

High-Level Roundtable on International Cooperation for Sustainable Development in Caribbean Small Island Developing States

***Natural disasters, risk reduction,
economic and social
sustainability for Caribbean SIDS***

Presented by
Neil Pierre, Director
ECLAC Subregional Headquarters for the Caribbean

Disasters in the Caribbean 2000-2007

DISASTERS IN THE CARIBBEAN 2000-2007					
DATE	PLACE	TYPE OF EVENT	AFFECTED POPULATION		TOTAL DAMAGE (millions of dollars – 2007)
			Deaths	Direct damage (primary affectation)	TOTAL
2000-2007	Caribbean		5,568	3,856,499	11,623.68
Annual average			928	642,750	1,937.28
30 Sept – 1 October 2000	Belize	Hurricane Keith (Category 5 on the Saffir-Simpson Scale)	3	57,403	755.57
October 2001	Belize	Hurricane Iris, category 4 on the Saffir-Simpson Scale (in Quintana Roo, Oaxaca and other parts)	23	21,568	232.54
November 2001	Cuba	Hurricane Michelle affected the central-eastern part of the country, reaching Category 5 on the Saffir-Simpson scale	5	140,415	2,066.27
November 2001	Jamaica	Landslides, floods and avalanches caused by excessive rains, associated with the passage of Hurricanes Michelle and Iris in the Caribbean	2	15,000	359.88
May 2003	Dominican Republic	Evaluation of the damages caused by the floods in the Yaque in the North and Yuna basins	10	63,520	43.99
May 2004	Haiti	Effects of the landslides in Font-Verretes in Mapou (which affected the town of Jimani en the Dominican Republic	2,665	16,900	

September 2004	Dominican Republic	Hurricane Jeanne, 15-18 September	23	32,554	296.00
	Haiti	Effects of Tropical Storm Jeanne in the town of Gonaives, the North-West and Artibonite, 18 September	2,754	297,926	295.90
	Bahamas	Hurricanes Frances and Jeanne (3-20 September)	2	28,500	551.00
	Grenada	Hurricane Ivan, 6-8 September	28	81,553	889.00
	Cayman Islands	Hurricane Ivan, 11-13 September	2	35,189	3,432.24
	Jamaica	Hurricane Ivan, 10-12 September	17	369,685	595.00
	Cuba	Hurricane Ivan, 12-15 September	0	2,200,000	1,500.00
January 2005	Guyana	Floods caused by heavy rainfall at the end of December – beginning January in the coastal region between Georgetown and Albion	34	274,774	519.68
December 2005 – February 2006	Guyana	Floods	0	101,681	30.10
May 2006	Suriname	Floods caused by heavy rainfall in the districts of Siwalipini and Brokopondo	0	48,351	56.51
August 2007	Belize	Hurricane Dean 21 August	0	37,700	89.51
August 2007	Dominica	Hurricane Dean 17 August	3 ^[1]	13,283	59.99
August 2007	St. Lucia	Hurricane Dean 17 August	0	23,167	0.0188

^[1] Three deaths were recorded, two were as a directly caused by the hurricane and one due to a traffic event caused by land slippage

