

# ASSOCIATION OF CARIBBEAN STATES (ACS)

20 <sup>th</sup> MEETING OF THE SPECIAL COMMITTEE ON DISASTER RISK REDUCTION Port of Spain, Trinidad-and-Tobago, 22<sup>nd</sup>-23<sup>rd</sup> November, 2012



# **SPEAKING NOTES FOR**

# THE HONOURABLE MINISTER OF PLANNING AND SUSTAINABLE DEVELOPMENT

**On The Occasion Of** 

20<sup>TH</sup> MEETING OF THE SPECIAL COMMITTEE ON DISASTER RISK REDUCTION OF THE ASSOCIATION OF CARIBBEAN STATES (ACS)

Friday 23<sup>rd</sup> November 2012

Hilton Trinidad and Conference Centre

#### 1. <u>Introduction – Linking Disaster Risk Reduction and Sustainable Development</u>

The Government of Trinidad and Tobago advocates that Disaster Risk Reduction is intimately connected to the thrust and commitment towards sustainable development. The three pillars of sustainable development, economic stability, social sustainability and environmental protection are intrinsically linked to our achievement of high levels of sustainable development.

This 20th Meeting of the Special Committee on Disaster Risk Reduction of the Association of Caribbean States is timely following the devastation experienced by some of our Caribbean states and the United States after 'Super Storm Sandy'. Acknowledge the commitment of the ACS to improve the ability of Caribbean societies to be better prepared to deal with the adverse effects of natural disasters and the harmful effects of climate change. The approach to improve the ability to conduct effective strategic planning for disaster risk reduction, to strengthen the institutions such as National Meteorological and Hydrological Services (NMHS) and the Disaster Risk Reduction orgainsations to provide services for safety and preparedness with respect to naturals hazards is indeed holistic.

Disaster risk reduction strategies are especially important for the Caribbean region due to the region's vulnerability to natural disasters which have a direct impact on open nature of our economies. The disruption of economic activity which occurs due to the loss of a country's economic base and the loss of capital assets and other infrastructure can have both negative short and long-term effects on GDP growth resulting in longer-term economic consequences, such as slower growth, higher indebtedness and higher regional and income inequality. Environmental and social costs while more difficult to assess in monetary terms, can also be substantial, particularly with reference to poor and vulnerable communities within the region.

# 2. <u>Importance of Disaster Risk Reduction and Green Response to Disasters: Trinidad</u> <u>and Tobago's Context:</u>

Over the past two decades, there has been growing concern over the massive impacts of largescale natural and man-made disasters. Although events like these have always affected mankind, new hazards, such as those posed by global terrorism, cyber threats, pandemics and the effects of climate change, have captured world headlines. Furthermore, the devastation created by the Indian Ocean Tsunami (2004), the events of September 11, 2001, the disaster wreaked by the Haiti and Chilean Earthquakes (2010) and more recently the tragic consequences of Hurricane Sandy (2012) have added to the widespread demand for more effective approaches to Disaster Risk Management.

In 2005, the Global Vulnerability Index classified Trinidad and Tobago as extremely vulnerable to risk as it relates to the environment. (Appendix I provides detail on this Index).

Trinidad and Tobago's location and the acceleration of urbanisation and industrialisation experienced in the country mean that we are susceptible to a range of both natural and man-made hazards. The scale and possible consequences of potential hazards have effected a change of orientation in natural disaster management policy, to focus on Disaster Risk Reduction. Consequently, there is need not only to frame policies to focus on disaster risk reduction but also to promote and facilitate the production and utilization of eco-efficient and environmentally friendly products, tools and processes to be utilized for responding to and recovering from disasters impacting on our country.

