

Stories of Impact

A series highlighting achievements in disaster risk management initiatives

Building Stronger Classrooms to Withstand Hazards in Mozambique



RESULTS & ACHIEVEMENTS

- A risk assessment of 637 classrooms in seven provinces was completed. Following the assessment, the government produced a catalog of hazard-resistant school construction options tailor-made for Mozambique, such as raised cement foundations and stronger, wind-proof roofs.
- School safety guidelines are now being put into place in more than 1,000 classrooms across the country.
- GFDRR-supported risk analysis tools are in use alongside guidelines on how to build resilient schools throughout Mozambique.
- This project significantly strengthens the government's school expansion policy. The government of Mozambique is enlarging the national school network by providing conventional and safe classrooms to all children of school age, thereby delivering on investments in this area.
- As a result of this work, an estimated 100,000 children in Mozambique are now able to remain in school in the aftermath of a disaster.

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

Natural disasters, such as cyclones and floods, have caused a disruption to education in Mozambique for decades. Aggravated by the effects of climate change, they also result in significant economic and social costs. The 2013 floods, for example, caused \$250 million in damages, including a large impact on the education sector and related infrastructure. As a result, the Ministry of Education has made great strides to ensure that Mozambique's schools are able to withstand large-scale damage by promoting the construction of safer buildings.

The Global Facility for Disaster Reduction and Recovery (GFDRR) provided financial and technical assistance alongside the World Bank, UN-Habitat, and the Faculty of Architecture and Physical Planning (UEM-FAPF) at Eduardo Mondlane University, Maputo, to support the government's efforts to develop school safety guidelines for classroom facilities across the country.

Context

Flooding and cyclones have destroyed thousands of classrooms in Mozambique since the early 1970s. Cyclone Funso and Tropical Storm Dando damaged 1,000 classrooms along the eastern coastline in 2012 and heavy flooding destroyed 250 classrooms in the Limpopo Basin in 2013. According to UN-Habitat, 60% of schools in the country are located in areas that are exposed to one or more natural disasters, with 200 to 1,000 classrooms affected each year by cyclones and floods. This high impact is often due to issues such as poor structural design, use of subpar construction materials, and ad hoc building practices.

Approach

Working with relevant ministries in Mozambique, the European Union (EU), and the Education Sector Support Fund (ESSF), this GFDRR Global Program for Safer Schools is implementing a phased approach by first undertaking risk assessments of schools and creating a catalog of hazard-resistant construction types and architectural models with adaptive measures for both traditional and conventional materials. This is the first time a comprehensive disaster risk assessment of school buildings has been conducted in Mozambique. In compiling resilient construction methods, the catalog allows the government and development partners to expand disaster risk management (DRM) operations with the unprecedented accessibility of a consolidated, reliable source of information.

By assessing 637 classrooms in seven of Mozambique's provinces, officials were able to draw on their observations and realized that without proper planning, the technical execution required for building safer schools was lacking. Additionally, an outdated national building code and limited access to updated risk information added to the ongoing struggle. The assessments led to a cohesive strategic plan for building safer schools with plans to expand the initiative nationwide. Several pilot project schools were upgraded initially and are serving as models, while the different regions complete their first construction phases.

LESSONS LEARNED

Joint initiatives lead to stronger results and more progress.

All partners, including the Ministry of Education, ESSF, UN-Habitat, and the EU collaborated to collect the necessary information to develop a unique approach and establish effective strategies. By working together, these partners were able to cut across previously siloed areas of expertise, ranging from sustainable construction methods to navigating the regulatory environment. This allowed them to effectively build safer schools and help students continue learning.

A focused, successful project can make a convincing case for expansion.

The risk assessments conducted as part of this project led the government to conclude that, in order to reduce the economic impact of cyclones and floods, an emphasis on DRM cannot be limited to education. Seeking to scale up the impact of the work being done, the government of Mozambique is expanding the experience to areas including health and government buildings.

Next Steps

The next phases of the project are focusing on continued school construction and engaging with national agencies to strengthen the policy and regulatory environment. The Safer Schools Initiative aims to enhance policymakers' understanding of the nature and types of disasters affecting schools.

Moving forward, the World Bank, along with other partners, will continue to contribute to financing newly resilient primary education and rural secondary classrooms. There are 40,000 classrooms currently in Mozambique, and there is a need for hundreds of them to be upgraded to new standards. This phased approach is linked to the GFDRR Program for Safer Schools, which focuses on preventing disaster risks from affecting schools and also promotes an open source platform to share school safety guidelines. The government plans to expand the initiative to other sectors and eventually promote sharing this experience with the region as a best practice.

"My dream is to become a journalist. I am a student at grade 5 at October 7 Primary School in the Patrice Lumumba quarter in Xai-Xai city, Mozambique. I am very happy with my new school because it is safe and for sure will not fall and hurt the students as happened during the 2002 cyclone."

—Armando Cau Júnior, 10-year-old student

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*All figures in US Dollars