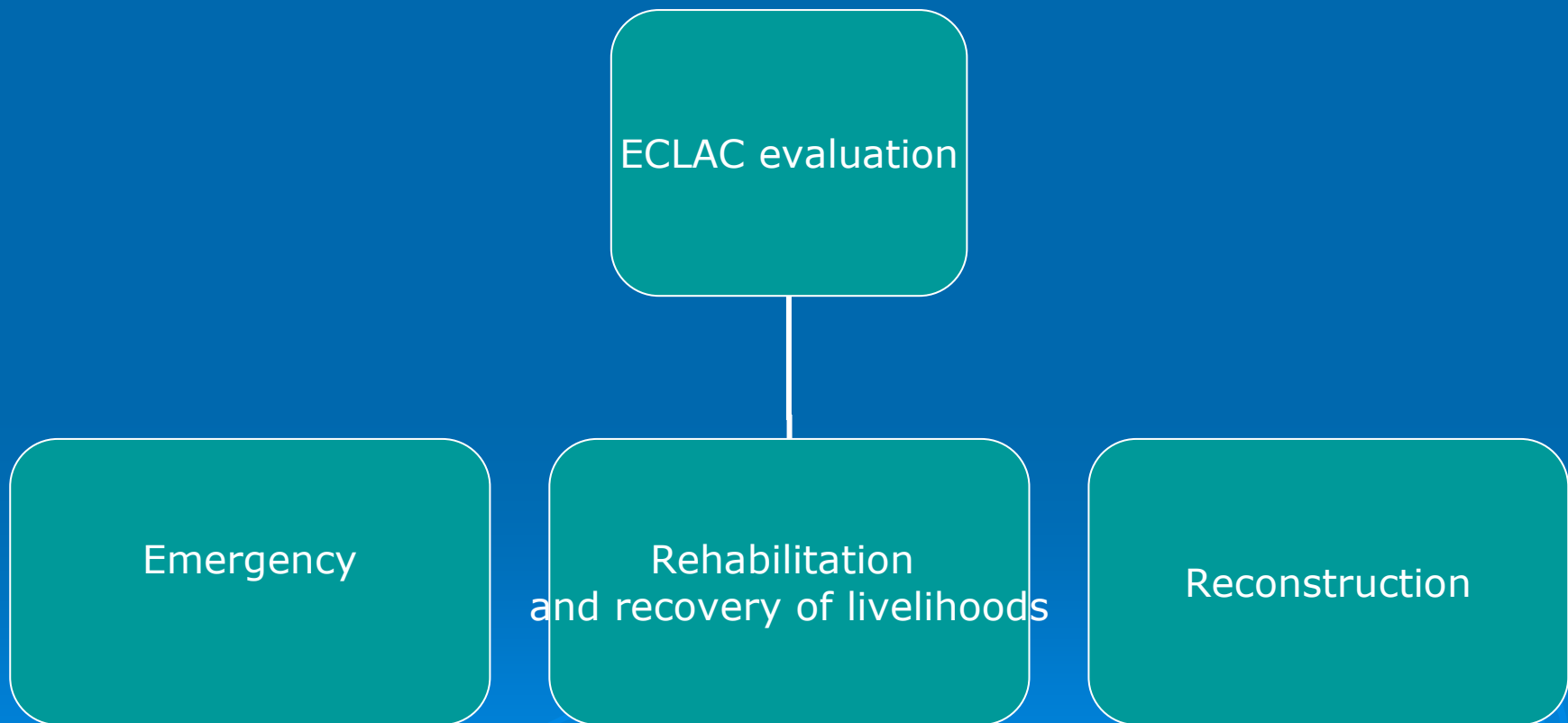
Economic Losses due to natural events in the Caribbean 2004 (ECLAC)

<i>Island/State</i>	<i>Natural Event</i>	<i>Economic Impact, US\$ million</i>	<i>Impact as % of GDP</i>
<i>Grenada</i>	<i>Hurricane Ivan</i>	889	212.0
<i>Jamaica</i>	<i>Hurricane Ivan</i>	595	8.0
<i>Dominican Republic</i>	<i>Tropical Storm Jeanne</i>	296	1.9
<i>Bahamas</i>	<i>Hurricanes Frances and Jeanne</i>	551	10.5
<i>Cayman Islands</i>	<i>Hurricane Ivan</i>	3,432	183.0
<i>Dominica</i>	<i>Earthquake</i>	46	17
Total		5,763	

Impact of September 2004 events on living conditions of people in four selected SIDS

Country	Total Population	Affected population	Per cent of Population Affected	Absolute Number of Deaths	Number of dwelling places damaged	Per cent of Housing Stock Damaged
Cayman Islands	42,397	35,189	83%	2	13,535	83%
Grenada	102,632	81,553	79%	28	28,000	89%
Jamaica	2,620,000	369,685	14%	17	102,000	14%
Haiti	7,929,048	297,926	4%	3,000	49,882	4%