This project that is being presented, 'Green Response to Disasters' adopts a sustainable approach to the management of a natural disasters, creating a major shift from reacting to the immediate needs of those impacted by disasters to that of adopting a long term view (integrating the values and principles of environmental impact and sustainable development) to the management of risk. The use of green products, processes and technologies to be used in disaster response and the development of standards and regulations to be used by Caribbean Governments in the promotion, production and utilisation of these products is in itself creative and innovative.

The Government fully endorses this approach to disaster risk management. Government is committed to the development of a new growth dynamic that transforms the existing consumption-based economic growth into an environmentally-friendly one – a model that emphasizes the efficient use of resources and minimizes pollution by utilizing environmentally-friendly technologies and supporting green industry.

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# 3. <u>Background: Trinidad and Tobago's human and economic losses from disasters</u> <u>between 1980 and 2010<sup>1</sup></u>

### **Overview:**

No of events:	10
No of people killed:	8
Average killed per year:	0
No of people affected:	3,187
Average affected per year:	103
Economic Damage (US\$ X 1,000):	26,127
Economic Damage per year (US\$ X 1,000):	843

# 4. Medium Term Policy Framework 2011 – 2014

The policy outlines the shift toward 'Green Policy Planning' in an effort to safeguard our environmental resources for the use and enjoyment of future generations. Implementing effective legislation along with policies to drive the efforts of promoting sustainable development will encompass the finalisation of legislation to protect the environment and reduce the incidence of anthropogenic (man-made) hazards such as flooding due to highly polluted water courses.

Additionally, the development of a National Physical Development Plan undertaken under a new planning framework for which one of the outcomes will be a National Spatial Development Strategy which will outline major land usage, national and sectoral goals, give strategic guidance on the arrangements of major infrastructure and location of facilities and will articulate the national urban development strategy.

The National Spatial Development Strategy will be undertaken on a phased basis; Phase 1 will require a Situational Analysis and the Harmonization of the Fourteen (14) Regional

<sup>&</sup>lt;sup>1</sup> CRED (WHO Collaborating Centre for Research on the Epidemiology of Disasters), *Trinidad and Tobago's Disaster Statistics 1980-2010*, <u>http://www.emdat.be/</u>

Development Plans produced in 2010. Phase 2 will address the preferred strategy, extensive stakeholder consultations and the finalisation of a new National Spatial Development Strategy.

A Comprehensive Disaster Management Policy Framework will guide the country's response to both natural and anthropogenic disasters by instilling a culture of safety, public education and awareness while addressing comprehensive disaster risk management.

Trinidad and Tobago therefore is committed to holistic sustainable development and to the importance of **stronger inter-linkages among disaster risk reduction, recovery and long-**term development planning as was articulated at the Rio +20 Conference held in Brazil in June 2012.

#### 5. <u>Rio +20 Conference on Sustainable Development, Brazil June 2012</u>

Rio +20 Conference on Sustainable Development focused on two themes: (a) a green economy in the context of sustainable development and poverty eradication; and (b) the institutional framework for sustainable development.

As reaffirmed and reiterated in the Rio+20 outcome, there is need to further mainstream sustainable development at all levels, integrating economic, social and environmental aspects and recognizing their inter-linkages, so as to achieve sustainable development in all its dimensions.

# One of the <u>Thematic Areas and cross-sectoral issues of the Rio+20 Conference was **Disaster** <u>**Risk Reduction**</u>:</u>

- Building **resilient cities and communities** is critical to achieving sustainable development.
- The commitment to the **Hyogo Framework for Action 2005-2015**: Building the Resilience of Nations and Communities to Disasters. (ODPM is guided by a comprehensive approach to reduce disaster risks as set out in the United Nations-endorsed Hyogo Framework for Action, adopted in 2005, whose expected outcome is *"The substantial reduction of disaster losses, in lives and the social, economic and environmental assets of communities and countries."*).

