

# Let's Make Schools Safer

Among all public amenities, schools and the children inside them are among the most vulnerable groups during any disaster. Thousands of children lose their lives every year in deadly disasters, mostly while attending classes. No task is more important as creating a safe learning environment for our children. Yet, children need not be mere recipients of emergency aid or risk reduction support. They can be leaders and agents of change for a culture of disaster safety.

This publication highlights the role of children in the process of change and SEEDS' efforts to tap these powerful agents of change to create safe schools. SEEDS through its School Safety Initiative seeks to create safe environments for children in schools through capacity building, education and training. SEEDS aims to achieve zero mortality of children in schools from preventable disasters by the year 2015.

SEEDS is indebted to the Disaster Preparedness Programme of the European Commission Humanitarian Aid Department and Christian Aid for their generous contribution towards the production of this book.





**More than 200 million people are affected by disasters every year. A third of them are children.**





Let's Make  
**Schools  
Safer**



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We believe in life before death.

#### IMPLEMENTED BY



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SEEDS is a non profit organization working to make communities resilient to disasters. For this, SEEDS adopts a multi hazards locally based approach seeking to empower communities through awareness generation, training and action.



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# Foreword

It is indeed a moment of deep satisfaction and a sense of achievement for us to have been able to reach out to thousands of children in schools in the region on the message of safety against disasters. This is not an effort of one organization. Rather, it is the combined effort of a large number of partners, individuals and governments who share the same passion and goal.

SEEDS along with its partners and supporters has been implementing school safety activities since 2005 in the following areas: Delhi, Gujarat, Shimla in the northern state of Himachal Pradesh; and Andaman in the Andaman & Nicobar Islands off the eastern coast. Activities include the following:

- **Delhi Earthquake Safety Initiative:** Training on search & rescue, evacuation and first aid and non-structural risk mitigation. The initiative was completed in 2005 and was led by Geohazards International, with support from USAID.
- **Gujarat School Safety Initiative:** Disaster awareness to schools reaching out to over 100,000 children; training of teachers; development of curriculum books on risk reduction for schools (text books for classes 7, 8 and 9; school safety initiatives in 175 schools; teachers' training for over 1,500 teachers). The two-year project was completed in February 2007 and the next phase of up scaling is being planned. This was carried out in partnership with the Gujarat State Disaster Management Authority, Government of Gujarat.
- **School Earthquake Safety Initiative in Shimla (Himachal Pradesh):** Disaster awareness; training and non-structural mitigation; structural retrofitting (awareness education and disaster management planning in 20 schools and retrofitting in five schools). One-year activities were completed in May 2007 and the next phase of up-scaled activities are being carried out under the current plan. These activities have been supported by Disaster Preparedness Programme of the European Commission Humanitarian Aid Department (DIPECHO) and Christian Aid.
- **Andaman School Safety Initiative:** Disaster awareness to schools; training in developing school disaster management plans (SDMPs) in 40 schools. The activities are ongoing in the city of Port Blair. These have been carried out with support of Christian Aid and Danchurch Aid.
- **Safe School Safe Community:** Strengthening Links Between Schools and Surrounding Coastal Communities for Disaster Risk Reduction: School safety activities including disaster management planning in 50 schools in the coastal region and preparing coastal communities around the schools. The activities under this project are still underway and have been carried out in partnership with the Orissa State Disaster Mitigation Authority and supported by the United Nations International Secretariat for Disaster Reduction (UN/ISDR)
- **Tamil Nadu School Safety Initiative:** Following the Indian Ocean Tsunami (2004), schools and school going children were among the worst affected. With support from Christian Aid, SEEDS worked with a Tamil Nadu based NGO – SPEECH to reach out to schools in Nagapattinam District and advocate with the State Government for making school safety mandatory in all schools.



In Himachal Pradesh, engineers and architects at SEEDS worked with schools to retrofit buildings, carry out mitigation measures against falling hazards as well develop emergency evacuation paths to minimize loss in a potential disaster situation. These works have been supported by the United Nations Centre for Regional Development (UNCRD), Quake Safe Adobe, GE, DIPECHO and Christian Aid.

SEEDS has been part of the Global Open Learning Forum on Risk Education (GOLFRE), a joint initiative of universities and NGOs from around the world. Following the GOLFRE pedagogy, training material has been developed and disseminated to hundreds of teachers in the country.

In other parts of Asia, SEEDS has been supporting partner NGOs as part of the Asian Disaster Reduction and Response Network (ADRRN) in implementing school safety in their respective countries:

- **School Safety in Malaysia:** SEEDS has been providing training to the staff of Mercy Malaysia, a renowned NGO in Malaysia on school safety activities in August 2007.
- **School Safety in Maldives:** SEEDS is providing technical support for CARE Society, a national NGO in Maldives for performing school safety activities in Maldives. A sensitization workshop for stakeholders and an orientation workshop for CARE Society Team was held in Male in November 2007.
- **School Safety in Afghanistan:** SEEDS is providing technical support for the UNDP in Afghanistan for implementing school safety programme in Afghanistan. School safety activities have been implemented in one model school in Kabul by SEEDS in November 2007.

SEEDS actively works to restore schools following emergencies. Restoration of education and bringing children back to school accelerates the process of overcoming the trauma of disasters in young minds.

- **Ankur: Post Flood School Restoration Project in Barmer, Rajasthan:** 18 schools restored and strengthened further to become resilient to disasters. This project was supported by The Children's Investment Fund Foundation (CIFF) and Mittal Foundation.
- **Balasore, Orissa:** Five schools have been restored following devastating floods in 2007 and upgraded further to serve as 'safe havens' for local communities if floods recur in future.
- **Jammu and Kashmir:** Following the 2005 Kashmir earthquake, SEEDS worked with local government and rebuilt four schools with support provided by American Indian Foundation. These schools demonstrated appropriate earthquake resistant technology and trained local construction workers so that the technology could be replicated.

In spite of substantial progress, we realize this is just a beginning. While the significant growth in a number of schools and increasing investment in education is indeed laudable, we need to raise a strong pitch to ensure every new school is made to be safe against disasters. Our efforts need to redouble to state the least.

We are indeed grateful to our partners DIPECHO and Christian Aid for their support in helping us bring out this publication. By highlighting different methodologies on school safety and testimonies of all those who have benefited by the programme, we do hope to be able to urge decision makers, policy planners in making school safety part of their policy. We hope to influence parents of school children as well, to urge the management of schools to ensure safety of all children.

Manu Gupta  
*Director, SEEDS*



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# Safe while Studying?

Roughly one billion children aged 0-14 live in countries with high seismic zones. Several hundred are at risk when they are attending schools.



A ravaged school in Poonch after the devastating 2005 Kashmir earthquake. SEEDS reconstructed 4 destroyed schools in the region after the quake.





School children and school buildings have been greatly affected by all major disasters. The Gujarat earthquake that occurred on 26 January 2001 claimed 13,805 lives and amounted to direct losses of over USD 3.1 billion. At least 1,884 school buildings collapsed and 5,950 classrooms were destroyed in the earthquake. A devastating fire claimed 94 lives of young children at the Sri Krishna Primary School in Kumbakonam (Tamil Nadu) on 16 July 2004. Around 17,000 children died and 2,448 schools collapsed in the 2005 Kashmir earthquake. Typhoon Linda (1997) razed 2,254 schools and damaged 4,022 schools in Vietnam. 74% of all schools were damaged in the 1999 Colombia earthquake. 441 school children died in a stampede at a school function in Mandi Dhabwali (India) in December 1995. In Kashmir, India, thick roof slabs are built to take the load of snow and keep buildings warm, but not enough attention is paid to make the walls strong enough to withstand earthquakes. In Thailand, after the tsunami, children returned to their classrooms only to find many of their classmates missing.

Roughly one billion children aged 0-14 live in countries with high seismic hazard zones. Several hundred million are at risk when they are attending school. More than 200 million people are affected by disaster every year - a third of them are children.

# Disaster Risk Reduction



# Making Schools Safer

SEEDS School Safety  
Initiative aims to achieve  
zero mortality of children  
from preventable disasters  
by the year 2015.



SEEDS recognizes the role of schools in the community as being very important. In fact, it would be befitting to call schools cradles of the society. Children are a dynamic and powerful force of change and are supporters in creating awareness in the community. They can contribute in a unique manner with energy and vision to find local solutions. School children should be encouraged to take up tasks which make them realise their importance as necessary stakeholders in the process of change.

SEEDS School Safety Initiative (SSSI) endeavours to create a safe environment for children. Recognizing the immense potential of children as potent agents of change, the initiative is trying to tap this powerful resource to bring about a larger change. Since its inception in 2005, SSSI has spread its culture of safety across the Indian states of Gujarat, Himachal Pradesh, Jammu and Kashmir, Rajasthan, Tamil Nadu and Orissa, Delhi and the highly vulnerable Andaman and Nicobar Islands and the neighbouring countries of Maldives, and Afghanistan.

