

BOYS PRIMARY SCHOOL

Safety Audit: First Step Towards Making Schools Safer



From an Effort to Turn Local Tsunami Recovery into Regional Disaster Risk Reduction for the Poor



southasiadisasters.net



For Personal and Educational Purpose only

Special Issue: 59

April 2009

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PREFACE

The recent and preventable deaths of tens of thousands of school children at their desks earthquakes in Kashmir and Sichuan, the ongoing destruction of schools in recurring floods and by violence, throwing children out of school must elevate our commitment to ensuring first that "Every new school is a safe school!".

This measure alone, through careful site selection and learning and adhering to disaster resistant design and construction standards would guarantee our eventual success most of the schools that will educate children in 50 years have not yet been built. Our second pledge must be to prioritise the replacement or retrofit of existing unsafe schools.

Beyond awareness are the very concrete measures required for physical safety: The greatest improvement in child safety will be when every school bus is fitted with a seatbelt for each child. A fire alarm system, every exit opening outwards and unobstructed, practiced orderly evacuation drills, and simple fire-fighting equipment on each corridor (a bucket of sand, a fire blanket) will save many lives.

Communities, schools, and educational continuity should be considered the same time: a single multi-purpose building can serve as both community disaster shelter as well as the school as assembly, indoor sports and performing arts center. In flood-prone areas the school building that is elevated will be back in use as soon as floodwaters recede.

This noteworthy issue of *southasiadisasters.net* on Safety Audit: Towards Making Schools Safer is an admirable example of practical review, evaluation and guidance that results from the shared interests of students, teachers, educational officials, and the wider interests of local community leaders. It synthesises the lessons, and sometimes oversights, of experience as it also provides further guidance for practical measures that can be pursued by communities to make schools safer. It speaks with an informed knowledge and seeks to motivate a wider commitment to making schools safer through recommendations, safety plan process and views of educators.

We shall all need to work smarter, sharing and disseminating specific knowledge effectively and widely. UNISDR's Prevention Web now hosts the DREAM Collection of disaster reduction educational materials with nearly 2000 entries, found under "professional resources": www.preventionweb.net. Users are invited to submit their publications to enrich us all.

The social bookmarking site DRR Library at www.drmlibrary.org provides a button for your browser menu in order to save valuable website for yourself and others, with description and tags to find and share them again. For teachers, the Edu4DRR teachers network can be found at <http://edu4dr.ning.com>

The Coalition for Global School Safety and Disaster Prevention Education distributes a newsletter twice a month. To subscribe you will find a link on the COGSS & DPE social networking site home page at <http://cogssdpe.ning.com>. While there, please become a member and join in or take the lead in discussions, Q&A, and interest groups as well as regional alliances. And please share your news and updates with the 1,000 and growing network with an email to: cogssdpenewsletter@gmail.com.

The examples cited by the issue reflect the multiple approaches that contribute to building community resilience and which can successfully reduce disaster risks. This issue demonstrates many of the small, practical, and cumulative steps that can be employed to create safer schools and communities. I hope readers can add their own efforts to the cause. ■ **Dr. Marla Petal**, COGSS & DPE

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Why School Safety Audit?

India is a country exposed to multiple hazards. About 60% of its land is prone to earthquakes, 12% to floods, and 8% to cyclones, among a few others. Schools, the foundation of a nation, are often indiscriminately built in hazard-prone locations without following safety guidelines. This has resulted in unnecessary deaths, injuries and losses in schools. Impact on schools and children in incidents such as the Bhuj earthquake, Kumbhakonam fire tragedy, Indian Ocean tsunami, Kerala boat tragedy, Kashmir earthquake, and Baroda bus tragedy are all examples of this fact.

Many education programmes are run in and outside India's schools by agencies at different levels. Society considers education to be a child's right, but many fail to acknowledge that safety is included in their right to education. This research study on school safety reflects not only the vulnerable situation of India's schools, but also sheds light on aspects related to the school community, its needs and the realities it faces.

The process should include stakeholders' opinions and involvement. Various tools can be helpful such as studying subject materials, focus group interviews, direct interviews, questionnaires, tables for data collections and opinions and structured direct observations. Supportive involvement of the local agencies and a community-based approach also make it a unique process.

The findings of the audit can be crucial for schools and local agencies who are involved in the field of education and DRR, as they emphasise the teachers' needs and demands. It will be useful for agencies that are designing and implementing school based DRR programmes.

It is an unfortunate reality that not enough is done to mitigate risk faced by children at school. And this tool — school safety audit — can be effective for designing and implementing school-based safety measures that are not limited to schools but also are useful to agencies at various levels working on school safety issues.

In developing countries like India, too many students are vulnerable to accidents and disasters due to inadequate safety measures in their schools. The school can design audit tool for concrete actions for immediate improvement and long-term development in school safety. This process is highly recommended for the disaster prone and disaster-affected areas.

