



**INTERGOVERNMENTAL PREPARATORY MEETING TO THE 17TH CSD
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**SIDS :
CLIMATE CHANGE AND ADAPTATION**

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Impacts of Climate Change on SIDS

- Increased vulnerability to effects of CC, SLR and extreme weather events
- Sea-level rise : increased inundation, storm surge, erosion and other coastal hazards, thus threatening vital infrastructure, settlements and livelihood-supporting facilities
- Water resources seriously compromised
- Heavy impact on coral reefs, fisheries and other marine-based resources
- Replacement of some local species, especially at higher latitudes
- Subsistence and commercial agriculture adversely affected
- Effects on tourism both direct and indirect, and largely negative
- Impacts on human health, mostly in adverse ways

(Source : IPCC FAR 2007, Contribution of WG2- Chapter 16 : Small Islands)



LDC-SIDS with NAPAs (December 2008)

SIDS	Date of NAPA submission
Solomon Islands	December 2008
Maldives	March 2008
Cape Verde	December 2007
Vanuatu	December 2007
Sao Tome and Principe	November 2007
Tuvalu	May 2007
Kiribati	January 2007
Haïti	December 2006
Comoros	November 2006
Samoa	December 2005

Policy consideration :
NAPA equivalent for non-LDC SIDS

Projected increase in air temperature (°C) by region, relative to the 1961–1990 period.

Region	2010–2039	2040–2069	2040–2069
Mediterranean	0.60 to 2.19	0.81 to 3.85	1.20 to 7.07
Caribbean	0.48 to 1.06	0.79 to 2.45	0.94 to 4.18
Indian Ocean	0.51 to 0.98	0.84 to 2.10	1.05 to 3.77
Northern Pacific	0.49 to 1.13	0.81 to 2.48	1.00 to 4.17
Southern Pacific	0.45 to 0.82	0.80 to 1.79	0.99 to 3.11

Climate Change and Agriculture in the context of SIDS

Change in temperature and rainfall patterns will impact on productivity, especially for rain-fed agriculture

Small size does not allow relocation of crops to other less affected areas

Invasive alien species (IAS) affecting crops

Implications for food security and livelihoods of communities

Pest resilience

Access to financing and insurance mechanisms

Policy considerations:

1. Irrigation
2. Crop diversification
3. Support instruments (research, extension, financial)
4. Trade negotiations

Climate Change and Rural Development in the context of SIDS

Micro and Small Entrepreneurs

Fishermen communities

Local communities living on craftsmanship

Women and Children

Unemployed

Limited infrastructure and opportunities

Policy considerations:

1. Education, training and skills development (e.g. National Human Development Strategy with emphasis on lifelong learning, involvement of private sector)
2. Mobility/competitiveness of workforce and diversification of opportunities (e.g. Circular Migration Schemes with partner countries,, Empowerment Programme for Vulnerable Groups)

Climate Change and Land in the context of SIDS

Land use changes and conflicting land uses

Deforestation

Watersheds and coastal zone management

Modification of microclimates

Loss of biodiversity

Land, agriculture and settlements

Policy considerations:

1. Land use planning tools
2. Access to infrastructure and information
3. Consultation with major stakeholders in Environmental Impact Assessment process (including right to appeal at the Environment Appeal Tribunal)
4. Restoration of degraded sites using the Ecosystems Approach

Climate Change and Drought in the context of SIDS

Modification of rainfall patterns

Water scarcity/stress

Inadequate storage capacity (reservoirs, dams)

Obsolete distribution systems (leaks, illegal water use)

Saline intrusion into groundwater

Pollution

Policy considerations:

1. Adopt integrated water resources management (including sustainable water consumption practices, efficient irrigation techniques, sensitisation campaigns against wastage, water recycling and reuse – public treatment plants / hotels)
2. Appropriate disposal / Adequate treatment of solid & liquid wastes
3. Monitoring systems for water quality and quantity

Climate Change and Desertification in the context of SIDS

Land degradation (UNCCD)


Land scarcity exacerbates pressure for land development

Soil erosion

Loss in agricultural productivity, biodiversity and soil water retention

Policy considerations:

1. Adopt Sustainable Land Management Practices (GEF project in Mauritius)
2. Development of a Terrestrial Protected Areas Network (also GEF-funded)
3. Use of IT-based land valuation and management system
4. Capacity building and institutional strengthening (with enhanced interagency collaboration)



