

FONDAZIONE ENI ENRICO MATTEI



CAPACITY DEVELOPMENT FOR HAZARD RISK REDUCTION AND ADAPTATION







Confronting the two-headed dragon

The case of Small Island Developing States

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No man is an **island**, entire of itself; every man is a piece of the continent, a part of the main; **if a clod be** washed away by the sea, the world is the less, as well as if a promontory were, as well as if a manor of thy friends or of thine own were; any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls; it tolls for thee.

John Donne (1572-1631)

Essentials

Small Island Developing States (SIDS) are characterised by unique conformation of environmental, economic and social *drivers of risk*, which makes them *vulnerable* to external shocks, *climate change and natural hazards*.

UNFCCC Conference of the Parties (COP-18) paved the way for "institutional arrangements, such as an international mechanism (...) to address loss and damage".

A mechanism to monitor SIDS performance in reducing risk, preserving vital ecosystem services, and engaging in development opportunities without side-looped effects on vulnerability and disaster risk.

Recognized in 1992 as a distinct group necessiting special attention, SIDS comprise 52 (51* according UNSD 2013) states and territories, of whom

- » 38 UN Members States
- » 10 least developed countries (LDC)
- » 3 Low Income and 14 Lower Middle Income countries**
- * UN Statistical Division's list of SIDS revised in 2013 does not include Bahrain
- ** World Bank classification <\$1,025; and \$1,026 - \$4,035 GNI per capita respectively

SIDS Identity Card

Small in land size, population and economy, but home to extraordinary natural beauty and cultural richness

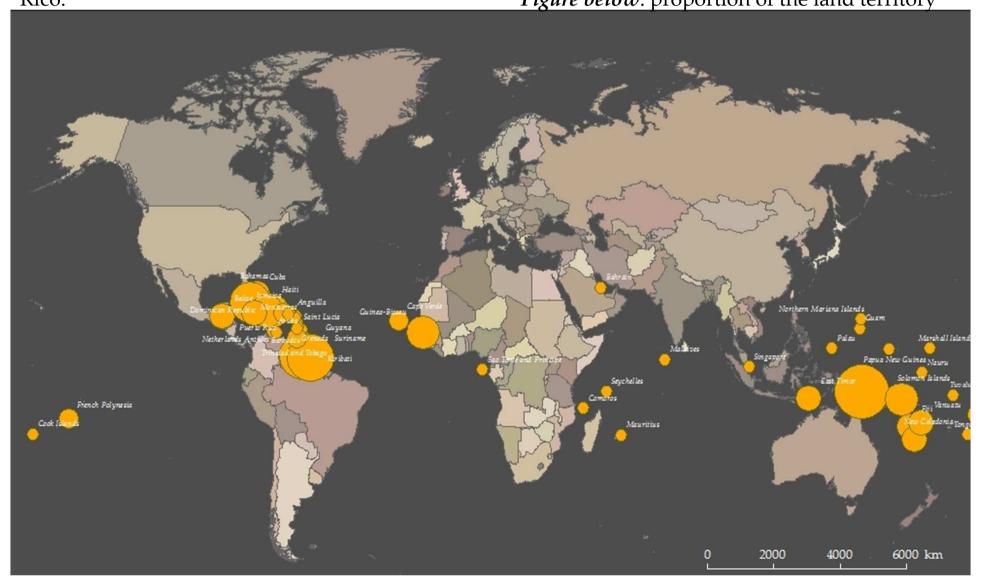
- » Less than 1 per cent of the earth surface, world's population, global GDP, but 20 per cent of the UN General Assembly votes.
- » High biological and ecological richness, unique indigenous culture and history

Disproportionally exposed to natural hazards of any kind and, worse, to likely effects of anthropogenic climate change climate

» Ca. 1 per cent in terms of anthropogenic GHG, first and most exposed to climate risks

SIDS: American Samoa, Anguilla, Antigua and Barbuda, Aruba, Bahamas, The, Bahrain, Barbados, Belize, British Virgin Islands, Cape Verde, Commonwealth of Northern Marianas, Comoros, Cook Islands, Cuba, Dominica, Dominican Republic, Fiji, French Polynesia, Grenada, Guam, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Federated States of, Montserrat, Nauru, Netherlands Antilles, New Caledonia, Niue, Palau, Papua New Guinea, Puerto Rico.