Recently AIDMI carried out study of school safety audit in seven disaster prone and affected states of India. Although it covers a small numbers of schools the selection procedure was

unique and covers key areas of India. It reflects crucial learning of joint process with schools staff and children, local NGO's and government authorities. The findings and recommendations and educators view are presented in this publication with the intention to inform policy decisions, develop school safety measures, and spread awareness to a broad audience of concern agencies. This research study has identified needs and focus areas for school safety in the South Asian region. It covers a large range of issues and calls upon a large range of stakeholders to take on the necessary work. Teachers alone cannot achieve school safety needs, and neither can government. School safety is the responsibility of all, and it will take commitment and effort from all — government, teachers, administrators, parents, children, community organisations, NGOs, and even the corporate sector. We have to accept the reality that our schools are unsafe and that joint efforts are needed to change this scenario. ■

A Few School Disaster Incidents in India

- December 23, 1995, nearly 425 people, many of them school children, perished as they tried to escape the flames during a school prize giving ceremony in the town of Dabwali, Haryana.
- January 26, 2001, Gujarat earthquake: 971 students and 31 teachers died.
- July 18, 2004, Kumbhakonam fire tragedy. A deadly fire raged through Lord Krishna School killing 93 children, all below the age of 11.
- December 26, 2004, South Indian tsunami. Thousands of school children and many teachers died or were reported missing in Tamil Nadu, and Andaman-Nicobar Islands.
- October 8, 2005, Kashmir earthquake. The death toll was huge, especially for school children.
- May 2006, Kashmir boat tragedy. The incident involved the drowning of one teacher and 21 school children in Wullar Lake of Kashmir.
- February 20, 2007, Kerala boat tragedy, 15 children and 3 teachers died when they were crossing a river with a tattered boat on their way back from a school picnic.
- April 16, 2008, Baroda bus tragedy. 47 students died traveling to a school in Baroda when the bus fell into the Narmada canal.
- January 21, 2009, Morbi road accident. 33 primary schoolchildren were injured when their jeep overturned on their way to school.
- January 21, 2009, Guda Malani road accident. 12 school children were killed and 26 were injured in Guda Malani town of Rajasthan.

School-based Disaster Risk Reduction Plan

Step-by-step process for DRR plan in School, based on local hazards, vulnerability and available resources in school can help schools in responding to disasters effectively.

In the event of any disaster, children and teachers in unsafe school buildings face considerable risk. School disaster management planning is one way to mitigate such risk for teachers and children. The prerequisite step to planning should be to conduct a school safety audit (evaluation) of the school, which includes key factors such as local hazards, school vulnerability, and capacity (resources), teacher and student knowledge of disaster management.

Aim: The aim of school-based DRR planning is to ensure that the safety of the students and the staff is maintained during an emergency. The emergency management plan is a means by which this can be achieved. This also includes risk reduction activities against future disasters.

Planning principles: When developing a school emergency management plan, observance of the planning principles as few mentioned here; simplicity, flexibility, decision

making process, dissemination, coordination, and consistency.

The audit provides information to the school's community about possible risk and how to build the capacity of the school by both structural and non-structural mitigation measures. This school-specific analysis - which comes out based on the tools - is crucial for preparing a school-based DRR plan.

The following steps are recommended for school-based DRR:

1. Sensitisation meeting for awareness to School Management:
As a necessary first step to preparing a plan and teacher training, on how prepare a plan, sensitisation meetings should be organised with the school authority in which all key school members are present (i.e. principals, administrative staff, all teachers, student leaders, head cook). These key members should discuss potential hazards

in their school, disaster management plans, as well as how to organise a committee and conduct a school safety audit with trained staff or experts.

2. Formation of the School Disaster Management Committee:
Four groups: Coordination group, disaster awareness group, risk reduction group and disaster response group. All four will conduct together an audit and then begin school-based DRR activities. The group's roles and responsibilities could be defined.
3. Conduct School Safety Audit:
The audit enables the school to enumerate potential risks and risk reduction measures. It also helps to identify limitations and necessary support from outside agencies. Audit findings enable the school to prepare a school-specific plan for DRR activities. For example, a school might not have emergency lighting to use during a power failure, exit doors and windows that jam and will not open, existing risk like outside electrical wires, suspended ceilings, weak tree branches, unsafe building, risk at high way located near to school etc.
4. Preparation of the School-based Disaster Risk Reduction document
The document should contain a detailed analysis of the school safety audit, mostly emphasizing information related to school-specific hazards, vulnerability and capacity through key aspects such as:
 - ◆ The physical location and demographic details of the school building and its



All photographs in this issue: AIDMI

Easy to understand DRR education material such as displays in local languages is crucial for schools to spread awareness among school stakeholders.

surrounding environs like the number of classrooms and laboratories as well as its proximity to river, highway, railway line/crossing, etc.

- ◆ Resource mapping showing the resources available within the school (i.e. stretcher, fire extinguishers, ladders, first aid kit, disaster response kit, etc.)
- ◆ Vulnerability mapping and coping mechanisms showing the vulnerable location of the school building such as the average number of students and teachers per class room, taps located in the vulnerable place, and outside electrical wires, coping mechanisms for the hazards identified should be listed out.
- ◆ Possible risk wise safe places and evacuation route with charts and signs of the school should be prepared and pasted at notice board. Time-to-time this document should be updated and reviewed.

5. Formation and Training to the School-based Disaster Risk Reduction Teams:

The member of the group should be creative, while developing the materials for awareness generation, kindly note that the cultural background of the area should be kept in mind. Based on location of school (urban or rural) community should be targeted. Each team member will engage in different activities such as raising awareness, risk reduction implementation, soliciting support from outside agencies, disaster response, coordination within the team and evaluation, etc. For these various tasks, team members need materials and trainings subjects like school safety, school based DRR, first aid, and search and rescue are several key subjects.



Children have unique perceptions of disasters and responses. Mitigation efforts should educate children about the risks they face.

6. Awareness activities and dissemination of the plan to everybody in the school: It is important that after plan preparation, the plan is disseminated to every school through innovative and interesting activities and with the integration of existing school activities.

7. Conduct regular safety demonstrations and report to Committee:

Mock drills, fire safety demonstrations are conducted to train students and teachers and to test the various elements of your response plan in order to evaluate and revise it. During a disaster, life-protecting actions such as evacuation to safer place, search and rescue and first aid must taken immediately. There will not be time to decide what to do next; everyone must know in advance because evacuation or first aid administration may be necessary; well trained staff and students will guarantee that these crucial steps are taken as quickly as possible. Disaster-specific drills can be conducted against any disaster — fire, earthquake, accident, cyclone etc.