The ECLAC Methodology: The post-disaster cycle



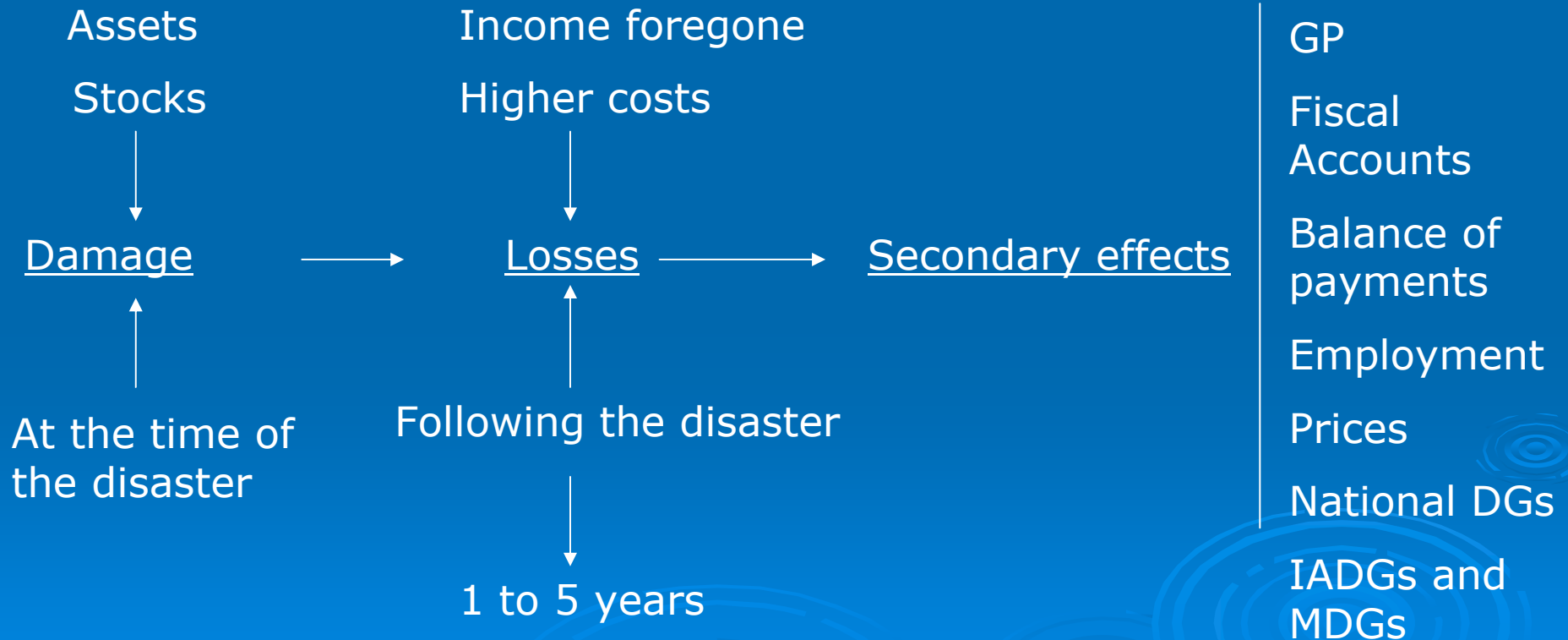
The ECLAC Methodology: The assessment

Part 1

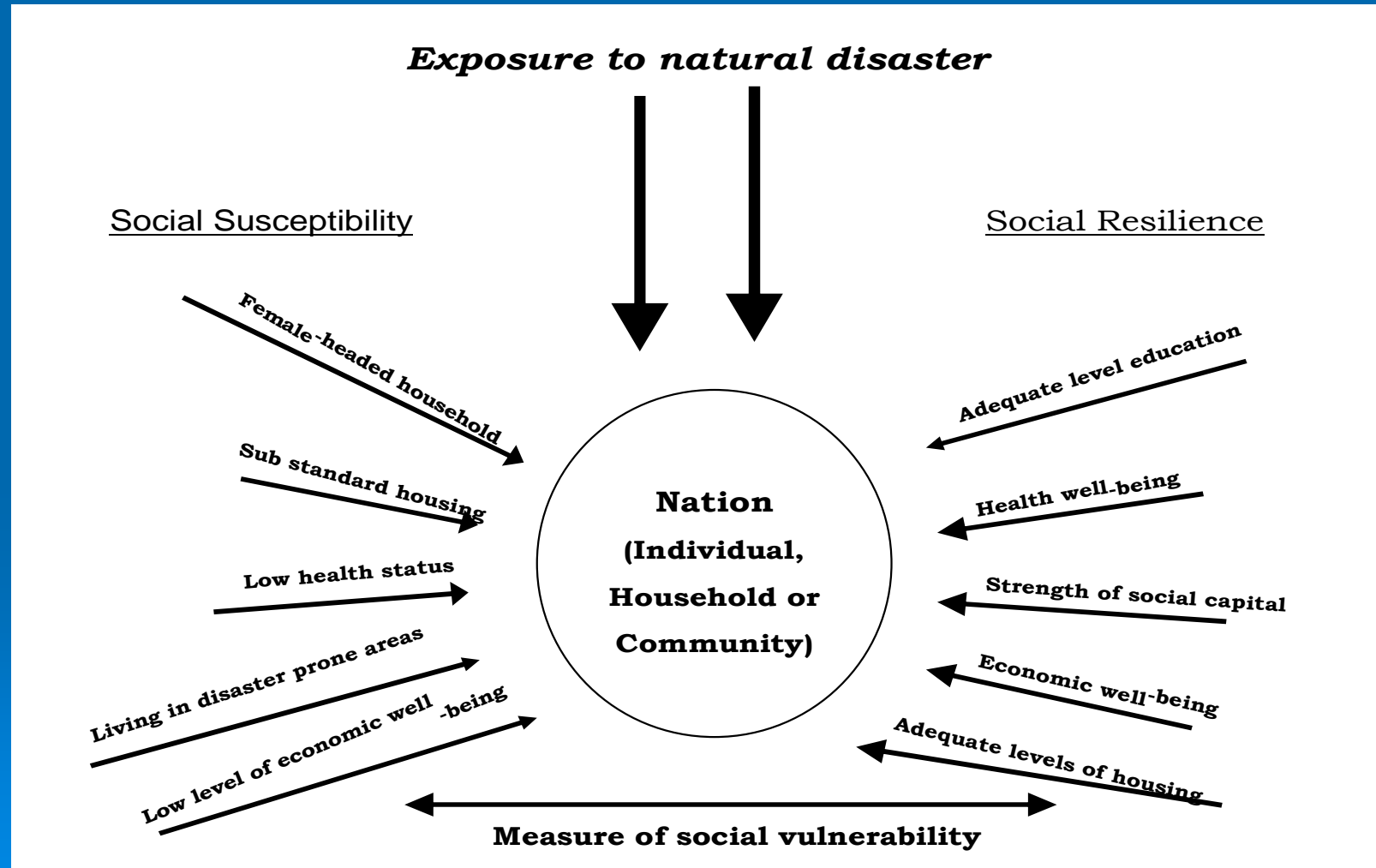
Social and productive sectors, infrastructure and environment

Part 2

Macro/socioeconomic effects



Framework for the social dimension of vulnerability to a natural disaster



Training in the use of ECLAC's Methodology

Country	No of Participants	Dates
Regional training workshop, Port of Spain	24	10-12 July 2000
British Virgin Islands	18	17-19 July 2000
Belize	59	11-13 June 2001
Jamaica	43	23-25 April 2002
St Lucia	42	17- 19 Dec 2002
Trinidad and Tobago	47	17-19 March 2003
Belize	43	21 May–4 June 2004
World Bank, Washington, D.C, USA (with SHQs Mexico)	10	13-17 April 2004
Expert meeting to revise the Disaster Assessment Training Manual Report of meeting, Port of Spain	32	6 & 7 July 2004
Cayman Islands	42	19-21 April 2005
Washington (with SHQs Mexico)	12	19 -20 May 2005
Port of Spain	51	7-9 June 2005
St Lucia	10	23-24 June 2005
Belize (with SHQs Mexico)	22	10-12 Jan 2006
Turks and Caicos	28	14-16 August 2007
T&T (with SHQs Mexico)	32	17-19 Dec 2007
Suriname	12	30 Aug to 4 Sept 2006
Guyana	21	2- 4 Feb 2006
Total Trained	548	

Lessons Learned

- Develop harmonized data collection, management and analysis systems to better measure disaster impacts
- Strengthen planning frameworks to incorporate economic instruments, insurance and risk transfer mechanisms for disasters
- Upgrade repair and maintenance plans and schedules for public infrastructure
- Enforce land use zoning and building codes provisions
- Integrate multi-hazard preparation into national development planning framework

Lessons Learned

- Undertake human settlements and hazard mapping to reduce exposure to disaster risk, particularly for low income groups
- Reduce the development gap between the rural and the urban environment
- Strengthen community based capacity for and involvement in natural disaster reduction
- Strengthen emergency response and management structures – build capacity
- Increase economic diversification to compensate for losses among different sectors

Lessons Learned

- Include equitable land tenure and use policies into the national development framework
- Consider social susceptibility of female-headed households and establish social protection and empowerment measures
- Incorporate transparency and accountability into the management of relief, recovery and reconstruction programmes
- Address negative impacts of globalization, particularly in regard to the erosion of social capital

Thank you

