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CONCEPT NOTE

Regular meeting of

Inter-American Council for Integral Development (CIDI)

MARCH 28, 2023

**THEME: SCIENCE AND DATA FOR DECISION-MAKING, RESILIENCE AND DISASTER RISK MANAGEMENT**

1. **Background/Justification**

All people face natural and human-made threats such as disasters. Today, climate change is scientifically linked to water scarcity and compound natural disasters, including hurricanes, floods, wildfires, heat waves, and extreme weather events. The Americas remain one of the most disaster-prone regions in the world, leaving citizenry exposed to multiple rapid-onset disasters and a constant state of struggle. Although member states are willing to strengthen cooperation on disaster risk reduction, most notably through the implementation of the Sendai Framework, they understand this is not enough if they want to build an integrated approach to greater resilience.

As the risks, effects and costs of disasters increase, disaster resilience emerges as the primary means for Governments to help control their fiscal, social, and environmental exposure to disasters. member states should contemplate in their planning processes, measures to reduce the impacts of catastrophic events on the economy and the people, with the mindset of protecting the most vulnerable groups, especially women, the elderly, persons with disabilities, the youth, and the poor as the frequency and intensity of extreme weather phenomena increase.

To consolidate science and data gathering initiatives at the national and regional levels to support the attainment of economic, social, and environmental resilience, member states must determine the priority areas as well as the format in which science and data is needed to best support sound decision-making for resilience, and the priority capacity building needs of science-based organizations and the role that regional and international partners can play in helping to build such capacity. While some scientific and data-gathering activities on resilience is taking place in the region, the need for current and future activities to be relevant, transdisciplinary, multidisciplinary, integrated, and institutionalized to help the region to overcome the social, economic, and environmental challenges to resilient and sustainable development is emphasized.

The Intergovernmental Panel on Climate Change (IPCC)’s Special Report released in October 2019, makes clear that the targets set in the Paris Agreement and the steps identified by countries in their Nationally Determined Contributions (NDCs) are not ambitious enough and will not bring about any significant reduction in climate change impacts, especially on the marine environment. Warming of 1.5 degrees Celsius is predicted to destroy between 70 and 90 per cent of reef-building corals while warming of 2 degrees Celsius will likely destroy 99 percent of tropical coral reefs. Other predicted climate change impacts include increased economic and social vulnerability, increased probability of droughts and coastal flooding associated with the strengthening of episodic ocean current events; increasing intensity of tropical cyclones and altered food security through changes in arable land available for agriculture.

Scientists forecast that without major mitigation efforts, carbon dioxide concentrations will reach about 560 ppm in another 40 years, which is by 2060 (Gergis, 2019). This means that countries must aggressively speed-up the design and implementation of policies and strategies at the individual, business, community, state, and national level to achieve climate-resilient and sustainable development. The adaptive instruments must include structural resilience strategies to fortify buildings, shorelines, and infrastructure as well as non-structural strategies to better prepare people and governments to withstand and efficiently build back from climate-related trends and disasters.

Latin America and the Caribbean (LAC) is the region most impacted by the COVID-19 pandemic and is among the regions most effected by climate change. With countries preoccupied with building their resilience to internal and external social, economic and environmental shocks, attention must be given to strengthening national and regional decision-making mechanisms aimed at reducing vulnerability and building resilience through improving development and use of science-based data.

The COVID-19 pandemic has both drained and diverted public health funding, resulting in declining resources to address the impacts of climate disasters on health. In response to these threats, countries are investing in innovative climate change adaptation strategies, including the development of early warning systems (EWS) for climate-sensitive diseases. The creation and implementation of decision support tools require strong collaborations amongst health, climate, and disaster practitioners with transdisciplinary researchers to assess needs and priorities jointly, assess available data, co-develop the tool, gather feedback via national and regional consultations and conduct training.

Further, geospatial intelligence enables the use of complex, geographically based models to assess and visualize risks such that data-driven decisions may be made. It allows communities to: (1) gain a fuller appreciation of their circumstances through the identification, monitoring, and modeling of the risks they face; (2) develop the requisite actions to build a community’s overall resilience; understand the economic, social, and environmental implications of potential disaster; (3) foster a community’s psychological resilience and strengthen its ability to “bounce forward”; (4) and build a culture of resilience in its citizens and development partners.

Ultimately, the social, political, environmental, or economic shocks associated with slow and rapid-onset disasters impact people’s well-being, including their health and livelihoods and more generally, their coping and adaptive abilities. The first to respond to emergencies and disasters are those affected by them. The evidence has shown that resilience assessments and strategies that are broad-scale, and top-down in nature are nowhere as effective as participatory, community-based, bottom-up approaches. For this reason, the Organization of American States (OAS) advocates the adoption of a “whole community approaches” to resilience that involve sub-national and national governments, the private sector, academia, and community-based organizations, among others. This shift is encouraged by rapidly developing information and communication technologies that can empower citizens to become more resilient and to participate more effectively in decision-making at the household, community, sub-national and national levels. Citizens now have access to extensive, real-time information for risk management (as well as improving data provision in data-scarce regions)[[1]](#footnote-1)/. Integrate community emergency preparedness and response mechanisms within national systems, and this integration must start with training and disaster preparedness.