8. Implementation of risk reduction measures

Based on the audit analysis, the team develops an understanding of the school's vulnerability. Now the team knows where and what kinds of mitigation measures should be implemented with whom and for whom. Several examples could be removing weak tree branches, taking fire safety measures in laboratory and kitchen, raising awareness on specific topics where school's lack knowledge, constructing safer buildings, designing appropriate exit routes, and taking steps to ensure the safety of vulnerable groups such as young students (std. 1 to 4), and People with Disabilities (PWDs). This step — implementation of risk reduction measures — is important for making schools safer and according to progress of this measures all other aspects are changing.

9. Evaluation of the plan to improve effectiveness:

The school-based disaster risk reduction plan needs to be periodically evaluated and updated. The suggested period for plan updating could be quarterly. For example, the first mock drill may have many mistake or consume more time. This drill need to be evaluated and improved. ■

Guidelines for School-to-School Safety Audit

Schools can design and implement tools by their own to evaluate current position of safety within and surround to school area and also for their neighbouring schools

Goal:
Promote school safety and school safety awareness by assessing current levels of understanding and preparedness, identifying needs and disseminating findings for preparing future actions to increase safety.

It is clear that AIDMI, as well as other agencies, do not have the capacity or resources to verify that all schools meet structural and non-structural safety standards. Moreover, a universal set of such safety standards does not exist.

Due to these limitations, AIDMI and other disaster safety practitioners advocate individual school-to-school auditing; schools can evaluate emergency exits and stairwells, and non-structural preparedness measures at their schools and other schools. It is best that schools audit each other to reduce internal bias. In order to conduct technical inspections of structures, specialised engineers will be needed.

The following is a basic, abbreviated guide for designing and conducting a general school safety audit of basic structures and non-structural preparedness measures. Of course, audits should be tailored to schools and needs to ensure that schools possess specific disaster preparedness plans for the hazards they are most likely to face and are able to respond according to their local capacity. This audit guide is by no means exhaustive, but serves as a good starting point to determine basic measures schools can undertake to: a) improve their response capacity; and b) reduce their risk and vulnerability.

In general, the audit should gauge and measure the following:

1. Teacher, staff, and student knowledge
 - a. Knowledge of key terms: hazards, capacity, vulnerability, and disasters
 - i. Awareness of measures to raise capacity and reduce vulnerability
 - b. Knowledge of do's and don'ts before, during, and after disaster
 - c. Are teachers and select students trained and having skills such as disaster response, basic of search and rescue, and emergency medical response?
 - d. Do students and staff know how to use all equipment including fire extinguishers and first aid kits?
2. School preparedness
 - a. Does school has disaster management committee? Evaluate committee's level of preparedness.
 - b. Does school has emergency evacuation plans and conduct drills? Evaluate plans and knowledge of plans.
 - c. Are emergency phone numbers and procedures accessible and visible to all school personnel and students?
3. Structural and non-structural evaluation
 - a. Evaluate number of, and accessibility of emergency and stairwell exits
 - b. Evaluate status of drinking water and sanitation
 - c. Are fire extinguishers and first aid kits accessible?
 - d. Number of litterbins on campus

If schools conduct the following basic evaluation (audit), they will have more complete and rigorous information to advance non-structural preparedness as well as to coordinate with engineers and local authorities to express concerns about potential structural hazards.

Action and Policy Advocacy:

There is much work to be done to learn about the needs of schools across the region. The audit's key findings and recommendations presented in this publication should serve as a springboard for increased dialogue and lateral learning across various stakeholders, resulting in sharper ideas for how to conduct future school safety audits in India and throughout South Asia.

In addition to auditing, stakeholders across sectors must advocate for the following measures:

1. Integration of DRR into education curricula and textbooks
While DRR education is already integrated in some school curricula, there is ample room to scale up this initiative. Education and government authorities can take a leading role in advocating for the widespread inclusion of DRR in school curricula. With the school safety audit findings, we now have better information to carefully shape the curriculum to address particular risk reduction measures.
2. Structural evaluations
It was observed in disaster-prone and affected areas that many school buildings were constructed with disregard for

safe building codes even after being affected by a disaster in the recent past. Structural evaluations are vital to identifying structural hazards and taking appropriate steps to ensure safe buildings. School preparedness is not sufficient on its own; but it is a necessary compliment to safe school structures. Therefore, stakeholders from government, the private sector, and schools should push for more widespread and continual structural evaluations to be carried out by certified engineers.



Schools with DRR implementation programme can be important knowledge resources to other nearby schools for school-to-school learning.

3. School-to-school audits, monitoring, data collection and analysis

Systematic, widespread school-to-school auditing should be a priority. Audits should be tailored to specific school settings and contexts, but should follow basic guidelines for determining the school's vulnerability and capacity to respond to disasters. A standard set of guidelines is lacking. Standard guidelines are needed to determine if audits are well executed.

To create such guidelines, multiple stakeholders should collaborate to identify the limitations of the audit (in terms of approach, process, variables of interest, and coverage of schools) and redesign the audit so that future evaluations are more rigorous and the results are more useful.

4. Certification and accreditation
Creating a formal certification and accreditation process to ensure that schools have been professionally audited would provide multiple benefits. First, if schools are certified, NGOs and

GOs can more easily monitor the safety status of schools, also making it easier to identify which schools need to be audited. Accreditation can be used to incentivise school auditing in addition to verifying that audits are completed according to professional standards. For example, school safety certification should be a necessary prerequisite for schools to qualify for insurance coverage. To this end, increased collaboration between education authorities and insurance companies is critical.