The school safety campaign also helps other NGOs and partners by training them on the tools and techniques to further the cause of school safety. As clearly mentioned in the Ahmedabad Action Agenda the SSSI is steadfast to ensuring “Zero Mortality of Children in Schools from Preventable Disasters by the year 2015.”

SSSI can be described as a good practice because it is a pioneering initiative that seeks to promote a culture of disaster safety in schools – that are the most suitable areas for sowing enduring good habits and practices. To this end, for instance, SSSI has a four-pronged approach in earthquake-prone areas: (1) structural retrofitting of school buildings to prevent their collapse in future earthquakes; (2) implementing non-structural mitigation measures to avoid injuries from falling hazards in schools; (3) education on safe infrastructure for school management staff and construction workers; and (4) preparing school disaster management plans and training school communities in immediate response, evacuation and first aid.

# SEEDS School Safety Network

● Afghanistan

● Jammu & Kashmir

● Himachal Pradesh

● Pakistan

● Delhi

● Rajasthan

● Gujarat

● Orissa

Bay of Bengal

Arabian Sea

Andaman & Nicobar ●

● Tamil Nadu

● Maldives

Indian Ocean



School girls bracing themselves up on search and rescue methods during a mock drill in Government Girls Senior Secondary School, Lakkar Bazar, Shimla.

# Learn-Reflect-Empower

SEEDS believes that disaster education focusing on the school community should follow Dr. Daisaku Ikeda's proposal, *The Challenge of Global Empowerment: Education for a Sustainable Future*, on environmental education. The approach should be to help school students, teachers and management "To Learn, To Reflect and To Empower":

**To Learn:** Students deepen their awareness about hazards and risks when they understand realities and know facts. Recent natural disasters are well documented and shared. These serve as case studies for teachers as well as students. Wherever needed, disasters are simulated with the help of portable models. The learning process is strengthened by curriculum change.

**To Reflect:** Students analyze factors leading to human casualties and injuries in disasters, so that they can recognize development practices and human actions that can cause disasters or prevent them. Students connect to their own local communities and families and share their learning with them.

**To Empower:** Students take concrete action toward reducing risks in their environment. Classroom and school exercises are introduced to help them take small definitive actions that can become a precursor to bigger investments for disaster risk reduction. School management prepares school disaster management plans which identify roles and responsibilities and which are rehearsed periodically.





# Ensuring Complete Safety

SEEDS adopts a holistic approach to school safety through education, training and action.

Adopting initiatives towards school safety is an effective way of tackling disaster vulnerabilities. The approach followed by SEEDS School Safety Initiative is not only about securing the physical safety of the school building, but also incorporating students into the preparation

plans and utilizing the community as well as the students as a valuable information resource. Accentuating and encouraging the culture of school safety as the best safety measure, the following components have emerged as the major highlights of this initiative.

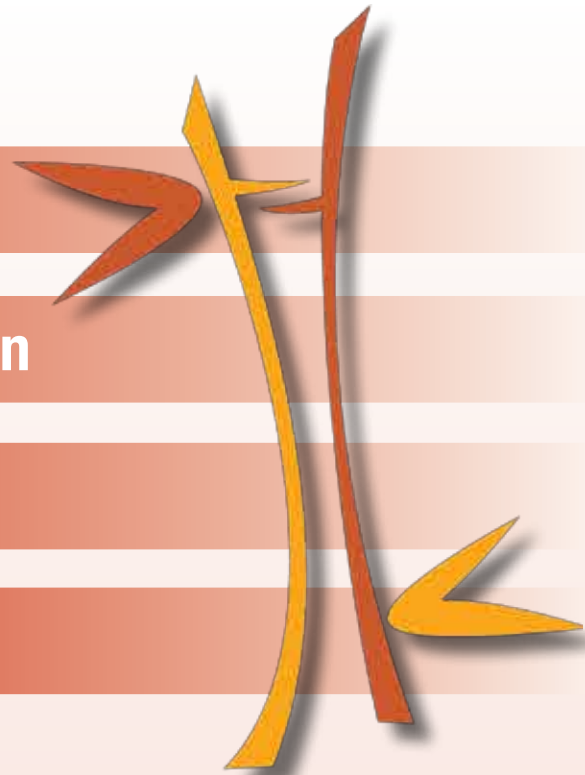


**Structural Mitigation**

**Non-Structural Mitigation**

**Capacity Building**

**Inclusion**





# Structural Mitigation

Earthquakes do not kill people, but unsafe buildings do

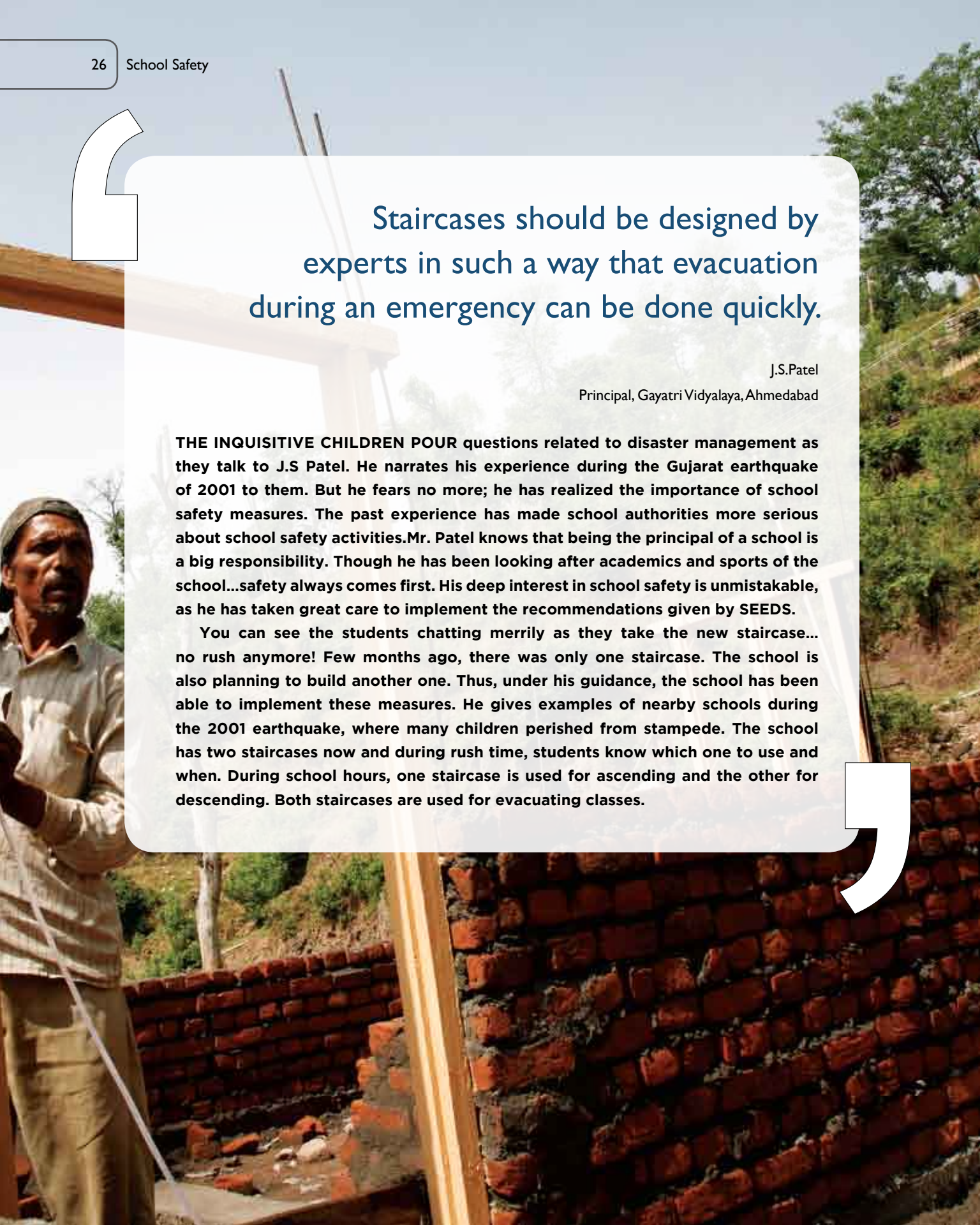


It is my duty to educate others on proper earthquake safe construction. We have retrofitted five schools in Shimla. Along with this goes the satisfaction that I have done something good for the children and community.

Hira Singh  
Mason, School Safety Initiative, Shimla

To ensure the safety of school children, the first requirement is a safe building to house the school. A safe school building can also serve as shelter during an emergency for accommodating the neighbouring community. Construction of a safe school building begins with the selection of the right site, designing the structure conforming to appropriate disaster resilient design codes, and doing construction with quality materials.