Challenges to the sustainable implementation of climate action include a lack of technological and human capacity particularly between the climate and related institutions, a lack of local studies and relevant data providing evidence of climate impacted sectors, and a lack of funding to sustain a preparedness and response system.

1. **Purpose of the session**

This session will present the report of the first OAS Conference on Science and data for decision-making on disaster risk management in the Caribbean which was held in Dominica in October 2022. The report will present priority areas for action as well as the multi-sectoral partnerships needed at the International, regional, and national level to build and share critical data to guide decision-making at both policymaking and programming levels. The session will focus on member states initiatives, plans, studies, and policies to promote the use of information and technologies to mitigate and respond to disasters. It will share opportunities to strengthen capacities for risk management, as the region undertakes meaningful actions to tackle the climate crisis. And it will inform the preparatory process for the Fourth Inter-American Meeting of Ministers and High-Level Authorities on Sustainable Development.

Questions for member states will feature:

1. How can access to science and data improve the design and implementation of effective and adaptive policies and strategies for resilient and sustainable development?
2. What critical data is needed and how can it be used in a practical context?
3. What mechanism for the science and data for risk and resilience exists within member states and are there examples of good practices in science-based decision-making?
4. What are the key recommendations for capacity building and institutional strengthening in the short, medium, and long-term?
5. What resources, tools, technologies may be deployed to improve decision-making on disaster risk management and resilience?
6. Is this a priority for other member states outside the Caribbean region?
7. How can the SEDI work with member states to develop this capacity where necessary?
8. **Relevance to SEDI**

- Strengthen the implementation of Sustainable Development Goals (SDGs)

- Promote data-sharing dialogues, protocols, and frameworks to help member states improve responses to natural events

- Foster regional cooperation and knowledge sharing on disaster management, including mechanisms for sharing best practices and lessons leaned

- Receive government inputs for a prospective Inter-American Meeting of Ministers and High-Level Authorities on Sustainable Development

1. **OAS mandates**

At the Ninth Summit of the Americas held in Los Angeles, United States of Americas, on June 8-10, 2022, the Heads of State and Government committed to “develop digital tools to provide real time response to climate events, disasters, and other emergencies while strengthening resilience and decision-making based on scientific data.”

AG/RES. 2988 (LII-O/22): To urge member states to promote gender-responsive multi-hazard and climate risk reduction strategies which give consideration to cascade and compound disasters, and conduct risk assessments capable of identifying and mitigating the effects of biological, natural, technological, climate, and unintentional man-made hazards, drawing from the lessons learned from the impact of the COVID-19 pandemic and disasters of natural origin, such as climate change and weather-related, volcanic, seismic-related and other events.

AG/RES. 2979 (LI-O/21): To invite member states, permanent observers, and global and regional disaster management agencies to provide official data, including information on the sharing of knowledge, expertise, lessons learned and good practices available to member states through cooperation, for inclusion in the Western Hemisphere database, to be used in facilitating effective preparation, response and recovery and so, in advancing resilience in any country that may be experiencing a disaster.

The OAS Charter mandates CIDI to promote cooperation among its member states to achieve integral development and, in particular, to help eliminate extreme poverty. The Charter also directs CIDI to “promote, coordinate and assign responsibility for the execution of development programs and projects to the subsidiary bodies and relevant organizations, on the basis of the priorities identified by the member states, in areas such as economic and social development, including trade, tourism, integration and the environment.”

The Inter-American Program for Sustainable Development (PIDS) entrusts the GS/OAS through SEDI to collaborate with sustainable development authorities of the members states and coordinate with other entities and international organizations. The PIDS establishes strategic actions to ensure that the work of the General Secretariat on sustainable development is aligned with the implementation of the 2030 Agenda on Sustainable Development and the Paris Agreement on Climate Change and that its objectives and results are guided by the SDGs approved by member states and contribute to their attainment.

According to the PIDS, the work of the General Secretariat should contribute directly to supporting member states in their efforts to reducing natural hazard vulnerability through emergency preparedness, planning, investment, and scientific approach.

1. **Structure of the Session**

- Presentation of the report of the first OAS Conference on Science and Data for Decision-Making on DRM in the Caribbean which was held in Dominica in October 2022, by Kim Osborne, Executive Secretary of Integral Development

* + Invited Panelists (TBD)

1. **Outcomes of the Session**
2. Better understanding of the role science and data can play to improve responses to natural events
3. Share specific recommendations relating to regional cooperation and knowledge on disaster risk management and resilience
4. Received and share amongst member states information on best practices to improve decision-making on disaster risk management and resilience
5. Distribute key takeaways to support the formulation of the agenda for the IV Inter-American Meeting of Ministers and High-Level Authorities on Sustainable Development.

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1. . Paul, J, Hannah D, and Liu W, “Citizen Science: Reducing Risks and Building Resilience to Natural Disasters [↑](#footnote-ref-1)