5. Global Safer Schools Programme
The findings of the audit are an important starting point to select key activities or measures to improve disaster preparedness. Workshops, conferences, and meetings to share experiences are essential to increase lateral learning and shape appropriate policy and action.
6. Increased citizen and youth engagement
In guaranteeing school safety, citizens must take the lead.

Citizens can improve their knowledge of hazards facing their schools and communities and take appropriate action in conjunction with local authorities. In short, although the government and NGOs have an important role in the school safety effort; school or community-based disaster risk reduction is the key plank.

Furthermore, students should be encouraged to volunteer in school safety initiatives. School safety or disaster clubs are one effective method of promoting student participation. A good next step would be to provide incentives to join DRR efforts, such as extra credit for courses and other rewards.

Last, schools would do well to involve students in school self-auditing activities. Youth from school safety or school disaster management clubs could take an active role in auditing their school's level of disaster preparedness and assessing vulnerabilities. An auditing club could be created to conduct quarterly evaluations of school preparedness and structural risk. ■

Hyogo Framework for Action and Educators' View on Making Schools Safer

In January 2005, 168 Governments adopted a 10-year plan to make the world safer from natural hazards at the World Conference on Disaster Risk Reduction, held in Kobe, Hyogo, Japan. The Hyogo Framework is a global blueprint for disaster risk reduction efforts during the next decade. Its goal is to substantially reduce disaster losses by 2015 — in lives, and in the social, economic, and environmental assets of communities and countries.

The Hyogo Framework for Action (HFA) emphasises that disaster risk reduction is a central issue for development policies, in addition to being of interest to various scientific, humanitarian and environmental fields. Disasters undermine development achievements, impoverishing people and nations. Without serious efforts to address disaster losses, disasters will become an increasingly serious obstacle to the achievement of the Millennium Development Goals. To help attain the expected outcome, the HFA identifies five specific Priorities for Action; these five priorities for action are here documented below with educators' views for making schools safer.

1. Ensure that DRR is a national and a local priority with a strong institutional basis for implementation	
Can external speakers and experts be involved in the school's risk reduction initiatives? How?	Can the schools engage local educational centers or professional facilities to host and promote disaster risk reduction training?
Designing DRR education curriculum integrated with primary, middle, and high school from village to state level	Active linkages with local education authorities and expert DRR agencies for long term and increase safety in education field
Experts from DRR agencies, government departments, hospitals, police give sessions in schools to build knowledge and positive atmosphere	Material on DRR with local scenario and data by school and outside expert agencies in rural areas
Session by disaster management centre on block contingency plan to teachers and students studying in higher classes	Teacher and student visits to departments - disaster management centre, weather department, local agencies
National and state structure on disaster management in schools and class by teachers	It can be started through class on disaster management in school
Network of schools for experience sharing and problem solving in connection with local authorities	School can participate in the educational activities run by outside agencies
Material from national level translated in local language for awareness building	School involvement with the NGOs/INGOs
2. Identify, access and monitor disaster risks and enhance early warnings	
What can new risk reduction initiatives be implemented in this school?	What information needs to be gathered for these initiatives?
Emphasis more on community based early warning system and education in school	Contact details with the schools of expert agencies on DRR and working actively on school safety issues
Build capacity of teachers and students for emergency response by training and implementation of safety measures in school	Information related to existing risk in and surrounding school
School vulnerability assessment to identify and implement to reduce such vulnerability	Information related to communication structure with concerned department to monitor and spread early warning information
School map drawing on the school building wall	Contact information of local to national structure of disaster response
Early warning tools like TV, telephone, or newspaper	Detailed information related to risk not only in schools but also in surrounding areas especially in urban location
Merge materials and create one school-specific guideline	Collection of material from local state and national level academic institutes to study

3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Can the schools involve multiple stakeholders in these processes-teachers, students, parents, outside community members?

Guidance to implement safety measures and teachers' views should be central for long term sustainable work in school

Platform for school concern group through network with involvement of local DRR agencies and government authorities

Awareness material specific on role of each group including community members

Newspaper clippings related to school tragedy incidents

Government and NGO's/INGO's active coordination can be very fruitful

School specific programme is more effective than general community's programme for effective work

How can the schools communicate information in an appealing manner (e.g. through games, field trips, dramatic arts and other forms of student engagement)?

Local language material with local photographs

Updated IEC tools for seasonal disasters especially flood and cyclone

Practical demonstration programme should be encouraged

School exposure visits to best practice schools before implementation of school safety activities

Scientific information of disaster occurrence through drawings

Local language slogan during monsoon and cyclonic season – created by schools

4. Reduce the underlying risk factors

What other awareness-raising activities can be implemented?

Design and implementation of school-based DRR plan

Disaster response plan made based on risk assessment prepared by school staff

Creation of student club for awareness generation specific on local risk factors

More emphasis on manmade disaster such as accident, epidemic (during awareness activities)

Special focus on awareness to reduce chances of epidemic after disaster

Student awareness on existing risk in schools such as fire hazards, accident prone areas, and tree and electric hazards

How can the schools maintain comprehensive information regarding each of the natural hazards and vulnerabilities that pose a risk in that particular region?

Creation and regular update of local language forms, tables for gathering data related to risk assessment and inputs from outside experts

Using IT tools to maintain huge data related to local areas which include schools information

School vulnerability information and updating with changes factor (increase and decrease)

Guideline to school by district level education authority

School-based disaster management team meeting time-to-time

Regular follow up activities crucial to keep information comprehensive

5. Strengthen disaster preparedness for effective response at all levels

Can the school be used as a center where instructional material is easily accessible to people in the surrounding community?

