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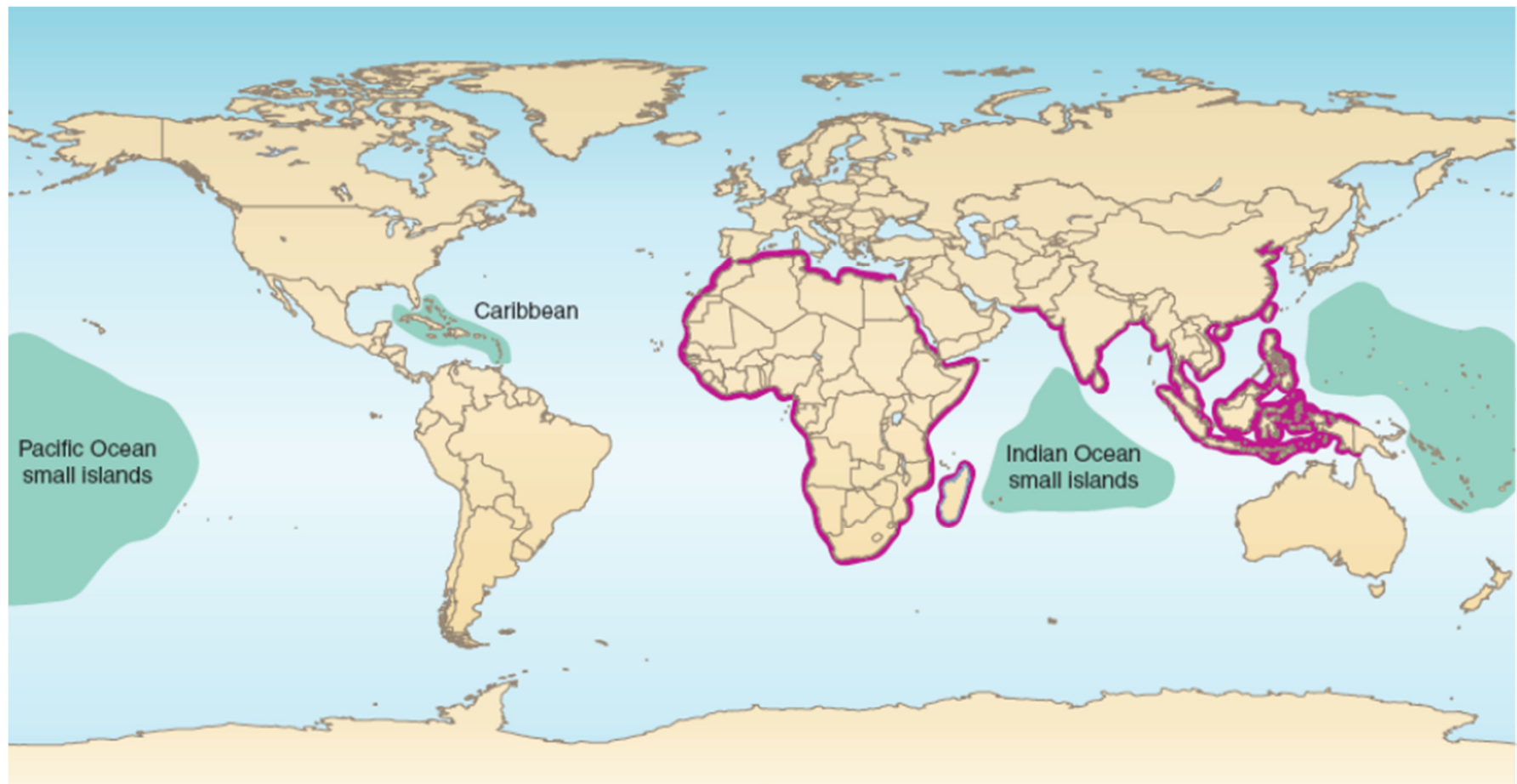
Consultancy Service for the Development of an Inundation, Flooding and Landslide National Risk Profile, Strategic Framework and Action Plans for Disaster Risk Management for the Republic of Mauritius

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Climate Change

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Small Island Developing States

SIDS is characterised by a unique pattern of climate change impacts and vulnerability.