Stringently adhering to the “safe building norms”, SEEDS demonstrates the importance of disaster resistant construction. The construction of the school buildings is part of a larger campaign of SEEDS to make the community aware of risk reduction and to capacitate the local masons and engineers in safe construction techniques.



Staircases should be designed by experts in such a way that evacuation during an emergency can be done quickly.

J.S.Patel

Principal, Gayatri Vidyalaya, Ahmedabad

**THE INQUISITIVE CHILDREN POUR** questions related to disaster management as they talk to J.S Patel. He narrates his experience during the Gujarat earthquake of 2001 to them. But he fears no more; he has realized the importance of school safety measures. The past experience has made school authorities more serious about school safety activities. Mr. Patel knows that being the principal of a school is a big responsibility. Though he has been looking after academics and sports of the school...safety always comes first. His deep interest in school safety is unmistakable, as he has taken great care to implement the recommendations given by SEEDS.

You can see the students chatting merrily as they take the new staircase... no rush anymore! Few months ago, there was only one staircase. The school is also planning to build another one. Thus, under his guidance, the school has been able to implement these measures. He gives examples of nearby schools during the 2001 earthquake, where many children perished from stampede. The school has two staircases now and during rush time, students know which one to use and when. During school hours, one staircase is used for ascending and the other for descending. Both staircases are used for evacuating classes.



A Mason training programme during the school reconstruction project in Poonch. Below: Educational handbook for masons on disaster resistant construction.

**Onsite training programmes form an integral part of the school safety initiative. Local contactors and masons are trained on safe construction practices. This helps to acquire new skills and enhance old skills and thus considerably raise their standard of construction.**

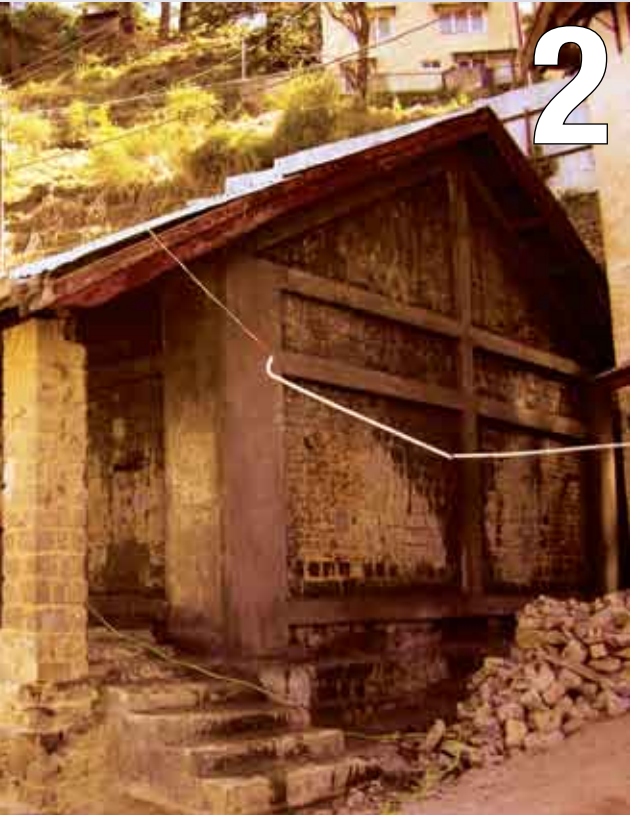




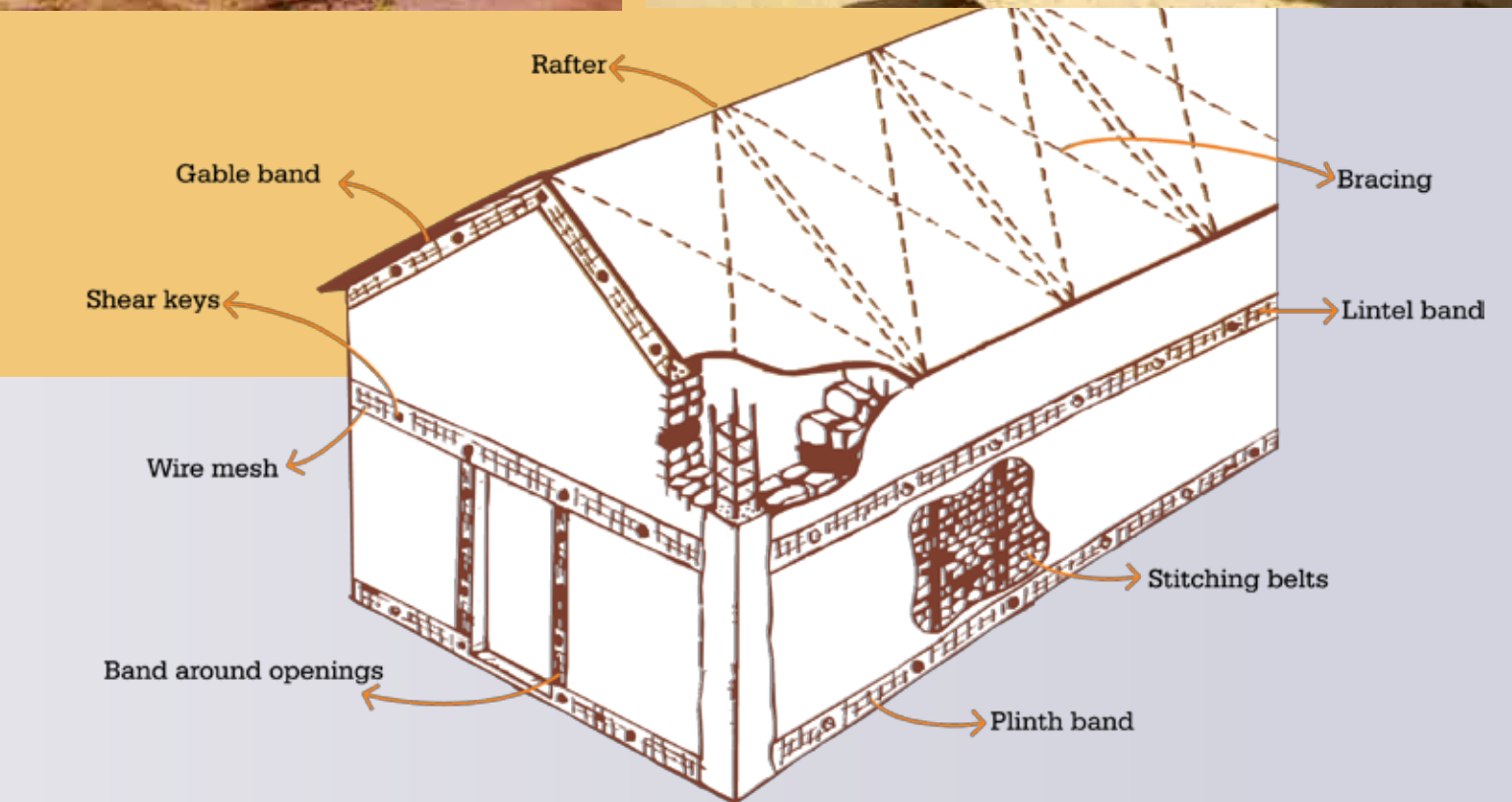
## RETROFITTING

Recognising the incapability of the existing building structures to resist disasters, SEEDS practices the method of retrofitting. Retrofitting is a set of safety actions taken to upgrade the disaster resistance of an existing building so that it becomes safer in the event of future earthquakes. SEEDS implements this in the form of providing seismic bands, eliminating sources of weaknesses or concentration of large mass and openings in walls, adding shear walls or strong column points in walls, bracing roofs and floors, adequately connecting roofs to walls and columns and also providing connections between walls and foundations.