Create schools with the safer building construction and disaster response plan at school and village level for disaster response

Local DRR centre operated at school with necessary resources to spread at community level

It can increase involvement of all stakeholders at community level

Support needed to operate such centre

DRR activities integrated with the block resource centre

Educational programmes organised by SSA integrated with the DRR

How can the school ensure that DRR knowledge and skills acquired are used, and not forgotten?

Integrate science curriculum with the DRR education in school

Practical exercise can be increased in schools - fire safety, first aid technique practices, mock drill, etc.

School disaster response plan creation and update by the school stakeholders

Refresher course and activities helpful for teachers

Involvement of ex-students in running awareness activities

Regular demonstration and mock drill exercise

Safer School Transport for Children

These are becoming all too common. On the same day January 21, 2009, two separate school-related traffic accidents have left a total of 13 children dead, and close to 60 injured. Less than two weeks later, on February 2, 2009, 6 children lost their lives in another school traffic accident at an unmanned railway crossing.

On January 21, 33 primary school-children were injured when their jeep overturned on their way to school near Morbi. In the months leading up to the accident, several parent requests for a safer school bus had fallen on deaf ears.

Sadly, on the same day as the accident in Morbi, a school vehicle transporting children collided with a truck in Gudhamalani district in Rajasthan state. 13 children were killed and 26 were injured.¹

And just two weeks later, on February 2, six children were killed when their bus was hit by a train at a railway crossing in Ferozpur district of Punjab. As in the previous two accidents, children lost their lives most likely because of reckless driving. In this case, the bus did not have a valid permit and the bus driver was talking on his cell phone when the bus was hit.²

If there is one thing to be learned from these tragedies, it is that school transport in unsafe for children. We must take the necessary steps to reduce the risks school-children face while travelling.

The framework to accomplish this is already in place. Recently, a GLS school group, led by executive vice-

president Sudhir Nanavati, introduced an agreement to ensure that school transport vans comply with safety standards set by the Gujarat High Court in 2006. There are 11 main guidelines for vehicle owners, parents, and school management to follow in order to ensure the safety of children during school transport.³

"The DO'S AND DON'TS for school vehicle owners/drivers in Mr. Nanavati's Tripartite Agreement include:⁴

- A vehicle shall accommodate no more than 14 kids plus the driver.
- The vehicle shall not exceed 20 kmph. Under no circumstances shall the vehicle doors be kept open while in motion.
- Comfortable seating arrangement, separate space to accommodate bags, safety locks and grills and a first-aid kit box mandatory inside the vans.
- Complete details and contact numbers of vehicle owners and drivers should be given to school management and parents of those students using their vans.
- Any school vehicle driver should be holding a light vehicle license at least for the past five years. The license copy should be made available to school management.
- Drivers will have to give in

writing that they will not smoke or chew tobacco while on school duty.

- The school will provide drivers uniforms, which they have to wear while on school duty.
- Under no circumstances will the vehicles jump traffic signals, and drivers will halt at places from where children can safely be escorted into the school or their housing colonies.
- As soon as the last child in the vehicle is dropped off home, it will be the driver's responsibility to call up school authorities, notifying the same.
- Every van must display the name of the school whose children are using the vehicle.

On its part, school management will be required to provide van drivers with a mobile phone [and] will also appoint automobile experts who will check the vehicles' condition at regular intervals."

Unfortunately, as evidenced by the three school transport accidents in January and February 2009, these guidelines are largely ignored throughout the country. This must change. In order to convince school management and vehicle owners to comply, citizens must express their demands loudly and in unison.

If they do so, Nanavati's guidelines will become much more than words on paper—a rigid framework that protects the lives of children during school transport. ■



A Safe School is a child's right and safe school transport is also an important right.

- 1 India bus accident leaves 13 dead, BBC News.com, 21 January 2009
- 2 Six school kids die at unmanned crossing, Times of India, 2 Feb 2009
- 3 No child's life at risk ever again, Ahmedabad Mirror, 9 January 2009.
- 4 Ibid.

Disaster Risk Reduction Education in Schools

Putting DRR education in education system with joyful learning and practical lessons

Why Teach DRR in Schools?

The Hyogo Framework for Action (HFA) 2005-2015 identifies five priority actions for nations and organisations to undertake in order to foster resilient communities. While all five actions are important for school safety, the 3rd Priority for Action may be the most relevant. It encourages users to make "use of knowledge, innovation and education to build a culture of safety and resilience at all levels". Further, the Hyogo Framework encourages promotion and implementation "of programme and activities in schools for learning how to minimise the effects of hazards."

Schools can be effective venues for promoting disaster risk reduction for communities at large. As noted by the UN/ISDR, "Schools are the best venues for forging durable collective values; therefore they are suitable for building a culture of prevention and disaster resilience."

In many communities, schools also serve as centers for community events and social functions, and serve as gathering places or shelters during emergencies. However, schools should also be used for community-based disaster risk reduction (CBDRR) activities.

A school safety campaign is important in promoting the second UN Millennium Development Goal of achieving universal primary education by the year 2015. Families simply will not send their children to school if they do not see schools as safe places; without sufficient school safety measures, the goal of universal education cannot be achieved.



School safety is not possible without scientific knowledge.

When disaster strikes, children who are in school buildings—which are too often built without regard to structural codes or regulations in developing countries such as India—are particularly vulnerable.

In disasters, children are among the most vulnerable groups. Children under the age of 15 account for nearly half of all victims of natural disasters. They are ill equipped to endure physical hardship and stress, they have immature immune systems, and they are in the critical stages of development.

Schools are important institutions in any community. In normal times, schools are a center for education and raising awareness through many social activities such as annual programme, community festivals, national days like Independence Day and Republic Day.

