

# Stories of Impact

*A series highlighting achievements in disaster risk management initiatives*

## Weathering Future Storms in Seychelles



### RESULTS & ACHIEVEMENTS

- With funding support from the World Bank and others, the government of Seychelles developed short, medium, and long-term disaster-resilient development initiatives which are expected to benefit 87,000 people and rehabilitate 500 km of roadways.
- The results of the Damage and Loss Assessment, conducted with support from GFDRR and the World Bank, led to the development of multi-risk mapping and an extensive review of flood risk financing options to address the \$30 million estimated cost of immediate reconstruction and recovery needs.
- The Damage and Loss Assessment laid the foundation for the creation of Sub-Saharan Africa's first World Bank-financed disaster contingent credit line, which provides the government with \$7 million in immediate liquidity after a large-scale catastrophe.
- As a result of an extensive risk financing assessment, Seychelles joined the newly launched Southwest Indian Ocean Risk Assessment and Financing Initiative (SWIO RAFI), a regional effort to increase fiscal capacity to respond to disasters.

**REGION:** AFRICA  
**COUNTRY:** SEYCHELLES  
**FOCUS AREA:** RESILIENT RECOVERY

Following repeated cyclones and heavy flooding, the government of Seychelles renewed its efforts to increase resilience to natural disasters. Tropical Cyclone Felleng battered this multi-island country in the Indian Ocean with heavy rain in January 2013, and, following this disaster, the government worked to assess the damages and ensure that recovery efforts mitigated the effects of future natural hazards. It did so with support from the World Bank and the African Caribbean Pacific-European Union Natural Disaster Risk Reduction (ACP-EU NDRR) Program, an initiative managed by the Global Facility for Disaster Reduction and Recovery (GFDRR).



**GFDRR**  
 ACP-EU Natural Disaster Risk Reduction Program

An initiative of the African, Caribbean and Pacific Group of States, funded by the European Union and managed by GFDRR



## Context

Seychelles, with its steep terrain and location in the Indian Ocean, is highly vulnerable to tropical cyclones, floods, storm surges, landslides, and tsunamis. The risks posed by natural disasters are further exacerbated by climate change and rising sea-levels. In 2013, Cyclone Felleng caused flooding and landslides that led to damages and losses exceeding \$8.4 million, or 0.77% of the country's GDP. Seychelles' infrastructure was the heaviest hit, with many roads completely washed away by the storm.

## Approach

In the wake of the disaster, the government implemented a National Flood Task Force. With support from GFDRR and the World Bank, it also conducted an innovative Damage Needs and Loss Assessment (DaLA) to evaluate the social, economic, and environmental impacts of the storm, as well as to quantify what is needed to increase resilience to future disasters. To ensure that post-disaster recovery is resilient:

- World Bank experts trained key ministries in affected sectors such as infrastructure and agriculture in the DaLA methodology.
- Using the results from the assessments, the World Bank proposed a disaster recovery framework on flood-risk management, providing vital recommendations on integrating flood risk management considerations at the institutional, investment, and policy levels.
- The DaLA recommended implementing risk transfer and insurance mechanisms, sparking the launch of a similar, region-wide initiative.

In addition, the government established medium-term and long-term goals, including the relocation of key public buildings to higher ground, the preparation of an integrated national disaster risk management plan, the revision of the flood management legal framework, and the development of new risk-based building codes.

## LESSONS LEARNED

**Lack of compliance with building regulations increased the impact of the disaster.** The DaLA revealed a lack of compliance and lightly enforced regulations contributed to losses, especially in the areas of construction and land use planning. Local authorities are now working to better enforce building regulations and zonal planning, and disaster-prone zones have been identified.

**Working together is essential to building back better.** At the time of the 2013 disaster, Seychelles did not have a standardized system in place for communicating with key stakeholders, which hampered its response capabilities to effectively implement the DaLA as part of a comprehensive DRM framework. The government has worked to strengthen its partnerships with all areas of society, from the private sector to non-profit organizations.

## Next Steps

The DaLA provided a clear understanding of damages, needs, and losses within sectors impacted by the cyclone. The assessment laid the groundwork for the immediate and long-term recovery and reconstruction efforts needed so Seychelles can be more resilient to future natural disasters.

By further integrating long-term disaster reduction goals with SWIO RAFI, the Seychelles will benefit from a more comprehensive overall approach that builds upon the region's collective risk management efforts. In addition, the Seychelles continues to participate in regional simulation exercises, such as a September 2014 tsunami preparedness test, and its Division for Risk and Disaster Management remains active in implementing code compliance for buildings and schools so they are able to withstand high winds and floods.

*"The 2013 floods were a wake-up call for the entire nation, and perhaps a reminder similar to that of the 2004 Indian Ocean tsunami—that Seychelles is not safe from disasters. The DaLA report is proof of the Seychelles' government's resolve and commitment to ensure the safety and well-being of our people as well as the conservation of endemic flora, fauna, and the country's other limited natural resources."*

—Rolph Payet, Minister of Environment and Energy, Seychelles

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\*All figures in US Dollars