**Many schools are functioning from buildings constructed without following bylaws and standard building codes. Built in congested places, in between tall buildings, or just above shops, most of these schools do not even have a safe space for evacuating the children in emergency.**

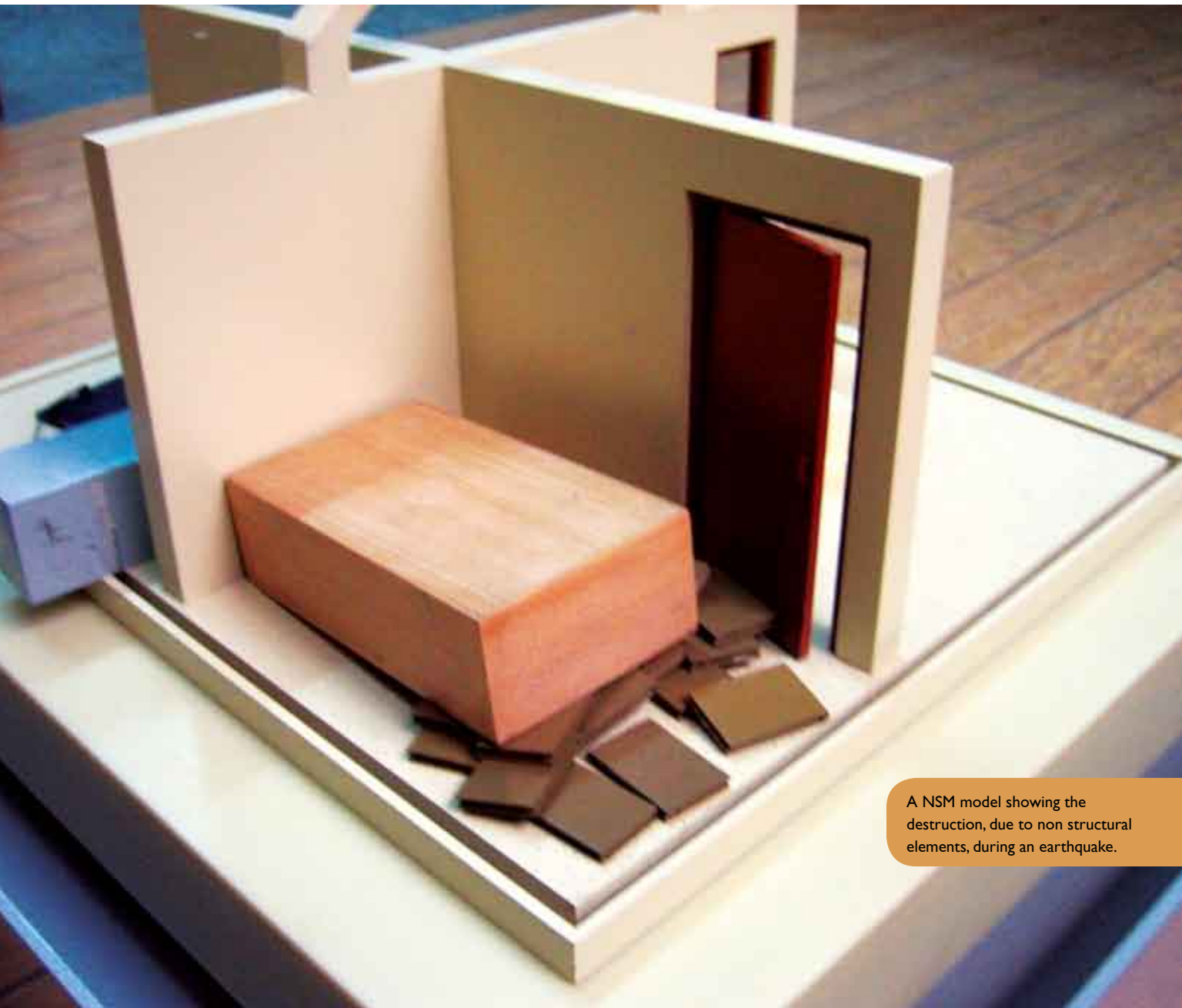


1. Senior Secondary School in Kasumpti, Shimla, before retrofitting.
2. Retrofitting in progress.
3. Disaster resistant school after retrofitting.



# Non-Structural Mitigation

Falling hazards



A NSM model showing the destruction, due to non structural elements, during an earthquake.

The workshops convened under the aegis of School Earthquake Safety Initiative Shimla have helped us understand that small precautions at home or school can save lives. After attending the workshops, we got the furniture at our school repaired; now we are ensuring that non-structural items are fixed to the floor and walls.

Anupam Negi

Librarian, Government Senior Secondary School, Sanjauli

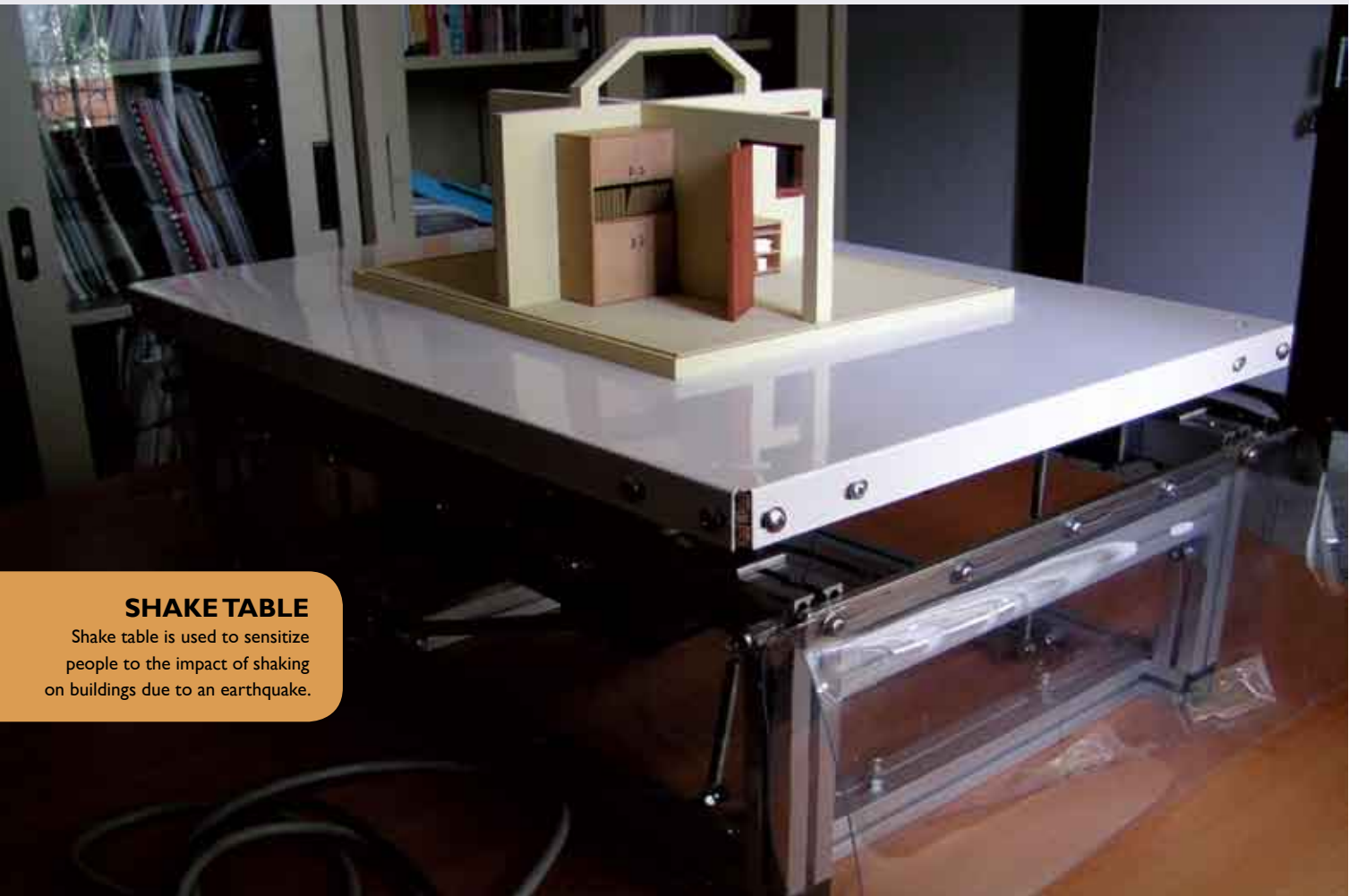
It was discovered that in the 1999 Turkey earthquake, 50 percent injuries and 3 percent deaths were caused solely by non-structural hazards. If we look at our schools, it is common to see cupboards standing close to doorways, heavy objects lying on top of shelves, and clocks and picture frames hanging on the walls. Children have seen wall-clock falling and injuring their friends even before they have learnt how to spell the word “clock”.



Schools, which promise to be the hub where children carve their way to a bright future, have turned out to be a place where their bodies were pulled out from the debris of many disasters. The small additional cost required for incorporating disaster resistant technology while building the schools and fixing up of non-structural elements cannot be compared with the price that we have to pay when thousands of school children get killed or injured. Looking at this grave situation, SEEDS stresses to include non structural mitigation of risks as part of its comprehensive school safety initiative. For example, where schools have laboratories, flammable and toxic chemicals are stored so that they are not spilled in an extreme event. School kitchens are designed to minimize the fire risk and similar measures are taken in other high risk areas.



**SEEDS worked with GeoHazards International, USAID and the Government of Delhi to develop a handbook on non-structural mitigation.**



### **SHAKE TABLE**

Shake table is used to sensitize people to the impact of shaking on buildings due to an earthquake.



School children having a closer look at the NSM models.