In times of emergency, schools can be used as shelter before, during, and after disaster. Schools are good places to store emergency equipment, and they also serve as a distribution center for food, medical treatment, non-food items and other forms of aid.

Scientific Knowledge

As a general rule, hands-on experiential learning is the most

effective way to educate. Therefore, ideally, a disaster relevant curriculum would not only impart knowledge of the natural hazards themselves, but would also involve students in disaster risk reduction and school safety audit - inspecting school buildings, going outside to map the surroundings, and even interviewing elders about extreme natural events in the past. Such learning should be done using methods to reinforce basic skills in listening, writing, reporting and mapping. DRR should also be integrated into history, geography and natural science; age-appropriate math, from simple arithmetic to statistics, geometry and trigonometry.

There are many benefits to integrating practical auditing exercises into the curriculum. First, students learn about disaster risks and specific structural and non-structural preparedness measures to mitigate such risk. Children can apply this knowledge to make their schools, homes and communities safer. Without doubt, teachers and staff play an important role as school-based disaster managers. But we must recognise that students are also critical actors needed to create a culture of safety first in schools.

The real-life teaching and curricula vary greatly. Some schools provide excellent training in earth and climate science, but do not focus on local hazards. In other cases, like generals who tend to re-fight the last war, education planners have focused exclusively on one recent disaster. Turkey, for example, within its all hazards school curriculum, has an impressive programme on earthquake-risk awareness that has reached perhaps five million

students. On the tsunami-affected coast of Thailand, there are new curricula that focus exclusively on tsunami - even though the most common hazards in the region are coastal storms, floods and forest fire. After the disaster, local agencies initiated many development activities and also changes in education. It is also important to address current local hazards rather than focusing only on past disasters.

Teaching youth and children about hazards is not enough to promote risk awareness or action. Earth and climate science is good, but should be taught as part of a comprehensive package with disaster prevention and preparedness that focuses on locally relevant hazards.

Strategies for Integration

Begin with a broad scientific disaster education — then continuously focus down in scale, increasing the detail of information. This should result in a journey from the worldwide context to practical ways of improving school and community building safety at the local level.

Forge links with other local educational institutions on this subject. Higher education can offer many opportunities for knowledge sharing and useful research activities. Sharing successful practices internationally is also beneficial.

Educational reforms that would add disaster-relevant teaching are difficult in systems with standardised examinations and a curriculum that "teaches to the exam".

However, the following example from India shows that it can be overcome:

At the national level, the Central Board of Secondary Education (CBSE) of India has already introduced disaster management into classes 8

and 9, and proposes to add it to the curriculum for class 10 in 2005/06. More than 1,000 teachers have been trained in the use of this new curriculum throughout India. New texts supporting this initiative include:

- Together, Towards a Safer India... An Introduction to Disaster Management for Class 8, CBSE, Delhi.
- Together, Towards a Safer India Part II: Making a Difference, a textbook on disaster management for Class 9, CBSE, Delhi.
- Together, Towards a Safer India Part III: A Stride Ahead, a textbook on disaster management for class 10, CBSE, Delhi.

One of the most important issues when considering curriculum material is the appropriate language. Language, thought and action are tightly linked in complex ways. Therefore, it is far better to use

Scientific lessons from previous disasters in and around schools have lead to the conclusion that schools in low-income areas are the first to suffer and poor and low-income families thus suffer the most from school disasters. This is true for villagers as well as slums. Furthermore, children have a right to education, but their right to safer schools is not recognised or even articulated. A world without poverty is not possible without the poor having access to education, to schools; to safer schools. The poor have the right to life; life of their children and the life of their children in schools. School safety is not possible without scientific awareness and also safety and poverty removal are not two separate issues.

indigenous languages in many parts of the world, even though official language policy in schools may favor the lingua franca. If schools are to be a focal point for disseminating risk reduction into the community, then relevant school material must also be accessible and legible to parents and even grandparents. Also, when risk reduction concepts are articulated in local languages, the community has greater capacity to debate, study and plan.

Connecting at Play

Children are more engaged with fun learning activities. Children are more likely to remember and replay such activities within their homes and communities. Some countries have disaster museums that act as a fun and interesting learning resource for children.

Furthermore, children's clubs for DRR, environmental management, water monitoring, animal care are a great way of using children's potential and energy for the benefit of the community. Creating such clubs in schools and providing clubs with the means to make their communities safer is an important step towards empowerment, especially if girls can be given key roles. For example, children could research a recent local or national disaster and make a display board to educate their community members about the disaster and the lessons to be learned. Children could also take an active role in evaluating the safety of their own school and making a presentation to their peers and community. No doubt children would benefit immensely from improved access to resources to conduct their research and prepare appropriate displays. ■

Reference:

1. AIDMI, Module of Pilot Training Programme on School Safety, December 23, 2008, Ahmedabad.
2. UNISDR - Let Our Children Teach Us

Recommendations for Stakeholders

The presented article highlights key findings of the full audit analysis and offers recommendations to INGOs, NGOs, government, schools and the corporate sector. It encompasses the views of school staff, educators, outside agencies, and the research team.

Recommendations for INGOs:

1. International Financial Institutes (IFIs) should promote programmes with relief and development budgets for schools in hazard-prone countries.
2. INGOs should encourage their national chapters to demand safety measures and policies from school authorities and develop national action plans to work with vulnerable schools.
3. INGOs should focus on supporting pilots and demonstration projects on the ground for school stakeholders.
4. With the support of INGOs, many programmes are being implemented in developing countries like India. INGO-supported programmes in all development areas should give attention to school safety issues.
5. School safety programmes should consider sustainability issues for continued impact and activity after INGOs end their implementation phase.
6. INGOs that are building new schools must take the initiative to understand school needs—this includes consulting school teachers and other stakeholders in the design and construction process.
7. Focus should be given to disaster preparedness not only in disaster affected areas, but also in disaster prone areas.
8. INGOs should support local communities to integrate children as social actors in all their preparedness and response activities.
9. Designing and implementation activities must not overlook the needs of people with disabilities and the rights of minorities.

