

**Presentation to the First Meeting of the
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It is an honor to join Ambassador Shirley and Ambassador Tomic for this special joint session on natural disasters. Let me thank them for their leadership, Secretary General Insulza, Ambassador Ramdin, as well as the specialized agencies, organizations and experts that join us today, as well as Ambassador Antoine.

Allow me to take a few moments to highlight some key lessons, drawing upon years of project and policy experience of this Office in the area of natural hazards and disaster reduction and disaster mitigation. In so doing, I refer delegations to the report before them, entitled "The Economics of Disaster Mitigation in the Caribbean." The joint report for the first time brings together the International Monetary Fund, the World Bank, the Inter-American Development Bank and this Office of the OAS, to examine some of the economic and developmental aspects of natural disasters.

Preparations for this joint report were triggered by the devastating hurricane season of 2004, and in particular the impacts that brought about unprecedented damages in Grenada, as well as Haiti, Jamaica and elsewhere.

In fact, 2004 was – until recent tragic events of September 2005 – the most costly year ever recorded for disasters. Worldwide, natural disasters in 2004 cost approximately US\$145 billion in direct losses. Obviously, the indirect costs, in terms of foregone earnings in the agricultural, tourism and other sectors increase that figure significantly, which the losses brought about by the destruction of schools and the impacts that has on children's education are considerable. In September 2005, a full year after Hurricane Ivan destroyed or severely damaged 90 percent of all homes and buildings in Grenada, more than 45 percent of all schools remain closed.

Obviously, 2005 will break all previous records. Initial estimates of the clean-up and recovery costs for New Orleans and the Gulf Coast of the United States could top \$200 billion.

Against this background, allow me to make three brief points:

First, natural disasters represent core development and economic challenges, rather than isolated or one-time extraordinary events. There is no doubt that hurricanes, the thousands seismic events that have occurred since 1960, tropical storms, mudslides and other disasters bring about both immediate human suffering and economic losses, as well as longer-term direct and indirect economic costs.

One of the key lessons of the joint IMF-World Bank-IDB-OAS report is that the poorest of the poor within countries are most vulnerable to the impacts of natural disasters, and the poorest take the longest time to recover from damages, including recovering predisaster income levels.

The recent events of Katrina underscore that a wide range of economic sectors – from electricity generation and natural gas and oil, to tourism, transportation, the upstream agricultural commodity sector and insurance and reinsurance sectors -- are all directly affected by disasters. For the Caribbean countries, together with Central America, these economic costs are amplified: they occur at the sector-specific level, and in addition exert economy-wide shocks that affect underlying macroeconomic stability. Indeed, given their geographic location in high-density hurricane zones, coupled with a reliance on one or-two key economic sectors – for example tourism and agriculture – the relative economic costs of disasters in the Caribbean region are more often than not acute.

Accordingly, approaching natural disasters needs to focus on action at the sector-specific level, as well as galvanize the attention of central ministries, including planning, finance and other departments within government.

Second, there is a human tendency to forget about disasters after the relief, clean-up and reconstruction efforts are completed. However, based on past and recent trends, it is clear all too clear that hurricanes and tropical storms are likely to increase, both in their frequency and in their severity, in the coming century. For example, recent scientific estimates strongly suggest that the frequency of Category 3, 4 and 5 hurricanes in the Atlantic appear to be increasing, while the damages from those events are also increasing, because of climate-variability and other factors.

Evidence already suggests that the pattern of hurricanes is changing. For example, 2004 saw for the first time ever recorded a hurricane hit as far south as the northern coast of Brazil, while in 2003, a hurricane had its land-fall as far north as Nova Scotia, Canada. The obvious point is that natural disasters cannot be managed as one-time or isolated anomalies. Instead, they are part of a clear and accelerating pattern.

Given this pattern, the single most important conclusion of the joint report before you is that greater attention is needed to bolster *ex ante* or preventative actions before disasters occur. Obviously, this focus cannot diminish the critical importance of post-disaster relief, response and reconstruction actions. In addition, there is an obvious over-lap between reconstruction and mitigation policies, and in particular, ensuring that repaired or rebuilt structures integrate cost-effective and proven risk reducing improvements.

Third, it is more cost effective to invest in risk mitigation actions – actions like improving hazard mapping and ensuring that planning and zoning officials avoid the approval of construction in vulnerable flood-plains, to actions like adopting building codes and standards for schools, hospitals, roads, homes and infrastructure, so that they can withstand Category Five events, and as important, ensuring those standards and norms are monitored and enforced on the ground.

The fact is, for each dollar spent on risk reduction actions before events occur, at least two dollars are saved in direct clean-up costs. The cost-benefits for longer-term cost recovery are much higher.

For example, the lessons of Hurricanes George and Lenny that struck the Eastern Caribbean islands in the late 1990s is that building with appropriate standards and material adds no more than 2 percent to the total construction cost of a home, and between 10-15 percent to the total constructions cost of major infrastructure. For that small-upfront investment, homes would have retained their roofs and critical facilities like Port Zante would have withstood storm impacts of hurricanes.

There are different models that can deserve support and replication. Grenada's "Build Back Better" campaign is a model in introducing quality assurance in construction, and engaging all stakeholders – including homeowners, builders, mortgage companies and the insurance sector – in proper reconstruction programs, so communities are better prepared for the next hurricane.

This Office plans to use the Grenada program as a pilot to support a multi-country or regional approach to support natural hazard risk-reduction, focusing on good governance, the sharing of best-practices, as well as supporting cost-effective and replicable pilot projects for low and middle-income housing, as well as schools. In looking ahead, it is clear financial resources is only part of the answer. There is a great deal we can learn from one another, in order to facilitate focused south-south cooperation, including for instance drawing upon the valuable experience of countries like Chile, Brazil, Mexico, Venezuela and others, to exchange information related to earthquakes and hurricanes.

Mr. Chairman, before concluding, let me acknowledge the outstanding contribution of two senior colleagues of the OAS Office for Sustainable Development and Environment – Jan Vermeiren and Stephen Bender. Together, they have worked on natural disaster issues in the hemisphere for more than 50 years. They are recognized as world experts in the field. They retire from the OAS in the very near future, and on behalf of the OAS, I sincerely thank them for their dedication to advancing the work of risk reduction.

Thank you