- The importance of **early warning systems** as part of effective disaster risk reduction at all levels in order to reduce economic and social damages, including the loss of human life.
- Importance of stronger inter-linkages among disaster risk reduction, recovery and long-term development planning. Coordinated and comprehensive strategies that integrate disaster risk reduction and climate change adaptation considerations into public and private investment, decision-making and the planning of humanitarian and development actions.
- The need to **integrate a gender perspective** into the design and implementation of all phases of disaster risk management.

#### 6. <u>Hyogo Framework for Action 2005-2015</u>

Five priorities for action:

- a) **Governance**: ensure that disaster risk reduction is a national and local priority with strong institutional basis for implementation
- b) **Risk identification:** identify, assess and monitor disaster risks and enhance early warning
- c) **Knowledge:** use knowledge, innovation and education to build a culture of safety and resilience at all levels
- d) Reducing the underlying risk factors
- e) Strengthen disaster preparedness for effective response

#### 7. Green Disaster Response Project

This project is developed in the framework of the Memorandum and the Letter of Understanding signed between the Association of Caribbean States and the International Federation of Red Cross and Red Crescent Societies. It comprises four (4) phases, which will identify, test and promote the use of green technology in the response to and in recovery from disasters.

Reducing the impact of the products and technologies used will provide both environmental and economic benefits for the use by regional governments to incorporate into their national policy and legislative agendas in order to promote and facilitate the production and utilisation of such eco-efficient and environmentally friendly products, tools and processes to be utilised for responding to and recovering from disasters impacting on their country.

The project has the following specific objectives:

- To determine the efficiency, effectiveness and availability of green products for the use in emergency response to and recovery from natural disasters such as the building of shelters, the heating, lighting and water supply used;
- To develop a regulatory framework to facilitate the production of the green products mentioned above;
- To promote and facilitate the production and utilisation of eco-efficient and environmentally friendly products, tools and processes to be utilised for responding to and recovering from disasters impacting on their country;
- To facilitate plans and preparations for the shipping to and distribution within Caribbean states of pre-stocked and/or emergency response materials that meet the specifications and criteria of Green materials; and
- To duplicate the model developed as the outcome of this proposal in Central America, South America and other regions of the world

The potential for business development in green products, processes and technologies for the Caribbean will be perhaps and unintended outcome of the project. It is something that we in the Region must always alert particularly as we look towards using the model within the hemisphere.

#### 8. Government and the Green Economy

Reflecting the growing importance of green technology, Government has taken the initiative to capitalise on the rising global interest in green growth and products, support green technology as a new growth engine and develop new industries that can successfully engage in the global environmentally friendly technology market.

Initiatives that the Government intends to undertake to shift towards a greener economy (although not directly linked to disaster risk reduction) in Trinidad and Tobago include the establishment of a Solar Manufacturing Complex, the creation of a National Wind Resource Assessment Programme, the utilization of green building technologies in the transformation of the Invader's Bay waterfront and investment in the provision of retail dispensing of compressed and liquefied natural gas for reducing the use of gasoline fuel.

# Appendix I

## EMA's Environmental Vulnerability Index (EVI) 2001 and 2002:

The results show that for Trinidad, indicators scoring 7 on the EVI are, intensive farming (especially poultry farming), human population density (especially in urban areas), rate of removal of natural vegetation (especially in the northern range), oil spills (especially on land), vehicle density (most air pollution is from vehicles), fertiliser usage (especially on Caroni lands), degraded land (especially from fires), water usage per capita (more of half of the water produced is unaccounted for) and mining activity (development activity in the petrochemical sector is exceptionally aggressive). In other words nearly all of Trinidad's major environmental vulnerabilities are anthropogenic in nature and due to poor management of the environment by human beings.

Tobago on the other hand is a far better place to live from an environmental vulnerability standpoint. The major environmental vulnerabilities in Tobago are due to the elevated density of endemic species per square kilometre that is fairly typical for an island, high density of people living in coastal settlements, high percentage of degraded land in the coastal zone and high water usage per capita. For its size Tobago has more unique biodiversity than Trinidad and so protection of its remaining natural vegetation is an urgent priority.