The government should also step in to make Non-Structural Mitigation (NSM) mandatory for every school seeking the government affiliation. The school inspectors should also ensure that the schools are earthquake safe. The authorities should only allow constructions adhering to the prescribed building codes.

Kalpana Sharma  
Teacher

# Capacity Building

Gearing up to face the assault



Mock drills are an essential component of the school safety initiative. The fire safety task force learning to use fire extinguishers during a fire drill in a school in Shimla.

Training and awareness of school safety has sparked the ambitious minds of students; they are confident now and know how to take care of themselves at all times.

Jyotsnaben Patel  
Principal, Jamnabai Saraswati Vidya Mandir, Gujarat

School safety initiative is an endeavour, which takes a holistic approach to make the school community disaster resilient. It is an ongoing process which requires participation from different stakeholders of the society, and efforts of rigorous and meticulous planning and systemic organizational efforts. It is not merely a passionate hope to call for action, but to start a campaign where a generation timely prepared unfolds the path to many trained and prepared future generations. The initiative strengthens the coping capacity of the school community to face any kind of emergency.



## Education

Schools are the best place for building a culture of long-lasting collective values. There is no suitable place than school where disaster risk education should be initiated. Education helps in counteracting the myths and the passivity people have towards something new. It should provide theoretical knowledge as well as hands on practical learning experience. The curriculum should also provide knowledge for thwarting and minimizing the risk caused by ignorance. Disaster risk education should, thereby, train the school community with the knowledge and skills needed to systematically recognize hazards and vulnerabilities which will reduce the risks in their environment and build their capacities and resources at the same time. SEEDS has been training teachers and students who are spreading the culture of disaster risk education in a chain reaction to reach the community at large. Disaster risk education trains the school communities with the knowledge and skills

needed to systematically recognise hazards and vulnerabilities which will reduce the risks in their environment and build their capacities and resources at the same time.

In all its initiatives SEEDS has emphasised the use of knowledge as a powerful tool to imparting awareness on disaster risk reduction. For this, a major step towards a formalised approach to the subject SEEDS has been steadfast in including the subject in the school curricula. Under the Gujarat School Safety Initiative, SEEDS helped introduce the subject of disaster management in the school curriculum.

A child is most attracted to the elaborate and animated mediums of communication. Understanding this psychology of children, SEEDS has come out with various innovative products for spreading awareness on school safety. SEEDS uses a diverse array of informal and communication practices to help further the awareness and practice of disaster risk reduction.

When children participate in these fun activities, they learn faster. With films and demonstrations, children remember these things easily.

Mamta Goswami  
Teacher, D. C.G. High School, Ahmedabad



## Simple steps can make school children safe from disasters.

Rama Negi,  
TGT Government Senior Secondary School, Shimla

**MS. RAMA NEGI PARTICIPATED** at the Training of Master Trainers workshop in Shimla. Her curiosity to learn about disaster management gradually transformed into an enthusiasm to implement the school disaster management plan in her school. Like a true teacher, she believes in teaching beyond texts. As Captain of the scout guide at her school, she plans to train her 96 scout guides in disaster preparedness and response.

What really moved her was a film that was screened during the workshop. Titled, 'Life has Changed', the film delved into a psychosocial theme, bringing a tear to her eye. During a discussion after the film, Ms. Negi expressed how she could understand the feelings of someone who has succumbed to a disaster and was determined that we should reach to these people.

After the workshop, Ms. Negi met the Principal of the School to discuss how the school disaster management plan could be made and implemented. After reviewing the School Disaster Management Plan, the Principal was impressed about how simple steps can make schools safe and resilient to disasters. Teachers carry multiple responsibilities and can play an active role in implementing safety initiatives in multiple ways.

**SEEDS has taken an initiative to equip school teachers with knowledge, skills, and tools for imparting better education on disasters through a Certificate Course under Global Open Learning Forum on Risk Education (GOLFRE). This course provides tools that will help teachers and school administrators in preparing schools to face disasters and to reduce their impacts.**



## Trainings

Disaster management has been introduced in the school curriculum recently, however teachers are not trained in the topic. Therefore there is a need for a handbook or sourcebook for teachers. SEEDS has made such an attempt to fill this gap by ensuring that teachers have the right understanding on disaster management and provide students with information and knowledge on disaster safety. Teachers are trained on the subject with the aim that they become master trainers and further train others on the tools and techniques of disaster management.

### PSYCHOSOCIAL SUPPORT

Trainings are also given to teachers, parents and others for providing psychosocial support to children suffering from post disaster distress. Children may be frightened during a disaster event and go into shock. They may be affected by fear, anxiety, helplessness, frustration, difficulty in sleeping etc. Such children would need physical and emotional assurance so that they can come out of their traumatic condition. The training equips the trainee to identify children who suffer from this condition by observing their symptoms. Once they are identified, proper counselling is provided to the affected children.





## Mock Drills

SEEDS has identified mock drills as the most useful exercise to check the preparedness of a system in case of any eventuality. When an earthquake evacuation mock drill is conducted in a school, students are trained to “duck, cover, and hold” during an earthquake tremor (represented by a pre-determined signal) and evacuate the school building through safe evacuation route and assembling in a safe area, class-wise. The missing/trapped students in each class are identified, rescued and first aid provided to them by Task Force members.

### TASK FORCES

With an aim to build the coping capacity of the school community, SEEDS helps form task forces to face any emergency. The various task forces set up for disaster management of the school:

- Warning and Awareness Task Force
- Evacuation Task Force
- Search and Rescue Task Force
- First Aid Task Force
- Fire Safety Task Force
- Psychosocial Task Force

Safety of our children is most important for us. School Disaster Management Plan will be useful for ensuring the same.

Krushna Kumari

Headmistress, Ratnakar U.G.U.P School, Puri

**RATNAKAR U.G.U.P SCHOOL AT Puri is located half a kilometre from the sea and is vulnerable to tsunamis and cyclones. Further, traffic congestion also raises questions on road safety for the students. The school has a total strength of 302 students and seven teaching staff.**

**The teachers and students were ready at six in the morning for the school safety workshop to begin. Many of the students and teachers were familiar with the psychosocial effects of disasters since they had been a witness to the same. They took great interest to know more about the precautionary measures to mitigate disasters and participate in the process of preparedness with their inputs and understanding.**

**Ms. Krushna Kumari Mohanty was quick and efficient in preparing and finalizing the School Disaster Management Plan in three days. She showed great concern for the safety and security of the school and the students. She also values the need for the school to reach out to the community. With this in mind, she included A. Vijayalakhxmi Rao, a local community leader, and A. Biswanath Rao as the Chair of Parent Teacher Association.**

**School students, teachers and management develop disaster management plans for their schools. In the process, they come to know existing structural and non-structural weaknesses. Efforts are made to ensure that the school community takes ownership of the plan and make the necessary updates in the future.**



The first aid task force in action, practicing its role during a simulated disaster situation.

