergency procurement procedures in place.

In addition, delegates highlighted the importance of regular operations and maintenance and dedicated resources for this in the budget. For example, in Belize regular maintenance of public infrastructure has become periodic due to a lack of funds. The country is looking to learn from Jamaica and Nicaragua, both of which have set up dedicated maintenance funds.

II.C. Cost-benefit of disaster risk financing and disaster risk management investments.

Delegates across countries highlighted the need to better account for the true costs of disasters and the cost benefit of investing in risk reduction.

Delegates highlighted two hidden costs of disasters. Disaster expenditure often lead to additional debt and fiscal pressures, yet governments do not account for increased cost of borrowing or the opportunity cost of shifting resources. Delegates from Grenada emphasized that most people do not realize that this is an additional cost on the taxpayers. Better information on this should provide incentives for investments in risk reduction. This lack of information also restricts a thorough cost-benefit analysis. In addition, disaster response exacts a cost in human and material on the government. The Government of the Seychelles just implemented a new system which tracks all expenditures for emergency response including the salaries of government officials, overtime, food, cost of transport, and depreciation of public assets such as boats.

Countries also lack sufficient evidence of the cost-benefit of investing in resilience. It was suggested that many Ministries of Finance must have cost-benefit analyses carried out for public investments in their archive. This could be brought together into one repository to facilitate knowledge sharing and a better understanding of the benefits of investing in risk reduction.

II.D. Disaster impacts on poverty and targeted social protection

Participants emphasized the importance of the socio-economic and poverty impacts of disasters, the high vulnerability of the poor to disasters, and the need to better track and measure these impacts. Participants emphasized the importance of analytical work to support this for example through household surveys. Many representatives including from the Dominican Republic, Saint Vincent and the Grenadines, and Jamaica confirmed that this was a priority in their approach to financial protection. Steps forward should include better linking disaster risk financing with social protection programs.

III. NEXT STEPS

Delegates highlighted the need to further integrate public financial management in financial protection strategies. Ministries of Finance could also further improve the public financial management of disasters by better linking this agenda to the wider fiscal risk and debt risk management. This would also enable governments to better capture the true cost of disasters and protect crucial development spending such as on social programs.

Delegates emphasized the importance to learn from other countries on these topics, and especially highlighted the importance of support to help Ministries of Finance develop comprehensive approaches to fiscal risk management.

Annex 1: List of Participants, by Session

Session (I): Risk Information in Preparedness and Response: From early warning to damage and loss assessments

Moderator: Michael Bonte

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1	Yvonne Hyde	Belize	Ministry of Economic Development	ceo@med.gov.bz
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Session (II): Disaster Risk Financing: From Tools to Strategies

Moderator: Olivier Mahul

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Session (III): Planning and Designing Climate and Disaster Resilient Projects and Investments

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Session (IV): Public Financial Management of Disasters: From Resource Mobilization to Execution

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