INFORMING FISCAL RESILIENCE EFFORTS IN THE INDIAN OCEAN ISLANDS

Improving risk financing strategies with better data

AT A GLANCE

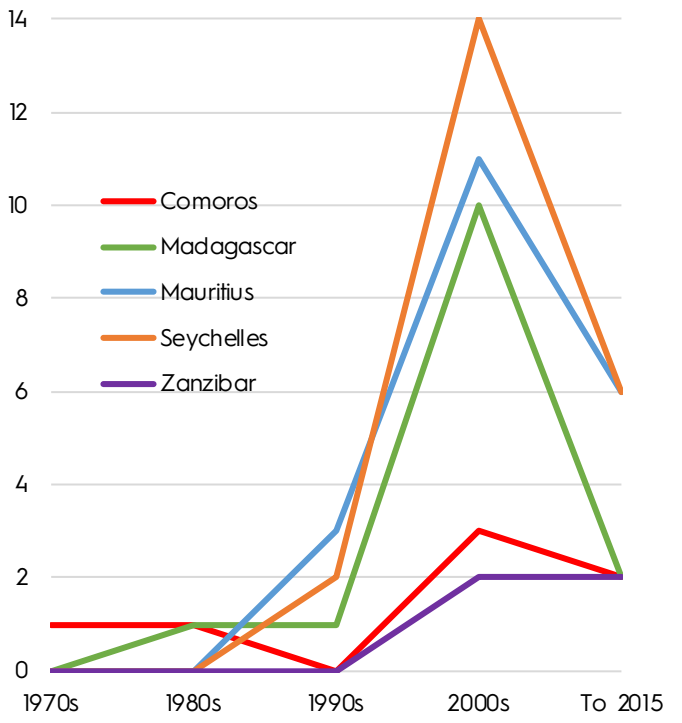
Countries The Comoros, Madagascar, Mauritius, Seychelles, and Zanzibar

Risks Earthquakes, tsunamis, and increasingly frequent and intense weather-related events

Areas of Engagement Promoting Open Access to Risk Information, Deepening Financial Protection

Five Indian Ocean states have taken steps to reduce their fiscal risk through better data collection, developing risk profiles, and using their findings to inform disaster risk financing strategies.

Number of recorded non-cyclone flooding events for each SWIO island nation, by decade



Source: Tropical Rainfall Measuring Mission (NASA/JAXA)

13 TROPICAL CYCLONES EACH YEAR

South West Indian Ocean (SWIO) islands face increasingly frequent and intense extreme weather-related events such as cyclones and floods, as well as earthquakes and tsunamis. On average, 13 tropical cyclones with wind speeds exceeding 63 km/h form in the SWIO basin every year. As a result, the SWIO Island States face high levels of physical and financial risk exposure.

Due to their small size, limited financing and borrowing capacity, and high transaction cost of risk-reducing financial solutions, SWIO island states have difficulty absorbing the financial impact of adverse natural disasters. Furthermore, they have a limited capability to predict future financial risks, leaving the development of adequate disaster risk financing (DRF) measures challenging.

PROFILING RISK TO INFORM FINANCIAL PROTECTION DECISIONS

The Indian Ocean Commission recognized that risk modelling can fill this information gap and provide reliable estimates of the potential economic impact of major natural disasters. So it requested technical and financial assistance for its efforts to improve the understanding of the region's disaster risks as input for the future implementation of DRF mechanisms.

That support came in the form of the Southwest Indian Ocean Risk Assessment and Financing Initiative (SWIO-RAFI).*

* SWIO-RAFI was implemented by the World Bank Group, and financially supported by the European Union (EU) in the framework of the Africa Caribbean Pacific (ACP)-EU Natural Disaster Risk Reduction Program, as well as the ACP-EU Africa Disaster Risk Financing (ADRF) Initiative, which are both managed by the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR). SWIO-RAFI marked the final stage of the ISLANDS Financial Protection Program.

Launched in 2014, SWIO-RAFI supported five Indian Ocean States – Comoros, Madagascar, Mauritius, Seychelles and Zanzibar† – to establish a solid understanding of their risk profiles, contingent liabilities, and fiscal situations. This understanding provides the basis for the development and implementation of DRF strategies.

SWIO-RAFI included a wide range of activities, including:

- Data collection and the establishment of an online data-sharing platform;
- The development of risk profiles to inform DRF strategies;
- An assessment of existing DRF instruments.

LESSONS LEARNED

Knowledge sharing and global dialogue is key to find ways to build on the risk modelling work undertaken as part of SWIO-RAFI.

Conversations during the 7th Regional Platform meeting of the Islands Program for Financial Protection, uncovered increased interest in measures to build greater financial resilience (such as sovereign risk pooling and the establishment of contingency funds). This prompted talks for further technical assistance on ways to use the risk models to better inform those efforts.

A versatile project can provide both short-term and long-term benefits for countries with different but related challenges.

The hazard, exposure, and financial risk components developed under SWIO-RAFI yielded useful tools. In the short term, data models developed helped countries to conduct rapid assessments after natural disasters hit. In the long term, the activities helped countries to better understand the context of the risks that they face, to develop options for the improvement of their DRF approaches, and to promote risk reduction in the SWIO region.

"SWIO-RAFI will not only improve the understanding within these Island States, but will also help to predict future risks. The goal has been to consistently reduce the exposure to such hazards using a combination of research and a myriad of assessment tools."

— Doekle Wielinga, Senior Disaster Risk Management Specialist at the World Bank

† Zanzibar is a semi-autonomous region of Tanzania.

Contact:
Ana Garcia
acamposgarcia@worldbank.org

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www.gfdrr.org

RISK INFORMATION CAPTURED

5 country-specific risk profiles for Madagascar, Comoros, Mauritius, Seychelles and Zanzibar were published which provide a new level of detailed quantitative risk data for each island nation, along with a summary report for all 5. This led to SWIO Island States having a much better understanding of their sovereign risk and for them to be able to use this information to build resilience against the most prevalent natural hazards.

LOCAL CAPACITY BUILT

Local representatives and delegates were trained on geospatial data platforms and participatory mapping techniques. In total, SWIO-RAFI conducted 21 training events in which nearly 200 people received training on different databases and Geographical Information Systems.

GREATER PREPAREDNESS

SWIO-RAFI activities contributed to better disaster response and preparedness. Following Tropical Cyclone Enawo in Madagascar in March 2017, the country used models produced under SWIO-RAFI to conduct a rapid assessment of economic losses. This also prompted Madagascar to take further DRM measures: it requested a Development Policy Loan with a Catastrophe Deferred Drawdown Option, which is currently under preparation.