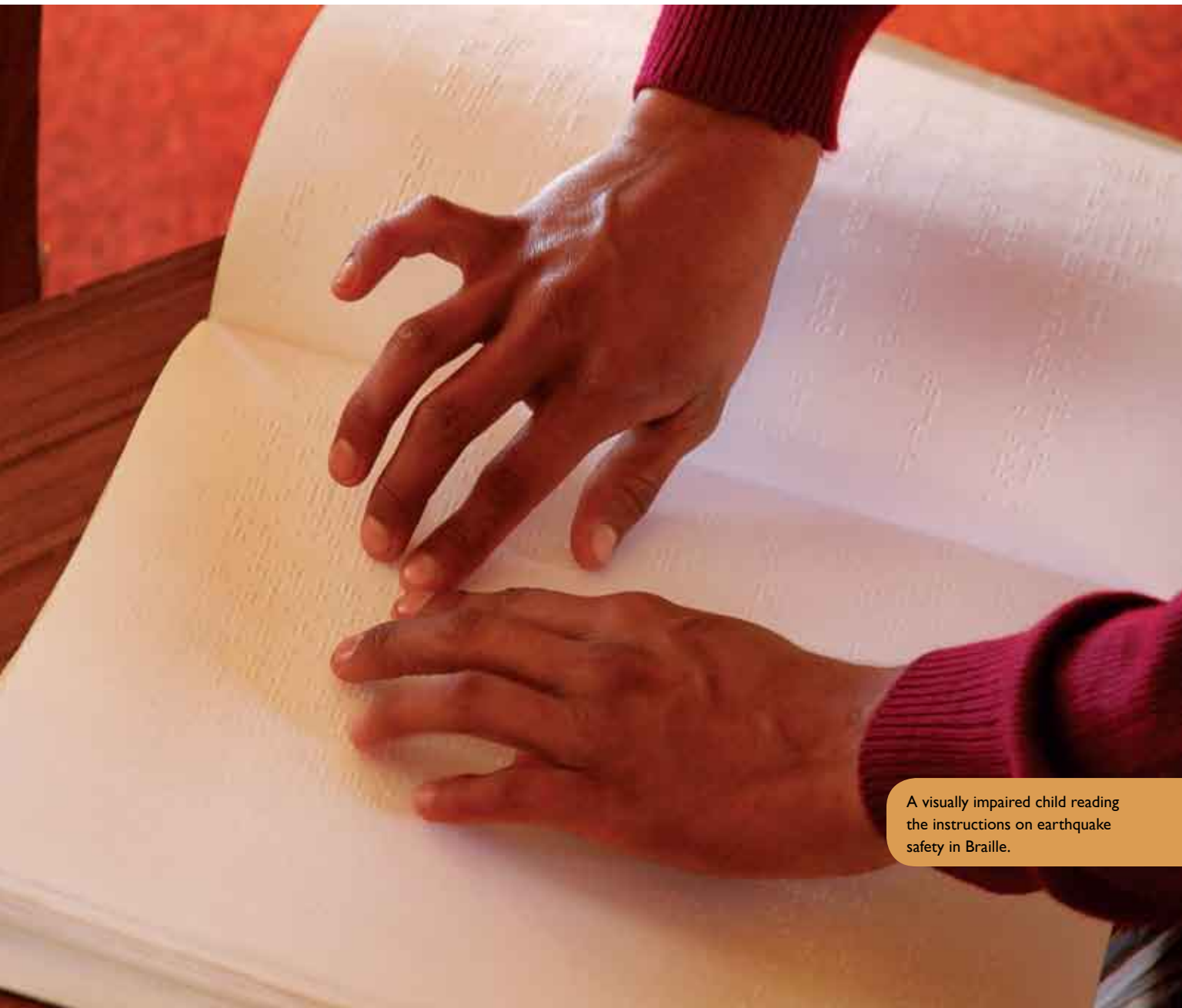
## School Disaster Management Plan

SEEDS approaches the school management and provides them awareness about school disaster management planning. SEEDS also facilitates the school authorities to form a disaster management committee for the school. SEEDS trains the disaster management committee in developing a Disaster Management Plan for the school, which captures school-specific hazards, vulnerabilities, and resources, and plans for mitigation, preparedness and response. The roles of each stakeholder at every stage of disaster management are listed in the plan. The plan needs to be revised at least annually by the school disaster management committee.



# Inclusion

Trained people with disabilities are not different from others



A visually impaired child reading the instructions on earthquake safety in Braille.


Disability can never be an obstacle in the learning process and participation in building resilient communities.

Tapaswini Pradhan  
Student, Sarada Bihar High School

Among the vulnerable, the disabled are the most neglected and are the least sensitized group in disaster preparedness. Recognising the needs and the unique ability of the differently-abled children and in line with its ongoing mission to reach out to the most vulnerable and socially marginalised sections of the society, SEEDS implemented school safety activity in a school (Himachal Pradesh Child Welfare Council, Deaf, dumb & Blind School, Dhalli, Shimla) for visually and hearing impaired children. It is found that with meticulous planning and determined efforts, these children can be empowered to face emergencies. The intervention which is striving to build the coping capacity of the visually and hearing impaired to fight against any emergency has set a landmark in the field of disability inclusive DRM efforts.



Children with disabilities taking part in mock drills.



The disabled are the most vulnerable during a disaster. School disaster management plan should properly account for this.

Praveen Gupta

TGT Medical, Government High School, Nehra, Shimla

**PRAVEEN GUPTA PARTICIPATED IN the Training of Master Trainers workshop held in Shimla. He hopes to train other teachers of his district on the importance of disaster preparedness and the methods that can be implemented for managing disasters. He participated in each and every activity of the workshop with great interest. When he made a detailed presentation he highlighted the issues of disability that should be considered when making the school disaster management plan.**

**When the workshop participants were taken for a visit to a fire station, Gupta volunteered for trying the breathing apparatus suit. It helped him and all the participants understand how the suit can be used in case of a fire. When the community knows that there are methods and tools for managing a disaster, they feel more confident in trusting community resources.**

**One important feature of the project is the introduction of concept of support systems. Support systems are those individuals with whom persons with disability (PWD) spend major part of their time. They are individuals who provide assistance to the PWDs at the time of their needs. This support system can be friends, colleagues, family members, teachers or the PWDs themselves.**





# Rebuilding Safer Schools

Creating a holistic learning environment that promotes the cause of all round education and development.



Schoolchildren having fun at the reconstructed school in Rampura, Barmer. SEEDS reconstructed 18 schools in Barmer after the 2006 floods.



**S**EEDS abides to the millennium development goal of seeking to achieve universal primary education. In striving to achieve this, SEEDS ensures that children go to schools that are safe and provide a welcoming environment to learn and grow. Keeping this in mind, SEEDS reconstructs schools that are devastated by disasters. The larger aim is to create a learning environment that promotes the cause of children's education with a wider perspective and in the longer run.

Apart from constructing buildings, the schools are made as safe refuge facilities for future emergencies. The rebuilding programme is also used to demonstrate the appropriate application of local construction materials and technologies to the local construction sector. The school buildings are also a demonstration of sustainable development by adopting locally appropriate construction, energy and water harvesting technologies.



Strengthen Capacity Through Training

Community Based Planning

Education and Awareness

Local Risk Assessment

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AETNER



THE WORLD IS CHANGING FAST

# Partners in Rhyme

School Safety is no  
single person's business,  
it is a joint effort by  
various stakeholders.



Community members coming together to map their risks around the schools and their houses.



Everyone played a crucial role to make the future of their children brighter...it was a community partnership in the true sense.

Parag Talankar  
Programme Officer,  
Project Ankur, SEEDS

In the process of making schools secure for the children, SEEDS ensures that all the stakeholders are involved proactively. This includes the students, teachers, school administration, parents, neighbouring community, government agencies, media and NGOs. While making the SDMPs, the role of each stakeholder is spelt out clearly. While the teachers are responsible for the children's conduct during an emergency, the school administration is responsible for the overall safety of its occupants. Parents are a critical stakeholder group as well as indirect beneficiaries of the awareness generated through schools, which reaches them via their children. They can be the leaders and agents of change for a culture of disaster safety within communities.



Private schools spend large amounts to buy sophisticated safety equipment but the children do not know how to operate them. There are also schools which are built over shopping complexes.

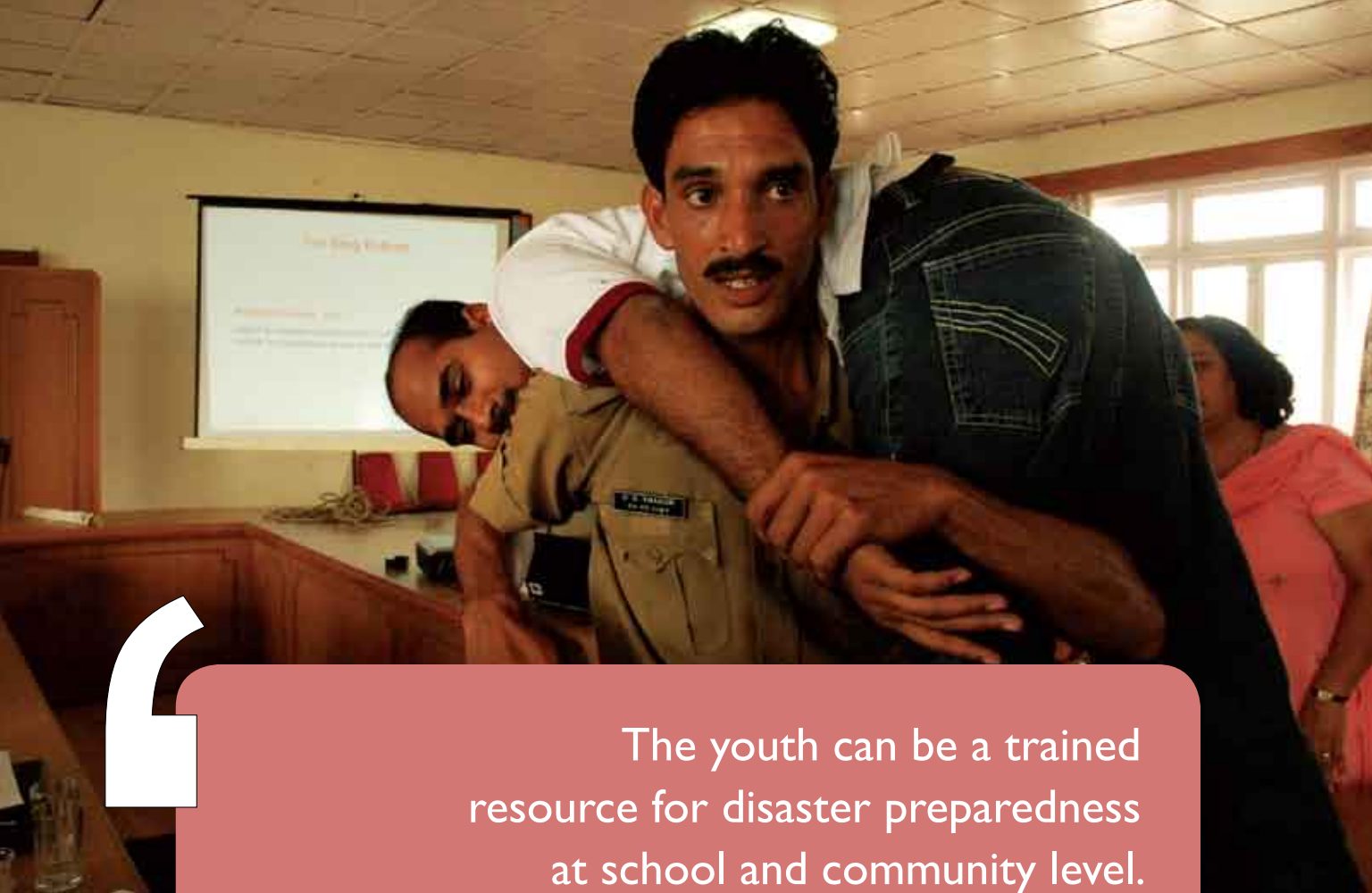
Jay Bhavsar  
Engineer, SEEDS School Safety Team, Ahmedabad

