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Environmental Sustainability in the Caribbean

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About the Hemispheric Think Tank Working Group in Support of the 2009 Summit of the Americas

This paper was produced as part of the Hemispheric Think Tank Working Group in Support of the 2009 Summit of the Americas, a joint project of the Canadian Foundation for the Americas (FOCAL) and the Inter-American Dialogue (IAD) with the financial support of the Government of Canada provided through the Canadian International Development Agency (CIDA).

The Working Group brought together researchers and policy analysts from the Western Hemisphere's leading think tanks to engage in intensive debate and dialogue and develop a strong intellectual and policy foundation for preparing and conducting the Summit.

In meetings in Ottawa and Washington, D.C., attended by leading national and multilateral officials, the group explored the critical problems the Summit could address, identified key areas of agreement and disagreement among countries, deeply probed the disagreements, and, where possible, sought to develop pragmatic approaches. These discussions and research have resulted in a series of policy papers that hope to mobilize and raise awareness of the Summit amongst regional governments and civil society.

Natural Disasters in the Caribbean

Caribbean Countries are, on average, more exposed to natural hazard events than other countries in their frequency and their damages. This inherent vulnerability has been exacerbated by the fact that most Caribbean countries are insufficiently diversified, small-island economies, heavily dependent on tourism and commodity exports.

Effects of Natural Disasters

The size and duration of the economic effect of natural disasters is, in general dependent on a number of factors. Nonetheless there are a commonly identified set of short term economic effects including:

1. **Decline in overall and sectoral GDP.** Industries such as agriculture, fishing and tourism are typically affected heavily by natural hazards while other sectors such as transportation, utilities and other services are also vulnerable depending on the nature of the hazard. Generally, natural hazards make output more volatile than otherwise.
2. **Deterioration in Fiscal Balance** arising from a contraction in the domestic tax bases after a disaster accompanied by an increase in expenditures. If this deterioration is met by an increase in debt, it can contribute to higher inflation and lower investment affecting performance in the long term as well.
3. **Deterioration in the Balance of Payments.** The current account balance weakens as natural disasters impair export capacity (when ports and highways are damaged) and tourism activities. Imports increase due to reconstruction needs and disruption in domestic supplies of goods and services. While foreign grants and remittances from abroad can reduce the adverse impact, they are typically insufficient to offset the impact and are not usually available immediately to developing countries.
4. **Inflationary and Depreciation Pressures** resulting from the weakening current account position and investor concerns about future loss of earnings of local companies.

The options available to a country in responding to the negative economic shock include a mix of fiscal adjustments and financing. The appropriate mix is determined by a number of factors including:

- the magnitude and duration of the shock
- the country's initial fiscal, BOP and Debt positions
- the exchange rate regime

- the availability and terms of financing, etc.

In the longer term, negative economic and social effects can arise from:

- environmental damage to agricultural, fishing and forestry assets,
- destruction of infrastructure such as schools and ports,
- crowding out of productive public spending and investment through higher interest rates and diversion of public resources to disaster relief and recovery,
- through the worsening of fiscal and external balances which might trigger inflation, loss of confidence, capital flight and banking or balance of payment crises.

Responding to the Effect of Natural Disasters

As outlined above, natural disasters can be viewed as an extreme form of supply shock. With the effect of Climate Change, natural disasters, and in particular hurricanes, have become more frequent and their economic impact more severe. As a result, the traditional focus on emergency response and reconstruction has become more unsustainable.

The response of the Caribbean Countries must be comprehensive, incorporating:

- Comprehensive Risk assessment of the country through a systematic process of information collection and analysis
- A programme of investment in risk prevention and mitigation
- Adoption of a programme of financial protection and risk transfer
- Strengthening of emergency preparedness and response mechanisms
- A cost effective and efficient process for rehabilitation and reconstruction

The Role of Think Tanks, Academic Units and Multilateral Financial Institutions

In responding to the challenge posed by natural disasters, there is a critical role for academic units of leading universities in support of national governments in the design and operation of hazard mapping and hazard modeling systems at the national and regional level. Academic institutions and think tanks can play a

critical role in assisting governments of the region in the development of integrated disaster risk management programmes and in working with local insurance companies to manage those layers of risk which are best covered nationally.

These institutions, working with local and multilateral financial institutions have a critical role to play in assisting Governments in the design and financial planning for prevention and mitigation projects. They can also play a critical role in working with international institutions in developing risk transfer instruments for managing those layers of risk which are better managed by transferring them regionally or internationally. One such instrument, the Caribbean Catastrophic Risk Insurance Facility, is described in the appendix.

The Role of the Summit in Enhancing Environmental Sustainability

The Summit of the Americas, viewed as a process rather than an event, creates the opportunity for a sustained series of meetings between the policy advice units in the countries of the region including think tanks, academic units, NGOs, private sector organizations and international partner organizations to examine issues such as environmental sustainability in the Caribbean region. Such meetings provide an opportunity for the exchange of information and experiences, the transfer of know-how, and the development of action plans which go beyond the policy dialogue of the summit. It provides a forum where implementation programmes can be developed and reported on, contributing to the solution of common problems such as natural hazard risks faced by the countries of the region.

Appendix

The Caribbean Catastrophic Risk Insurance Facility

This instrument, developed by the countries of the Caribbean working with the World Bank, is designed with the following features:

It provides client governments in the region with **immediate financial liquidity in case they are hit by an adverse natural event**. Created with the assistance of donor countries that have contributed to the initial capitalization, the facility allows the small states of the region to pool their risk in order to lower the cost of coverage. The reserve capital provided by the donors is needed to absorb some of the risks while buffering the effects of international re-insurance volatility. It also serves to increase the overall resilience of the pool.

Under the scheme, **claims payments will depend on parametric triggers**. Index-based insurance contracts will pay claims based on the intensity of a predefined natural event in a predefined area over a predefined period up to a predefined limit per year. This **type of contract is less expensive than traditional insurance since it does not require the insurer to evaluate the losses on an indemnity basis**. The determination of the intensity of the predefined event is to be made by an independent agency.

Administered by a “captive manager”, the scheme allows participating countries to pay an annual premium based on their specific exposure. Countries can buy coverage for risks based on a specific return period, with the risks and premiums, which are specific to the location and size of each state, being calculated using probabilistic risk modeling techniques.

By offering a mechanism which allows the small states to access liquid financial resources immediately after a natural disaster, the proposed facility fills a gap in the range of instruments available to them for financing their response to the natural disaster. In principle, by ensuring that liquidity exists in the aftermath of the disaster, the facility should help the countries remain on their feet, speed recovery and maintain economic development.

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La Fundación Canadiense para las Américas (FOCAL) es un instituto independiente que se dedica al fortalecimiento de las relaciones entre Canadá y los países de América Latina y el Caribe mediante el análisis y el diálogo sobre políticas. Buscamos la creación de nuevos vínculos y opciones de política para el Hemisferio Occidental a través de la investigación que aborda soluciones sobre temas sociales, políticos y económicos. FOCAL promueve buena gobernabilidad, prosperidad económica y justicia social, basando nuestro trabajo en principios de integridad intelectual, diversidad racial y equidad de género.

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