

MOZAMBIQUE



2,658

**number of new schools built
between 2004-12**

46%

**of primary school children
are learning in
rudimentary classrooms**

≈ 35,000

**number of new classrooms
needed by 2025**

RECOMMENDATIONS

- Conduct a technical review of UN Habitat's hazard mapping and consolidate other hazard mapping as part of a revision to the planning/building regulations which should be updated periodically and made widely available.
- Develop site selection and planning guidelines to complement a technical design brief and model school design package.
- Build construction detailing capacity within relevant public bodies and the private sector; and develop community construction manuals/training.
- Establish an emergency repair fund and assessment process as part of a larger retrofit program.

ASSESSMENT

Hazard Assessment

Mozambique is vulnerable to major earthquakes, flooding, drought and cyclones. Political consensus on the need for safer schools acknowledges the number of schools located in hazard-prone areas, recognition of the financial implications associated with retrofitting and reconstruction. However, there are concerns about the validity of existing hazard mapping for schools in relation to an unclear scientific basis for data, and their methodology.

Existing Education Infrastructure

Most schools constructed over the past decade will require retrofitting or replacement. The emphasis on quantity rather than quality and a 'cost ceiling' of approximately \$180/m² contributed to sub-standard construction. Three school typologies were identified: old, new and conventional. The old methodology represents the vast majority of government schools and there are concerns about

construction quality. Conventional schools are built spontaneously by community groups and their quality varies widely. New methodology schools utilise a pre-fabricated steel frame but comparably few have been built.

Implementation Process

Ministry approved old methodology schools account for approximately 1,000 new classrooms per year which are generally delivered by open tender to local contractors without pre-selection or robust technical review. A similar volume of conventional schools are built every year but with even less quality control. A further challenge has been 'paralyzed construction' whereby construction has stalled generally due to poor financial management.

Regulatory Environment

A full design package for the old methodology has not been adopted locally as it was calibrated to South African requirements, does not

reflect local construction practices and is considered expensive. The provincial engineer or local architect adapts and value engineers these designs. Key details are often omitted and it is not clear where design responsibility rests legally. There is no process for review or verification, and no requirement that the design complies with the National Building Code (1961) or other standard. The Code is out of date and does not provide a robust basis for justifying the design of schools.

Financial Environment

Donors generally finance the old methodology classrooms but it is unknown what the future projections are for this support. Funding for the 1,000 conventional classrooms built every year is not well monitored and harder to predict. Engagement with the construction of conventional classrooms might help to deliver higher quality infrastructure at scale.



This study was conducted in collaboration with the World Bank and GFDRR as part of the Global Program for Safer Schools to understand the results of the existing work in Mozambique conducted by the World Bank and identify potential entry points for action. It was conducted over a 3 week period which included a 5 day fact finding mission in March 2014. For more information, please contact:

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