**MR. JAY BHAVSAR WAS A** part of the SEEDS School Safety Team in Ahmedabad, which worked round the clock to implement the ‘Gujarat School Safety Initiative’. He hopes that the schools of Gujarat serve as models of school safety.

The school safety initiative has been able to address the differences existing between schools. His experience of visiting schools has also made him pensive. He has seen that there are many types of schools, which contradict the common image of a ‘school’. We all imagine that schools have a grand building, large grounds, sufficient desks in the classrooms and a wide road outside. Many schools do not even have a structural plan of their school buildings, though they are supposed to. It becomes a problem to identify the structural problems when surveying the safety of schools. And many schools do not even consult a structural engineer.

Planning safe evacuation for the children of each school has been the biggest challenge on the job. The initiative has been enlightening for the school authorities. He mentions that most teachers and children are not aware of the need for safety in schools. But after the program was conducted, many teachers realized the need of safety for all people and the seriousness of disasters. What remains now, is a follow up in all these schools since the batch of students keeps changing every year.





The youth can be a trained resource for disaster preparedness at school and community level.

Deepika Dhiman  
Student, Himachal Pradesh University, Shimla

**DEEPIKA DHIMAN, A STUDENT OF disaster management at the Himachal Pradesh University, was a participant of the SEEDS 'School Earthquake Safety Initiative Shimla' workshop in May 2008. It was a new and exciting experience for her, because she was able to gain some practical knowledge about disaster management and the views of other participants. She was surprised that many teachers are not familiar with the term "disaster" and how they can take simple steps for greater preparedness. She firmly believes that the youth can be a trained resource for disaster preparedness at the school and community level.**

**She mentions how disaster management is a community-based activity, which begins from the school. For her, the school safety initiative helps in developing skilled resource people from all age groups. Further, a student or an individual is trained to help many people in case of a disaster. She notes that every school should have its own disaster management plan and carry out mock drills periodically to reinforce knowledge and practice.**

Teachers are the roots to knowledge. They disseminate information to students, fellow teachers and to their families.

Subhashree Dhal

Assistant teacher, Shri Vihar Sidhu Mandiram School, Puri

**SHREE VIHAR SISHU MANDIRAM SCHOOL** in Puri caters to the needs of the children residing in the premises of Sanskrit University. It may be a small school, but the parent teacher interaction is commendable. The collaborative efforts of the children and teachers have made the school safety initiative a successful one.

For four years, assistant teacher, Ms. Subhashree Dhal has continuously been driven to impart knowledge to young minds. She notes how children are sincere, listen carefully and remember details. Cultivating young minds is the way to educate the whole society.

The school safety program has become a platform for her to participate and demonstrate that safety is a part of civic awareness. Her active participation has been reflected through her activities as the coordinator of the Warning and Awareness task forces. She also hopes to coordinate the other task forces especially the First Aid task force. The school safety program has addressed all the necessities for making the school community aware of the risks and the resources near the school and how they can be efficiently managed for a quick response.

“The teachers and the non-teaching staff have showed that it is important to be alert and act as per the need of the four phases of Disaster Management,” says Mr. Adwait Charan Dhal, President of the school.





## COMMUNITY EMPOWERMENT

In Barmer, Rajasthan, Project Ankur, the school reconstruction project, was based on the active participation of the village community and the local government to ensure that the final product matches their aspirations and that there is a local sense of ownership. Village education committees were formed which had 8-10 members comprising various stakeholders. These saw that the utmost quality control was ensured, leaving no space for error.



# The Way Forward

Initiating and spreading the culture of safety in all directions with the school at the core.





A disaster resilient community is one which can bounce back to normalcy after any disaster, a community which is prepared to face any disaster with grit and gumption. SEEDS through its school safety initiative aim to create such communities. Keeping this overriding theme in mind, SEEDS is up scaling the safe school initiative to involve other strategic stakeholders. The project which is titled 'Safe School Safe Community' aims to strengthen school safety as a catalytic process that reduces the risk of life-loss of school children due to disasters, and strategically leads to an institutional process of community and state disaster management planning.

The project seeks to demonstrate how school safety can be a catalyst in initiating community based disaster management processes, which can be directly linked to state level planning, intervening through block level and village level disaster management planning. It will, in this way, show how the gap between small scale community based initiative and top heavy policy interventions is bridged effectively.



# Appendix: Ahmedabad Action Agenda for School Safety

## PREAMBLE

The International Conference on School Safety<sup>1</sup> was held from 18th to 20th January, 2006 in Ahmedabad, Gujarat, India. Reaffirming The **Priority for Action 3** of the **Hyogo Framework for Action 2005-2015**, to use knowledge, innovation and education to build a culture of safety and resilience at all levels, the **UN Millennium Development Goal (Goal 2) to Achieve Universal Primary Education** by the year 2015, the participants recognize that every child has both the right to education and the right to safe and sustainable living, hereby set themselves the goal of achieving in solidarity

## “Zero Mortality of Children in Schools from Preventable Disasters by the year 2015”

To achieve the above goal, the participants adopted the following action agenda for school safety. (hereafter referred to Ahmedabad Action Agenda). The actions are outlined under immediate priority and long term accomplishments (i.e. by 2015)

## I. DISASTER RISK REDUCTION EDUCATION IN SCHOOLS

### Immediate Priority

Action 1.a: Include disaster risk reduction in the formal curriculum at both primary as well as secondary levels. Education must address an understanding of root causes that lead to disasters<sup>2</sup> and environmental

problems that are intimately connected to our daily lives. Education must inculcate a sense of responsibility for effecting a positive change on both local and global scale.

Action 1.b: Promote disaster risk reduction through co-curricular activities in schools acknowledging that children in schools<sup>3</sup> need to develop “survival/life skills” first, along with “academic inputs”. Co-curricular activities must include basic disaster awareness and disaster risk reduction, mock drills, first aid training, training on fire safety and other response skills as appropriate (e.g. light search and rescue, swimming, evacuation and emergency shelter creation).

### By 2015

Action 1.c: Promote exclusive initiatives among children in schools that make them leaders in risk reduction in the community.

Children must serve as role models in the community and provide exposure on responsible practices and behavior in the community. Children in schools must reach out to those under-privileged and non-school going children.

Action 1.d: Ensure effective partnership among schools to share risk reduction education and achieve higher levels of school safety.

Local, Regional, National, Global coalitions/school networks must be encouraged to share and learn good practices on school safety.

## 2. DISASTER RESISTANT SCHOOL INFRASTRUCTURE

### Immediate Priority

Action 2.a: Complete risk assessment and safety measures must be undertaken to ensure zero potential damage to new school buildings.

Minimum standards must be established for school construction, considering schools as critical infrastructure.

Building codes are expected to be in place, promulgated, and enforced by national, regional and local governments. All new school buildings must adhere to minimum international standards. Public authorities need to reach out to communities who self-build schools, to promulgate these standards and provide technical assistance, including, if necessary, engineering guidance and construction-worker training on disaster resistant construction.

Action 2.b: Mandatory safety audit of all existing school buildings with respect to their location, design and quality of construction and prioritizing them for demolition, retrofit or repair.

Safety audits must adhere to the minimum standards. Both knowledge and physical resource to ensure audits and repair must be made easily accessible to school community. Audits must be recognized and encouraged by the local government/education department.