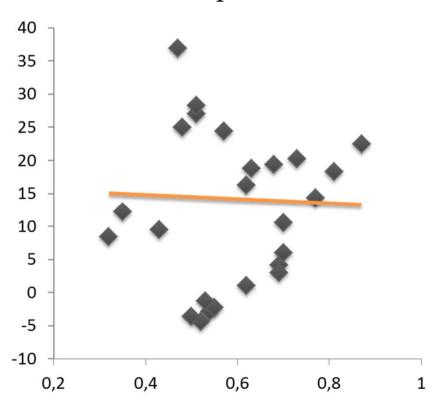
Figure below: proportion of the land territory**



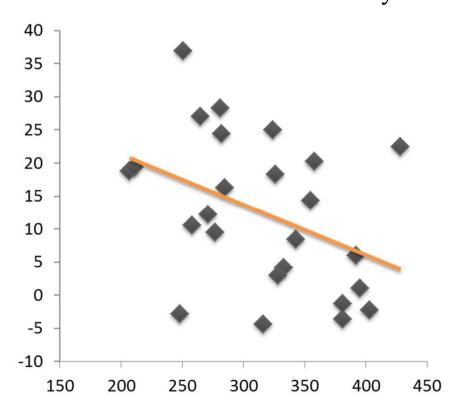
Economic growth (2007-2012)

decoupled from the social development and cohesion, with weak correlation to the preservation of healthy ecosystems

Human development index



Environmental Vulnerability Index



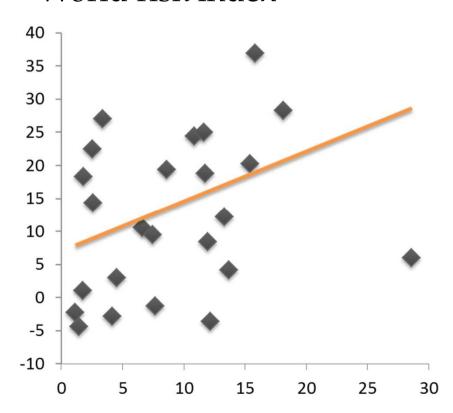
Economic growth (2007-2012)

is pursued without due attention to overall hazard risk exposure and contributes to increased risk

Disaster Risk Index

40 35 30 25 20 15 10 5 0 -5 -10 0,2 0,4 0,6 0,8 0 1

World risk index

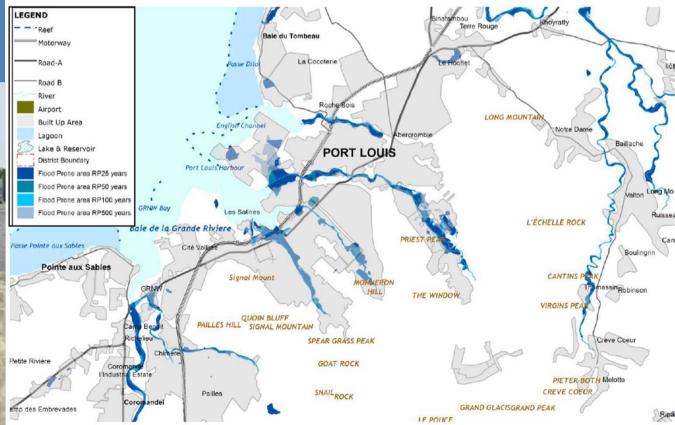


On March 31th and April 1st, 2013, Port Luis, the capital of the Republic of Mauritius was hit by torrential rainfall with estimated return period > 300 years. Precipitation over 3 hours exceeded 150 mm.



