

PREFACE

Schools play a vital role in every community. They are not only the places where students learn and teachers teach; they are also used for social gatherings, theatre and sports. In addition, school buildings play an important role in responding to and recovering from natural disasters. In the event of an earthquake, hurricane or flood, schools can serve as emergency shelters and, as such, can be used to house, feed and care for the local population.

Earthquake-threatened communities need earthquake-resistant schools. When schools are closed because of earthquake damage, education is hampered, community life disrupted, and emergency shelters unavailable. Where school attendance is compulsory, communities have a moral obligation to provide a safe study and work environment. But the most important reason earthquake-threatened communities need earthquake-resistant schools is to protect their children and teachers.

Recent earthquakes in Algeria, Italy, Iran, Morocco and Turkey demonstrate that many threatened communities do not yet have earthquake-resistant schools. In some of these earthquakes, schools that collapsed and killed students were modern and located near older buildings that did not collapse. In one case, a poorly constructed new addition appears to be the cause of collapse; in other cases, unexpectedly strong ground shaking contributed to the problem; and in most cases, the building code was not sufficiently enforced. Most of these earthquakes did not occur when school was in session; otherwise, the death toll could have been far heavier.

Unless something changes, this situation will worsen. Many countries experiencing the greatest increase in population – and, hence, having the greatest need for additional schools – are also the poorest. Under these circumstances, there is the temptation to build new schools and enlarge existing ones using inferior designs, materials and construction techniques. All countries – rich and poor – face the problem of how to make the large number of their existing schools earthquake-resistant. The infrequency of great earthquakes in any one location makes it easy for the public and for public officials to forget about the important need to design, construct and maintain earthquake-resistant schools – until it is too late.

In response to this need, the OECD Programme on Educational Building and GeoHazards International convened a meeting of internationally renowned experts from 14 countries and five continents on school earthquake safety – representing international organisations, government, academia, business and non-governmental organisations – to review this problem and identify possible solutions. The meeting was held at the OECD in Paris from 9 to 11 February 2004. The participants were asked to prepare a report that would provide the following:

- A statement of the obstacles to achieving seismic safety of schools and education systems.
- A discussion of methodologies and criteria for assessing the seismic safety of schools and education systems, and for monitoring progress toward achieving seismic safety.
- Suggestions for strategies to promote greater seismic safety internationally.
- Recommendations for OECD actions to assure seismic safety of schools in its member countries.

This publication contains the report of this *ad hoc* experts' group. It provides a clear and urgent message to OECD governments and others that the problem of schools collapsing during earthquakes and killing students and teachers can and must be addressed before more, greater disasters occur.

We urge you to read this report and help us implement its recommendations.



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