## **Global Environmental Vulnerability Index 2005**

A vulnerability index for the natural environment, the basis of all human welfare, has been developed by the South Pacific Applied Geoscience Commission (SOPAC), the United Nations Environment Programme (UNEP) and their partners. The index was developed through consultation and collaboration with countries, institutions and experts across the globe. This index is designed to be used with economic and social vulnerability indices to provide insights into the processes that can negatively influence the sustainable development of countries.

The EVI is based on 50 indicators for estimating the vulnerability of the environment of a country to future shocks. These indicators are combined by simple averaging and reported simultaneously as a single index, a range of policy-relevant thematic sub-indices and as a profile showing the results for each indicator. Simple averages across indicators were used because they can be easily understood and more complex models do not appear to offer any advantages to the expression or utility of the index. This overview with drill-down structure means that in addition to an overall signal of vulnerability, the EVI can be used to identify specific problems. The EVI has been designed to reflect the extent to which the natural environment of a country is prone to damage and degradation.

Below shows Trinidad and Tobago's Profile and our rank on the EVI as extremely vulnerable.



T	rini	dad	and	l Tok	Da	go	SCORE	DATA%
						EVI	381	94
Wind 1							Extreme	ly yulnerable
Dry 2						CENTRATION.		ly valitorabio
Wet 3	<u> </u>					ASPECTS OF VULNERABILITY:		
Cold 5	$\vdash$					Hazarde	3 79	Q1
SST 6						Popietanao	3.75	100
Volcano 7						Demogra	3.75	100
Earthquake 8						Damage	3.90	100
Tsunami 9								
Sides 10						LEGEND FOR INDICATOR TIPES:		
Dispersion 12						Weather & Climate		
Isolation 13						Geology		
Relief 14						Geography		
Lowlands 15						Resources & Services		
Borders 16						Human Populations		
Openness 19								
Migratory 19						POLICY RELEVANT SUB INDICES		
Endemics 20						Climate Change	4.25	02
_							4.20	92
Endangered 22						Exposure to Natural Disasters	3.09	100
Extinctions 23						Biodiversity	3.74	100
Vegetation 24				_		Desertification	4.10	91
Ecoss veg 25						Water	5.33	92
Degradation 27						Agriculture / Fisheries	4.29	89
Reserves 28						Human Health Aspects	6.20	83
MPAs 29						· · · · · · · · · · · · · · · · · · ·		
Farming 30				_				
Fertilisers 31						ISSUES OF GREATEST ENVIRONMENT	AL VULNERA	BILITY:
Pesticides 32							32	39
Fisheries 34								340
Fish Effort 35								
Water 36						ENVIRONMENTAL		WASTE
Air 37						LOWLANDS OPENNESS ENDEMICS DEGRA	DATION PESTIC	IDES TREATMENT
Waste 38							<u>≙</u>	
I reatment 39							-/	
Spills 41							-/	
Mining 42						INDUSTRY MINING POPULATION SET	ASTAL EMENTS	
Sanitation 43						ISSUES OF LEAST VULNERABILITY OR	<b>GREATEST F</b>	RESILIENCE:
Vehicles 44						4 5 7. * 80	9	10 2
Density 45							ANK TO	
Growth 46							6	
Coastal 48							7	
Agreements 49						HOT PERIODS COLD PERIODS VOLCANOES EARTH	HQUAKES TSUN	IAMIS SLIDES
Conflicts 50						14 0 23 3 41		。 50
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		Resilient 륮		Vulnerable		RELIEF EXTINCTIONS BIOTECHNOLOGY SP	ILLS GRO	ATION WTH CONFLICTS
Blanks = No data or Not applicable; EVI scores are 1-7				ot applicable	;	CHANGES SINCE LAST EVALUATION	None, this is f	irst assessment
				- 1-1				
								22/02/2005