Urban vulnerability

» About a third of the SIDS population lives in the capital towns most of which are located close to the coasts

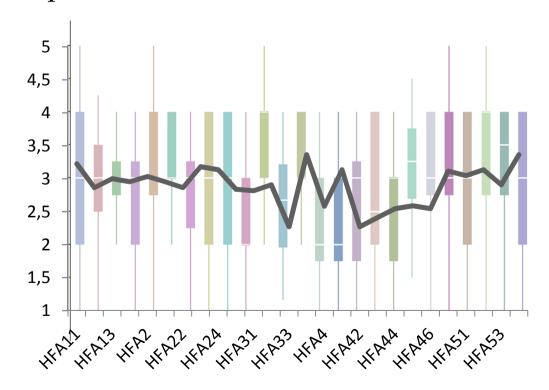


» 1992 UN Conference on Environment and Development » 1994 Barbados programme of actions » 2005 Mauritius Strategy of Implementation » 2010 UN General Assembly highlights very slow progress » 2012 UN Conference on Sustainable Development » 2012 UN Climate Change Conference (Doha): loss and damages associated with the impact of Climate change

DRR Governance

More efforts and international assistance are needed to boost sustainable development

» 22 SIDS have reported the progress in implementation of the HFA



Post 2015 Int. Agreement

- » **Conditionality** of the L&D scheme to mandatory and progress-monitored implementation of the HFA+,
- » **Partnership** for capacity building, scientific/technical support, data collection and risk analysis,
- » DRR and climate change proofed **development**; real commitment to preservation of valuable ecosystems
- » Regional cooperation (e.g. Caribbean insurance scheme) for DRR
- » Earmarking a share of **development aid** for disaster prevention and preparedness

Projects

CATALYST

Capacity
Development For
Hazard Risk
Reduction And
Adaptation

EU FP7 (Oct 2011-Sept 2013)

Global Think
Tank comprised by
distinguished
experts established

CASCADE

Climate Change
Adaptation
Strategies for
Water Resources
and Human
Livelihoods in
the Coastal
Zones of Small
Island
Developing
States

EuropeAid ACCP (2012-14)

DRR and Climate Risk Republic of Mauritius

Climate simulation, Inland and coastal flood risk assessment, DRR Strategy

ADP (2012)

Climate Adaptation & Insurance in the Caribbean

Early warning, risk reduction, livelihood security & insurance

MCII, CCRIF, Microensure, Munich Re (2011-2014)

How do people manage weather risks today?

	Grenada (%)	St. Lucia (%)	Jamaica (%)	Belize (%)	Stressor Level
Insurance Payout	4.8	1.5	2.9	8.6	Low
Used Savings	45.7	96.2	65.4	34.5	Medium
Used Remittances	3.8	3.1	9.6	1.7	Medium*
Found another job	10.5	6.1	0.0	12.1	Medium
Sold possessions	1.9	1.5	0.0	13.8	High
Government Assistance	34.3	8.4	1.9	25.9	Medium*
Borrowed (informal)	7.6	10.7	16.3	13.8	Medium
Borrowed (formal)	7.6	10.7	0.0	36.2	Medium
Did not repair/replace	22.9	59.5	48.1	24.1	High
Other (includes 'waiting')	9.5	0.8	51.9	6.9	High
TOTAL	148.6	198.5	196.1	177.6	-

Stressor Levels from Sebstad et al. (2006).

Totals do not sum to 100% as multiple responses were allowed. High amounts over 100% indicates multiple coping strategies.

^{*}Indicates that stressor level was not included in Sebstad et al. (2006) but inferred from other levels.



MCII CLIMATE RISK INSURANCE IN THE CARIBBEAN

MICROENSURE Munich RE



Objectives

- Enhance livelihood security as part of wider risk management & adaptation efforts
- Provide financially stable parametric insurance solutions for low-income people to cover medium-level weather events (return period 20-40 years)
- Find ways to combine approaches with DRR to catalyse sustainable adaptation
- Prove value of regional risk management platforms in achieving these goals

Thank you for your attention

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