Key Findings:

- The focus of outside agencies was largely limited to construc-

tion of new school buildings, with little regard to school safety and disaster preparedness. Construction was often undertaken without input from school staff regarding needs.

- Processes and methods that reduce disaster risks were rarely considered, even after the occurrence of a major disaster. School buildings are often structurally unsafe.
- The focus on reconstruction has been on new and big buildings, but not on safer buildings.
- Agencies are less likely to respond to slow-onset disasters such as drought, and schools in areas affected by such disasters are often neglected. Preparedness steps against those disasters can be taken in schools, such as rainwater harvesting.

Recommendations for Local NGOs:

1. Local NGOs should directly engage with schools to influence government policies and programmes to integrate risk reduction for children.
2. Before implementing any activity with schools on safety measures, NGOs should provide training and orientation to



DRR knowledge building can only be sustained with regular practical sessions.

school groups (especially school staff) for participation and involvement in implementation.

3. Training programmes are an effective tool for spreading awareness and encouraging school initiatives—and are most effective when complimented by follow up activities. NGOs should design training programmes to integrate sustainable, active learning.
4. NGOs should view schools as implementation partners, instead of as beneficiaries. Schools can help build NGO capacities for utilising resources and making their work sustainable.
5. Community participation includes the participation of children—children can play a central role in DRR and they should be empowered to do so.
6. Design and implementation activities must not overlook the needs of people with disabilities and the rights of minorities.
7. NGOs working in education should mainstream DRR into their activities and curricula.

Recommendations for Corporate Sector:

1. Insurance companies should encourage and support their policyholders to demand certificates of school safety from education authorities.
2. The corporate sector should promote school safety DRR activities through their CSR programmes—many educational activities are taken under CSR, but interventions on Disaster Management and School Safety remain at a low level.

Key Findings:

- There was a clear difference in activities and awareness levels between recent disaster affected

and disaster prone areas. Many schools located in affected regions had implemented mitigation measures due to support of outside agencies.

- Very few schools were found with the school-based insurance. Many staff of rural schools lacked awareness and understanding of the concept of insurance.
- Where DRR programmes and activities were implemented, follow-up activities were absent, diminishing the impact of their investments.
- Outside agencies' DRR work with schools placed greater emphasis on need-based efforts—school input is lacking. This reflects an absence of school staff and student participation in the DRR process.

Recommendations for Schools:

1. Schools should develop strategies for sustaining knowledge and safety measures after intervening agencies have left.
2. Schools running school safety activities should invite local authority representatives to increase their involvement and promote expansion of such activities.
3. When outside agencies intervene, school representatives should proactively provide detailed school information regarding its profile, existing risk, vulnerabilities, and current needs.
4. School staff should be involved in every activity implemented by outside agencies, including needs assessment, programme design, implementation and evaluation.

5. Teachers have the highest level of local knowledge and understanding of students and their needs; they should proactively provide input to government and NGO programmes.
6. Schools should consider what roles their staff and students can play in DRR, and solicit outside agency support for developing activities. They should also solicit community involvement.
7. Schools should keep comprehensive records of student information, accident history, disaster history, and other emergency incidents to help inform future activities and interventions.
8. Schools should take the initiative to keep emergency contact numbers on site, and to teach critical numbers to students.

Growing up Healthy, Growing up Safe, Growing up Educated and Growing up Happy

A Child Centred approach to Disaster Risk Reduction is the key to ensuring a child's right to safety:

During the last two decades, our world has demonstrated enough to establish one key fact of life that risk to children of the world is real and recurrent. Our vision of a child is someone who is *Growing up healthy, Growing up safe, Growing up educated and Growing up happy!* Any community and its institutions, especially schools which are places of learning and formation must take this right to safety from the 'responsibility' and 'claim' perspective.

We can advocate this under safety and lifeline framework through the 'panchsheel' of Education, Protection, Health, Inclusion and Advocacy.

Arguing for Risk and Safety Education would entail that 'best interest of the child' acts as the norm and responsibility of all duty-bearers and carers.

Risk and Safety Education in early education is critical, though it so happens that some of the academicians, architects, engineers and others are second generation literates vis-à-vis some children. Advocate Children participation in design and decision-making about structures that relate to children lifelines. This, I believe, is the only way to guarantee the Right to Safety of Children of our world!

The key underpinning in doing so is a 5-dimensional change:

- Change in Policies and Practices
- Change in non-discrimination of children and young people
- Changes in lives of children and young people
- Changes in children and youth capacity to become active citizens
- Change in Communities, Civil Society and Governance capacity to support Child Centred DRR and Right to Safety ■

Ray Kancharla, Emergency Manager, Save the Children

Key Findings:

- Safer schools have not shared their experiences with schools that need to be rebuilt.
- Most of the schools surveyed undertook efforts to create hazard-free grounds, including removing weak tree branches and checking electrical wiring before the monsoon season. This shows a proactive interest in school and child safety efforts.
- Several schools possessed safety equipment such as fire extinguishers and first aid kits, but in many cases staff lacked the skills to operate or utilise the equipment. Many of these schools also lacked the resources to replace exhausted or expired equipment.
- Teachers and administrators have high levels of interest in making schools safe. Current constraints in time and resources inhibit their capacity for action.