Mauritius in the context of the SIDS - strengths

Improved water source, urban (% of urban population with access)

Improved water source, rural (% of rural population with access)

Agriculture value added per worker (constant 2000 US\$)

Electricity production from hydroelectric sources (% of total)

Improved water source (% of population with access)

GDP (current US\$)

GNI per capita, Atlas method

GEF benefits index for biodiversity

Gross savings (% of GNI)

Energy use (kg of oil equivalent per capita)

Renewable internal freshwater resources per capita (cubic meters)



Mauritius in the context of the SIDS - weaknesses



Annual freshwater withdrawals, total (% of internal resources)

Annual freshwater withdrawals, agriculture (% of total freshwater withdrawal)

CO2 emissions (metric tons per capita)

Marine protected areas (% of territorial waters)

Mangroves area (sq. km)

Coral reef area (sq. km)

Forest area (% of land area)

Terrestrial protected areas (% of total land area)



Gaps

Lack of climate change and socio-economic scenarios and data at the required scale

Uncertainty about the potential impacts of climate change

A range of climate change-related projections

Within country/territory differences need to be better understood

Lack of investment and attention to climate and environmental monitoring frameworks

Economic and social costs of climate change impacts and adaptation options are rarely known

Capacity building

CB a key part of DSS Strategy - transversal to all actions

Transpose the results of this study into current practice and policies.

Access the results of this project – the geodatabase FILM, the soft copies of the map.

Use the results to make the necessary/suitable policy interventions and identify where these can or should be put in place.

Replicate, refine or update the study (understanding of the tools).and design follow-up site specific action

Action plan

Action 1: Reduce risk in areas prone to very high and high risk

Substantial investments are needed to safeguard areas prone to very high and high risk to flood, inundation and landslide hazards. The current vulnerabilities are to some extent results of unsound development practices and insufficient preservation of environment including wetlands and coral reefs.

Action 2: Implement a DRR National Platform along the principles of Hyogo Framework for Action

A seamless horizontal and vertical integration of all DRR institutions is a critical priority for risk governance in Republic of Mauritius. It is highly recommended to implement a DRR Platform conform to the recommendation of the Hyogo Framework for Action and streamline climate adaptation and DRR strategy into existing legislation and organisational division

Action plan (2)

Action 3: Adopt a sound development strategy

Spatial planning and land management play an important role in risk prevention, by limiting the development in flood prone areas, and by encouraging flood risk-sensitive land use and management practices. High proportion of areas identified for future development are placed in areas prone to very high and high risk.

Action 4: Preserve healthy natural environment

Healthy environment and ecosystems provide (regulatory) services reducing the impact of natural hazard events. Nevertheless the area occupied by coastal and inland wetlands has declined. This trend should be reverted and more emphasis should be paid to ability of ecosystems to mitigate or offset the effects of the natural hazard.

Action plan (3)

Action 5: Embrace the culture of risk

There is a scope in promoting culture of risk ranges from improving public perception/ awareness of risk, public participation in disaster risk planning and decisions, and evidence based decision making.

Action 6: Sound (spatial) data infrastructure

A sound disaster risk management is data-intensive. Monitoring of precipitation (regimes), surface run-of, river discharges, wave heights, cyclone activity should be centrally stored and made accessible to all relevant institutions. The lack of a consistent spatial data infrastructure obstructed the conduct of this risk assessment. The acquisition of detailed topographic data in very high and high risk areas should become a high priority.

Action plan (4)

Action 7: Early warning and alerting system

The existing early warning system for tsunamis and cyclones should be extended to include river discharge and high tide, as well as other natural hazards such as drought. The issued alerts should find an easier way to all concerned citizens through media, internet, and Internet-based social networks.

Action 8: Emergency response

The emergency operations focus primarily on the protection of human lives and limiting the impact of disasters. The emergency plans contain specification of the roles and coordination between various actors, specification of the shelter places for the evacuated population, emergency equipment and facilities, disaster contingency plans etc. It is a best practice to develop emergency plans at all administrative levels (from municipal up to the national level) with different levels of detail and partly content.

Action plan (5)

Action 9: Emergency fund and insurance scheme

Post-disaster recovery should be facilitated by a national solidarity/recovery funds and private insurance schemes .

Thank you for your attention



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