

FIRST WORKSHOP ON LONG TERM FINANCE (LTF)

***Session II: Understanding
the long-term finance needs
of developing countries***

**Maritim Hotel
Godesberger Allee
53175 Bonn, Germany**

Evolution of discussion on L&D

- Bali Action Plan 2007 called for:
- Risk management & risk reduction strategies.
- Inclusive of Risk Sharing & Risk Transfer and for consideration of Disaster reduction strategies & means to address Loss & Damage associated with CC impacts in developing countries that are particularly vulnerable to CC.
- No mention of compensation or liability issues.
- Risk Management & Insurance featured primarily in discussion of Ad Hoc Working Gp. On Long Term Cooperative Action (AWG-LCA) 2008 – 2010

Evolution of discussion on L&D

- Copenhagen Accord – funding identified
- Resolved in Cancun -- Agreements recognised need to strengthen international cooperation & expertise to understand & reduce Loss & Damage associated with the adverse effects of CC including impacts related to extreme weather events and SLOW ONSET events

SLOW ONSET EVENTS

- SLR
- >> Temperature
- Ocean Acidification
- Glacial Retreat & related impacts
- Salinization
- Land and forest degradation
- Loss of biodiversity
- Desertification

AOSIS PROPOSAL (2008)

- Proposal for a mechanism for risk reduction, management & sharing – 3 components:
 - a) A risk management and prevention component to promote risk assessment and RM tools & strategies at all levels with a view to facilitating & supporting the implementation of risk reduction and risk management measures
 - b) An insurance component to address climate related extreme weather events, and risks to crop production, food security and livelihoods
 - c) A rehabilitation and compensation component to address progressive –ve impacts that result in Loss & Damage.

COP 17 DURBAN

- Consensus on elements of a work programme in L&D in SB1 work programme :
- SB1 requested to “continue the implementation of the work programme on approaches to address L&D associated with CC impacts in developing countries that are particularly vulnerable to the adverse effects of CC and to make recommendations on L&D to COP for its consideration at its 18th session”.

Thematic areas of the work programme on loss and damage

- I - Assessing the risk of loss and damage associated with the adverse effects of climate change and the current knowledge on the same
- II - A range of approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events, taking into consideration experience at all levels
- III - The role of the Convention in enhancing the implementation of approaches to address loss and damage associated with the adverse effects of climate change

Assessing the risk of loss and damage associated with the adverse effects of climate change

1. What are the data and information requirements for assessing impacts and climate risk, at different levels and for a broad range of sectors and ecosystems? What data are available and where are the gaps?
2. What methods and tools are available for risk assessment, including their requirements, strengths and weaknesses, and can they address social and environmental impacts?
3. What are the capacity needs for applying risk assessment methods on the ground, including for facilitating their application in developing countries?
4. How can the results of risk assessments be optimally formulated in order to support decision-making? What are the desired methods for presenting the results of risk assessment exercises so that they drive decision-making?

Key Requirement to assist SIDS

Address Loss and damage

- - Capacity Building –assessment, planning and implementation of risk reduction measures for key sectors –increased information –data and analytical capacity
- - Risk Management tools and instruments – Captive Insurance systems – reinvestments of premium in SIDS
- - Identification of key economic assets and valuation

SOME CARIBBEAN EFFORTS TO ADDRESS L&D

- Impacts of SLR on coastal development.
- Caribbean Catastrophic Risk Insurance Facility (CCRIF)
 - Regional insurance
 - Micro-insurance (Haiti)
- Regional Framework Strategy & Implementation Plan.
 - Development of a Risk Management tool.

SLR Impacts: 1m

- At least 16 multi-million dollar tourism resorts lost, with a replacement cost of **over US\$ 1.6 Billion** and the livelihoods of thousands of employees and communities affected
- Transportation networks severely disrupted
 - Loss of 10% of CARICOM island airports at a cost of **over US\$ 715 million**
 - Lands surrounding 14 ports inundated (out of 50) at a cost of over **US\$ 320 million**
 - Reconstruction cost of lost roads **exceeds US\$ 178 million** (6% of road network in Guyana, 4% in Suriname, 2% in The Bahamas)

SLR Impacts: 1m

- Over 2,700 km² land area lost (10% of The Bahamas)
 - Market value of undeveloped land lost is **over US\$ 70 billion**
- Over 100,000 people displaced (8% of population in Suriname, 5% of The Bahamas, 3% Belize)
 - Cost to rebuild basic housing, roads and services (water, electricity) for displaced population approximately **US\$ 1.8 billion**
- Annual GDP losses of at least **US\$ 1.2 billion** (over 6% in Suriname, 5% in The Bahamas, 3% in Guyana and Belize)
- Over 1% agricultural land lost, with implications for food supply and rural livelihoods (4% in Suriname, 3% in The Bahamas, 2% in Jamaica)

Total Economic Impact of 1m SLR

- GDP loss = > US\$ 1.2 billion per year (cumulatively US\$30 billion if 1m SLR occurs in 2075)
- Permanently lost land value = US\$ 70 billion +
- Reconstruction / relocation costs = \$ 4.64 billion

NOTE: These figures are based on SLR scientific evidence and do not include other major economic impacts, such as losses in agricultural production, losses in GDP from areas outside inundated regions, costs of changing energy, increased storm or hurricane damage and related insurance costs, necessary water supply construction, increased health care costs and any non-market value impacts.

Total Annual and Capital Costs of SLR in CARICOM Countries*

	2050s		2080s	
	Annual Costs (US \$ billion)	Capital Costs (US \$ b)	Annual Costs (US \$ b)	Capital Costs (US \$ b)
Mid-Range SLR Scenario	3.9	26	13.5	68.2
High SLR Scenario	6.1	60.7	19.4	187

U Trotz CCCCC

(in 2010 USD) ¹⁴

*Plus undeveloped land loss of \$70 Billion

SLR Impacts: 1m

SLR impact estimates **are highly conservative...**

- Population and GDP are fixed at recent levels
- Coarse resolution of geospatial data masks the vulnerability of coastal infrastructure, natural areas and people to inundation from SLR in some areas
- Implications of SLR for accelerated coastal erosion could not be assessed in this study

In the Future...

- High resolution DEMs that account for erosion are essential to understand the true threat SLR poses
- A comprehensive understanding of long-term SLR risks is needed to negotiate appropriate adaptation assistance.
- Addressing these knowledge gaps should be a priority for Development Agencies

THANK YOU