

CASE STUDY

Leveraging for comprehensive school safety

Country: India

Organisation: SEEDS, Nayang Technical University, Ministries of Education and Public Works, Temasek Foundation

Hazards: Earthquakes, flash floods, landslides

Summary: This project was created to sensitise communities in earthquake-prone regions of India by engaging the community, partnering with the local government, training engineers and masons, and providing necessary retrofits to schools. Although the number of retrofitted schools was low, SEEDS spent more than a year in each community in an effort to change the culture as well as increase the safety of the school building. Newly trained local masons retrofitted schools while engineers provided oversight during the process.



Country and hazard overview

The Indian subcontinent presses into the Eurasian tectonic plate in the north, causing India – along with other nations in the region – to experience many small and a few devastating earthquakes in the last century. After witnessing the pattern of earthquakes and other natural hazards that resulted in a series of abrupt but predictable disasters, SEEDS began working with communities, technical universities and government authorities in 1994. They helped communities retrofit unsafe schools and adopted strategies for reducing losses from future crises, using schools as a catalyst for community-wide change.

Creating a culture of safety

In a retrofit pilot project spanning the three Indian provinces of Himachal, Gujarat and Assam, the NGO SEEDS used the retrofitted schools as focal points to organise the community around comprehensive school safety. They especially focused on Pillar 2 – school disaster management. Each state is in a moderate to high seismic risk zone and has a history of disasters.

To effectively build community buy-in, SEEDS held basic orientations at schools to create awareness about comprehensive school safety. These orientations were a necessary primer before retrofitting but were also necessary for explaining the school community's role in school safety even after the retrofit was complete. The school community would be responsible for operating and maintaining the retrofitted building, performing non-structural mitigation and regularly conducting school disaster management activities. In conjunction with mason training and other mobilisation activities, this phase often took six months. SEEDS expected the school retrofit and the school disaster management activities with the school communities to serve as a channel for promoting a culture of prevention and preparedness in the local community.



The retrofit of schools in Shimla, India is part of a broader comprehensive school safety approach. After retrofitting is complete, the school and wider community engage in a mock drill to test their preparedness. Photo: SEEDS.

After a school was retrofitted, SEEDS facilitated trainings in disaster preparedness for community members, school staff and students. The trainings included search and rescue, fire safety, first-aid, safe evacuation and mapping contingency plans. Students were also trained in 'duck, cover and hold' methods in case of earthquakes and safe evacuation. Special training was also provided to school staff to create a school disaster management plan. Together, the school retrofit and the accompanying 'soft' activities with the school community were expected to serve as a channel for promoting a culture of prevention and preparedness in the local community.

SEEDS then formed school disaster management task forces based on the trainings, which were divided into functional groups. These were search and rescue, first-aid, fire response, and a group to connect with the local government offices. The task force members included representatives from local leaders, parent-teacher associations and school clubs.

Establishing a Joint Action Plan

After the school community became aware of disaster risk reduction principles, SEEDS established a Joint Action Plan, which connected the school task force with the larger community. They performed outreach to ensure the wider community knew the school could be a gathering point in a flood, earthquake or other sustained hazard. By strengthening this connection, SEEDS was attempting to ensure the community benefited from the training and disaster management planning at the school.

Even though the school was likely to operate as a safe haven and school task forces would take leadership roles during a disaster, SEEDS also taught communities emergency preparedness skills and basic hazard knowledge in case the school became incapacitated.

The Joint Action Plan was designed to help the task forces react to disasters as well as proactively protect children during their routine interactions with school. One proactive measure included consistent updates for parents on the whereabouts of their children. Disaster or not, if a bus was late, parents were sure to get a call explaining why.

For the school communities, the experience culminated with a large mock drill where the school, fire department, the hospital and local government played the part they would function in a real emergency. SEEDS identified mock earthquake drills as the most useful exercise for students, staff and communities to check their preparedness levels. They encouraged the local government to mandate the mock drill to ensure everyone participated.

After being given a predetermined signal, students responded with 'duck, cover, and hold' as they had been taught during the disaster preparedness training. They then evacuated the school buildings following the practice of 'don't run, don't push, don't talk, don't turn back'. Students left the building by class and organised at a set assembly point.

Realistic conditions involved certain students that were 'trapped' in the school or generally missing. The Search

and Rescue task force then had to respond by finding the missing people and providing aid. If the missing students were injured, they would be connected with the hospital. It was not just the adults that role-played. Students also practised their response skills, identifying damaged buildings, rescuing each other, performing first-aid and putting out fake fires. The mock drills were both realistic and exciting.

The biggest challenge for the students was to evacuate quickly and to establish coordination among the task forces. However, they became more efficient through multiple practices of the mock drill.

Overall, the process of engagement, retrofitting and practising mock drills took a full year. On completion of the project SEEDS handed the project details – including the disaster management plan, guidelines for retrofit and other project details – to the local education department for implementation in other schools. The governments in several provinces have adopted the initiative for wide-spread replication.

Key takeaways

- Safe school construction should be integrated into a comprehensive school safety program.
- Non-structural mitigation is an integral part of Comprehensive School Safety, and a part in which students and staff can actively participate.
- Safe school construction projects provide impetus for engaging communities in school disaster management.
- School mock drills, especially when coordinated with the wider community, can provide good opportunities for practice and affirmation of a culture of safety.



In 2011, officials from Shimla's police, education and public works department meet with the SEEDS project manager during an advocacy workshop. Photo: SEEDS.