### By 2015

Action 2.c: Develop, implement and enforce codes with the performance objective of making all new school

1. “School Safety” refers to safe environments for children starting from their homes to their schools and back. This includes safety from large-scale ‘natural’ hazards of geological/climatic origin, human-made risks, pandemics, violence as well as more frequent and smaller-scale fire, transportation and other emergencies, and environmental threats that adversely affect the lives of children.
2. “Disaster” A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources. (UN/ISDR terminology)
3. “Children in schools” refers to children while they are in school premises, as well as on their way to or back from school.

buildings ready for immediate occupancy following any disaster to serve as shelters or safe havens for the community as well as to restore educational functions in the shortest possible time.

Since schools are important post-disaster shelters, safe havens, emergency operations centers, and needed for educational continuity, "immediate occupancy" should be the performance standard of choice, and school buildings should serve as models of disaster-resistant construction.

Action 2.d: Implement a systematic plan to retrofit and/or repair existing schools to meet minimum standards of life safety in the event of known or expected hazards. Demolish unsafe irreparable school buildings and replace them.

To prevent avoidable deaths and injuries of children in schools, as well as to ensure that they serve as post-disaster shelter that can be retrofitted or repaired, school buildings must fall within the purview of safety standards. Unsafe buildings must be demolished and replaced with safe new buildings.

Action 2.e: Implement routine checks to ensure schools adhere to minimum standards and safety measures are not undermined.

Maintenance of school facilities and resources must be done periodically. Physical resources like fire safety equipment, first-aid kits must be regularly updated. Similarly non-structural mitigation of equipments and furniture, evacuation plans, building survey and hazard mapping must be reviewed periodically. This ensures effective response during any contingency.

### **3. SAFE SCHOOL AND COMMUNITY ENVIRONMENTS**

#### *Immediate Priority*

Action 3.a: Mobilize parent, student, local community and school staff to champion school safety.

Encourage parents, students, local community and staff to actively engage in discussions and action planning for school safety with school administrators, authorities and governments.

#### *By 2015*

Action 3.b: Schools to prepare and implement school safety plans including measures to be taken both within school premises and in the immediate neighbourhood. This must include regular safety drills.

Schools shall recognize risks both within their own premises and in their immediate neighbourhoods, identify and assess resources available for meeting emergency needs, prepare short term plans for preparedness and outlining measures for disaster risk reduction. Safety drills include fire safety, evacuation process, earthquake drills (Duck, Cover and Hold), drills for flood safety, and learning early warning signs and communication systems for storms and other hazards.

Action 3.c: Promote active dialogue and exchange between schools and local leaders including police, civil defence, fire safety, search and rescue, medical and other emergency service providers. Recognizing that school communities must be prepared to meet their own disaster response needs for a period of time, active dialogue and exchange helps to prioritize and co-ordinate assistance by emergency services. Advance planning optimizes the need for expert resource and also makes the school community resilient.

#### **Action 3.d: Schoolchildren must practice safety measures in all aspects and places of their lives.**

This focus on school safety is intended to build momentum for a culture of safety that extends to all parts of life, and to become as natural to daily life as health, hygiene and environmental concerns. Safety practices must be internalized to bring in tangible changes.

### **4. ADVOCACY AND GOVERNMENT POLICY ON SCHOOL SAFETY**

#### *Immediate Priority*

Action 4.a: A policy on school safety which would eventually be integrated with the existing policies on school education must be framed.

State/National Government must ensure a policy framework on disaster risk reduction education and safe school infrastructure with active participation from schools, national/local educational authorities and the community at large.

#### *By 2015*

Action 4.b: Enforce policy through budgetary allocation, strategic programs and effective monitoring.

State/National Government must implement school safety through enactment (legal support), resource allocation, effective advocacy and strategic programs. All national/state governments must aim for zero loss of life in schools due to any calamity.

### **STAKEHOLDERS AND ROLES AND RESPONSIBILITY**

To implement the Actions outlined above, every parent, school principal, teacher, child, government policy maker, pedagogic/scientific/technical expert, non-governmental organization, intergovernmental organization, private

sector, mass media should consider themselves to be a stakeholder and hence a “Champion of School Safety” bearing the following responsibilities.

#### National / State-Province / Local Education Authorities

- Accept responsibility for ensuring the safety of schoolchildren.
- Include disaster risk reduction training/education elements in educational curriculum throughout all grades/classes.
- Establish and implement strategies, policies and regulations for safe school facilities.
- Allocate resources for construction/ retrofitting of safe schools and training.
- Promote, facilitate and incorporate disaster risk reduction in teacher-training programme across institutes/ colleges/universities.

#### School Community (School Administrators and Teachers)

- Ensure teachers and non-teaching staff receive the opportunity for training in disaster risk reduction.
- Be accountable for applying proscribed safety norms and regulations in their own schools.
- Ensure active participation of school community, including children and parents, in preparing and implementing school disaster plans and disaster risk reduction efforts.
- Be prepared to respond to emergencies.
- Encourage and support children to participate in spreading disaster risk reduction knowledge, acting as bridges to families and communities.

#### National/State-Province / Local Disaster Management Authorities

- Collaborate with and involve education authorities in

planning policies, minimum standards and regulation for ensuring school safety.

- Promote effective methodologies for active learning, integration of disaster risk reduction education in formal curriculum of schools.

#### Inter-governmental Organizations, Development Banks, and Donors

- Mainstream disaster risk reduction in schools through appropriate line item allocation of funds and standard operating procedures.
- Integrate safety and disaster risk reduction into policy and strategic planning for schools and education sector.
- Leadership to educate larger donor group policy-makers in longer-term issues of school safety and disaster risk reduction.
- Develop monitoring tools and set-up independent auditing processes to evaluate school and education sector projects from a disaster risk reduction perspective and in adherence with the established standards.

#### Non-Governmental Organizations (local, regional and international)

- Establish ongoing links with academic/scientific/research institutions and experts for the development of training programs, delivery of training programs, and research on impacts and outcomes.
- Initiate coalitions for school safety at every level: local, district, state, national, regional and global.
- Integrate disaster risk reduction into mainstream development and aid activities, including adoption of standards and standard operating procedures that ensure the physical safety of school buildings.

- Mainstream disaster risk reduction in schools through appropriate advocacy and communication to common citizens.

#### United Nations

- Allocate resources to develop focal points for knowledge sharing at regional and global level.
- Promote use of Hyogo Framework for Action as a reference for actions on the Education for Disaster Risk Management.
- UN/ISDR take lead UN role in advocacy and education of national governments, decision-makers for strategic policy intervention for disaster risk reduction.
- UN agencies collaborate to develop and promote good practices in school structural safety and disaster risk reduction education in all forms.
- Coordinate comprehensive library and online catalogue of disaster risk reduction educational materials and tools. (UNESCO/ISDR).
- Reach out to include all school safety efforts in Education Platform worldwide, reflecting local activities as part of larger objectives. (UN/ISDR).

#### Children and Youth

- Learn principles and practices of disaster risk reduction.
- Become aware of disaster risks in your own community and how to reduce them.
- Participate in preparing and implementing school disaster plans and disaster risk reduction efforts.
- Participate in drills and appropriate response to early warnings available in your school or community.
- Participate as bridges to spread disaster risk reduction knowledge to families and communities.

### **Mass Media and Social Marketers**

- Participate in training to learn background on hazard, risk and risk reduction information.
- Participate in the development, refinement and implementation of the code of conduct for disaster reporting, especially with respect to children and schools.
- Engage as responsible partners in creating awareness and encouraging action for disaster risk reduction and school safety.

### **Pedagogic/Scientific/Technical Experts**

- Adopt and incorporate a children's rights approach to school safety.
- Develop and disseminate training modules for awareness, assessment and planning, physical protection

and response capacity skills and provisioning.

- Provide technical assistance and guidance in refining and improving educational materials and learning aids for disaster risk reduction.
- Involve all stakeholders in participatory development of training resources and research.

### **Private Sector**

- Engage as local community stakeholder and partner with other stakeholders in school safety.
- Promote in kind, material and financial support to promote disaster risk reduction and school safety activities.
- Link private schools to public school safety and disaster risk reduction efforts at all levels.

- Insure schools against physical losses in disaster.

### **Coalition for Global School Safety**

- Serve as an independent umbrella to link school safety advocates globally for the long-term tasks of both school disaster risk reduction, and disaster risk reduction education through schools.
- Advocate at all levels to keep school safety a priority until it is achieved.
- Share advocacy materials, and good practices to support school advocates globally.
- Nurture and support school safety leadership and champions at all levels.
- Encourage formal and informal groups and individuals to affiliate for the purpose of mutual support in creating the momentum needed to accomplish these goals.



Paintings drawn by school children at a painting competition during the International Conference on School Safety in Ahmedabad.



# School Safety Through a Child's Eye!



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