

VANUATU



1,057

schools serving 72,000 students

70,000

**school children affected by
school closures following
Tropical Cyclone Pam**

95%

**of schools surveyed require
renovation, structural
retrofitting or reconstruction**

US\$ 48

MILLION

**projected annual losses
due to earthquakes and
tropical cyclones**

RECOMMENDATIONS

- Provide technical guidance and support to the Government of Vanuatu for the development of a national education infrastructure renovation, retrofitting and reconstruction program.
- Support the Ministry of Education and Training (MoET) to complete their education infrastructure asset management registry. Provide technical support and training to MoET to incorporate structural vulnerabilities into school assessments.
- Work with MoET to develop a retrofitting assessment tool and retrofitting guidelines to improve the safety of existing education infrastructure.
- Review the model school design package and support the MoET to develop a school construction manual to be used as a template for all new infrastructure.
- Develop a “Training of Trainers” program to improve the knowledge and skills of local construction workers.
- Develop quality assurance processes for the MoET and communities to help improve the standard of construction.

ASSESSMENT

Hazard Assessment

Vanuatu is regularly subject to the damaging effects of cyclones, earthquakes, tsunamis and volcanic activity. Six major cyclones in the last 20 years have resulted in widespread damage to education infrastructure adjacent to active volcanoes are subject to corrosive emissions. The National Disaster Management Office (NDMO) and Vanuatu Meteorology and Geohazards Department (VMGD) are currently developing hazards maps for the country. Schools are frequently used as evacuation centres.

Existing Education Infrastructure

The MoET is responsible for the design and construction of all public education infrastructure in Vanuatu, but has limited capacity and capability to meet the needs of school communities. Limited investment in new, engineered education infrastructure since independence in 1980 has resulted in a current deficit of 158 classrooms and construction has not kept pace with demand. A country wide survey by the MoET to develop an education infrastructure asset register was under way prior to Tropical Cyclone Pam (TCP), but requires additional assessments of the key structural vulnerabilities and

exposure to local hazards. Following TCP, a rapid Post-Disaster Needs Assessment was undertaken, which provided a basis for the development of a large scale school reconstruction and retrofitting program. Surveys observed a clear pattern: engineered 'permanent' structures suffered only minor damage, while community built 'semi-permanent' structures were almost universally destroyed.

Implementation Process

The MoET has constrained capacity to identify, prioritise and coordinate the requirements for new education infrastructure. Site selection is generally undertaken by local communities based on availability of land rather than hazard exposure which may leave school locations at risk to natural hazards. Design and construction procurement is conducted either in collaboration with MoET, by school communities themselves, or by donors. Quality assurance in construction is variable, with evidence of good oversight in some donor funded schools but mostly sub-standard in community built schools. The lack of institutional capacity and shortage of skilled construction workers is a challenge under normal conditions but will not be adequate to handle the increased volume of work following TCP.

Regulatory Environment

The decentralisation of engineering and architectural functions to Facilities Units within ministries has left the MoET with insufficient capacity and capability to fulfil its role. Physical planning policies are being developed but are unlikely to incorporate the planning of education infrastructure throughout the country. The National Building Code became law in 2013 but uptake is extremely limited and mostly ignored by School Councils and international organisations who should seek approval from the MoET.

Financial Environment

With limited funding available from the government, construction of education infrastructure is generally funded by international donors. Approximately US\$ 12 million of donor funding is currently being considered for education infrastructure. A key strength of the school system in Vanuatu is that school communities themselves also contribute approximately 50% of the total funding required.



This study was conducted in collaboration with the World Bank and GFDRR as part of the Global Program for Safer Schools in response to Tropical Cyclone Pam which hit Vanuatu in March 2015. The specific objectives were to understand the damage to education infrastructure, understand government priorities, conduct a diagnostic of the education sector, and inform a reconstruction and rehabilitation program. It was conducted over an eight week period which included a 9 day fact finding mission in August 2015. For more information, please contact:

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