Climate Change and Indian Ocean SIDS

- About 1/3 of GEF-funded projects in SIDS are under the Climate Change Focal Area (with 3 in Africa, including one in Mauritius)
- Project, supported by the French Global Environment Facility, on enhancing regional and national capacity building for the Indian Ocean Commission island states (Project aims at building capacity on climate observation, assessing and analysing climate change impacts, extreme event warning and risk reduction, strengthening adaptation policies and measures, and creating regional structures for cooperation and coordination)

Measures taken by Mauritius

- Economic Reform Strategy (2005), Stimulus Package (2008)
- Empowerment Programme for Vulnerable Groups and access to financing through various schemes (planters, fishermen, women, entrepreneurs)
- New National Environment Policy (2007) and revised National Environmental Strategies (2008)
- Economic and crop diversification, with development of service sectors
- Early warning systems extended from cyclone to other natural disasters (e.g. flooding)
- Coastal protection works
- Sustainable tourism
- Land use planning
- Awareness raising
- Involvement of stakeholders

‘Maurice Ile Durable’ concept

Lessons Learnt

- SIDS and sustainable development

Development dimension of climate change and adaptation

- Flexibility in management practices

Management of vulnerable systems, managed either by governments, private sector or communities, need to be flexible. (e.g. reuse of treated wastewater, alternative crops)

- Stress reduction

Non-climatic effects on vulnerable systems can be minimised (e.g. improving overall resource management practices/infrastructure)

- Improving public awareness and preparedness

Improve stewardship & early warning systems and capacity of end users to respond in a timely manner (e.g. flash floods, storm surges)

Bottlenecks to be overcome

- Funding

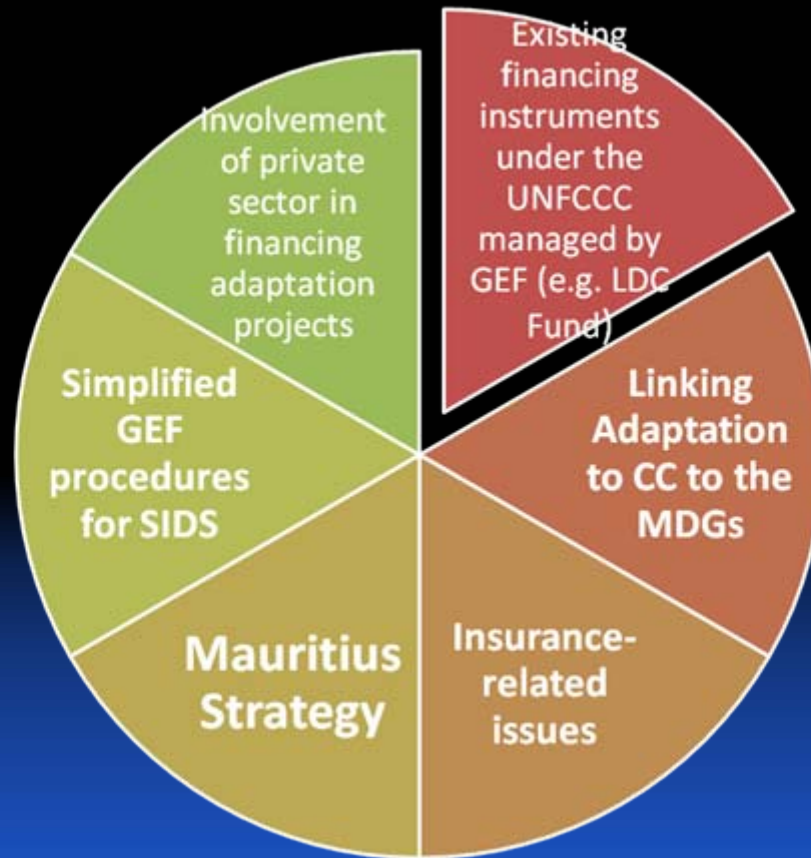
SIDS encounter difficulties to access funding, including delays in processing at the funding agencies level, rejection of projects because of supposedly inadequate project document, project size/benefits, etc. *SIDS-adapted financing mechanisms is required.*

- Technology transfer

Even where technology is available, it may not be suitable (e.g. economically) in view of scale and heavy cost of investment. *Further research for SIDS-appropriate technology is required.*

Financing

Adaptation to Climate Change in SIDS





Adaptation Planning and Implementation

- Mainstreaming CC in national and sector-specific development strategies
- Attaining the MDGs
- Institutional capacity building to plan and support implementation
- Risk management
- Early Warning Systems
- Networking and information sharing between SIDS regions
- Bridging the gap through stakeholder involvement along the whole process.



THANK YOU