Recommendations for Government:

1. National governments should undertake extensive nation-wide school safety audits and allocate resources to implement recommendations.

2. Governments should integrate DRR in school curricula at various levels.
3. Government policy should reflect special initiatives to protect school children in disaster and emergency situations.
4. Government should develop community-driven school safety activities with a rights based approach—it should not approach such activities as charity.
5. When governmental education authorities at national and state levels review their education activities each year, they should consider the safety and DRR scenario in their schools and support ongoing integration of DRR activities into big and small education programmes.
6. Sarva Shiksha Abhiyan should have a well-defined, ongoing DRR initiative.
7. National and state governments should develop specific support for schools run without adequate basic infrastructure facilities.
8. Governments should mandate structural building standards for



Design and implementation activities must not overlook the needs of PWDs.

- schools and periodical compulsory structural building assessments for both private and public schools. Schools should not be permitted to operate without meeting these standards.
9. Local education authorities at the block level should be trained in school-based DRR.

Key Findings:

- Private schools demonstrated higher levels of construction safety than government schools, largely due to their financial capacities. Many rural schools have unsafe buildings or no buildings at all.
- o School communities demonstrated higher emphasis on accidents and injuries than on disasters. Schools have effectively spread knowledge of traffic safety, but have so far neglected to teach do's and don'ts for disaster situations. We are forgetting to utilise lessons from other states disaster experience. This reflects a lack of effort towards disaster preparedness.
- o The majority of governmental and community development organisations working among the surveyed schools lacked expertise in DRR subjects.
- o Most buildings are not sturdy enough to withstand severe cyclones or earthquakes. Many structures were also poorly maintained, with deterioration and aging of materials causing visible corrosion and cracking. ■

Teaching Safety with Students through a Fun game

Directions: Divide your class into 3-6 teams. Assign one student from each team to read clues. To begin, each team will be given the first clue. Then, each team will proceed to the location corresponding to the answer in order to locate the second clue. Teams cannot copy other teams but must work within in their team to answer each question. The teacher may provide hints if a team is stuck and cannot answer a question. This process of answering questions and finding clues will continue until all the clues are completed and each team reaches the end of the game and finds the treasure.

Objective: The objective is for the children to become familiar with their school environment-where various safety materials are located

on campus in a fun and engaging game. All children should be well aware of school safety and where school safety materials are located. Practice makes perfect! You should create clues or questions according to your school safety materials. However, the following are sample questions that may be used if relevant.

Practical examples:

1. "If a small fire breaks out, I would use this to put it out." (The next clue will be located at the fire extinguisher)
Explanation: Each team would have to locate the place where the fire extinguisher is stored to find the next clue.
2. "In the event of an emergency, I would use this device to call the fire brigade, police, etc." (School telephone)

Explanation: Each team would locate telephone and phone numbers to call.

3. "In the case of an earthquake, I would proceed calmly down this stairwell." (Stairwell exit)
4. "In the case of an injury, where would I locate the first aid kit?" (First aid kit)

Disaster awareness questions may also be mixed in. For these questions, if the team answers correctly the teacher will give it the next clue.

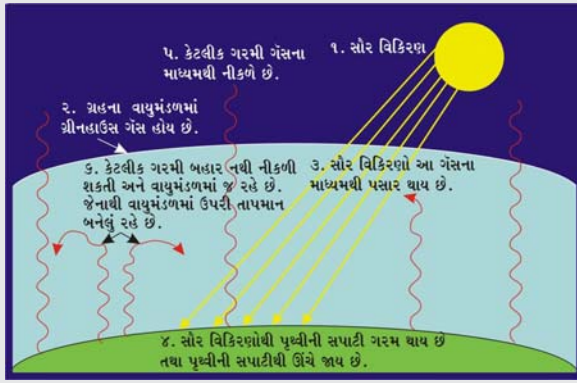
Examples:

1. Define the following key terms: hazard/vulnerability/capacity/disaster.
2. Name two ways our school can increase capacity to respond to disasters.
3. Name two ways our school can reduce vulnerability to disasters. ■

RECENT JOINT EFFORTS FOR BUILDING CAPACITY OF SCHOOLS AND COMMUNITIES

Distance Learning Training Series (DLTS) on DRR Education with Schools

AIDMI, with ISRO (Indian Space Research Organisation), launched a distance learning training series on DRR education in August 2007. To date, this training series has covered 1,493 schoolteachers and students and local communities in various districts of Gujarat. This unique programme provides the opportunity to raise awareness of DRR strategies in Gujarati language. Recently, the 21st session was conducted on 'Climate Change' to increase understanding of its causes, impacts, potential solutions, and most importantly, how each individual can contribute to reduce future impacts. It is important to note that rural educators demanded climate change as the topic.



314th Training Programme on 'Disaster Preparedness for School Safety'

The school staff training programme on 'Disaster Preparedness for School Safety' was conducted on February 27-28, 2009, in Ahmedabad. 27 key school staff participated in the training, learning about various school safety aspects such as student safety, past school tragedy incidents, mock drills, fire safety demonstration, risk assessment, school response plan, do's and don'ts in disaster response, psychosocial effects and so forth. Staff from each school created individual school-specific follow up action plans based on school-specific risks. School safety activities will be implemented in 8 urban schools of Ahmedabad according to their action plans. So far this training programme was also conducted in vulnerable schools in Jammu and Kashmir, Rajasthan, Maharashtra, Tamil Nadu and Bihar.



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Note: This issue of southasiadisasters.net is prepared by AIDMI with major contributions from Vishal Pathak, Sanchit Oza, Deepesh Sinha, Zack Zimbalist and Manish Patel.

The American Jewish Joint Distribution Committee supports the Safer School Campaign and has contributed to the preparation of this issue.

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