



Local Capacity Building for Safer Schools

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ABOUT THIS ISSUE

Assam is one of the most hazard prone states in the Indian union which is exposed to the risks of large earthquakes (as it lies in seismic zone V), incessant flooding and concomitant erosion, landslides and storms. Children bear a disproportionate burden of the adverse impacts of these hazards when they materialize into disasters. For instance, during the Assam floods of 2012, more than half the affected people were children. The detrimental impacts of such disasters are reflected in the dwindling trend noticed in several child welfare indices. In the exigent times brought on by disasters, children's access to quality education is severely inhibited. This underscores the need for pursuing the ideal of school safety in the state.

This issue of *Southasiadisasters.net* is titled 'Local Capacity Building for Safer Schools'. Taking note of the need to enhance school safety in the state, the Assam State Disaster Management Authority (ASDMA) has launched a massive capacity building initiative aimed to train the teachers of selected schools across the state on how to manage the risks in their respective schools. This issue contains an overview of this initiative, its main achievements and the lessons learnt.

By showcasing the success of capacity building school safety initiatives in Assam, this issue puts forward a strong case for replicating and upscaling Safer Schools efforts at Global Platform for Disaster Risk Reduction at Cancun, Mexico. ■

- Kshitij Gupta, AIDMI

INTRODUCTION

Capacity Building for Safer Schools

Resilience building in Assam has always been a mammoth task. The state is exposed to a variety of hazards such as floods, earthquakes, landslides, erosion, storms and occasional droughts. Moreover, rapid urbanization and environmental degradation have increased the exposure of the state and its citizens to the aforesaid hazards. In the context of this enhanced vulnerability, the Assam State Disaster Management Authority (ASDMA) has taken up several initiatives across different themes to protect Assam and her citizens from such risks.

One such theme is school safety and child protection in emergencies. Due to their particular physical, social and psychological characteristics, children bear a disproportionate burden of the adverse impacts of disasters and emergencies. ASDMA recognized this increased vulnerability of children and takes up many actions to build their resilience to such extreme events. One area of ASDMA's intervention is School Safety.

School going children are one of the most vulnerable groups exposed to the adverse impacts of disasters and emergencies. It is therefore imperative that the resilience of schools should be improved against the various hazards. The best way of reducing disaster induced losses and improving the safety in schools is to build the capacity of the teachers and students through various activities.

In keeping with the vision of 'A Prepared State' and a 'Safer Assam', the ASDMA has initiated the phase

of a massive capacity building programme called 'Training of Teachers on School Safety Including School Disaster Management Plans and Conduct of Mock Drills in Assam'. Covering all the 27 districts of Assam, this programme is a significant step towards capacity development for risk reduction in schools.

Under this programme, the All India Disaster Mitigation Institute (AIDMI) has been entrusted with the responsibility of conducting these school safety trainings. Under this programme a total of 4934 teachers from 3702 schools across all the 27 districts of the state have been covered. Not only did these trainings teach the technical side of disaster risk reduction to the school teachers, it also encouraged them to play an active role in managing their school level risks by drafting school disaster management plans (SDMP) for their respective schools. SDMP is a consolidated document that details the hazards in a school and consists of a response plan for all the identified hazard.

The importance bestowed by global and national level policy interventions like Sendai Framework for Disaster Risk Reduction (SFDRR) and India's National Disaster Management Plan (NDMP) on school safety underlie the significance of this theme. Staying true to the mandate of these frameworks/plans, ASDMA initiated this capacity building program on school safety to empower teachers at the local level to achieve resilience for their respective schools. ■ - AIDMI Team

"This Karimganj emergency management Exercise, 2017 is an eye opener for all the people and organisations. This is high time to mainstream disaster risk reduction across district for preparing our district prepared against any disaster."

- Mr. P. K Talukdar, Deputy Commissioner, Karimganj, Assam

Promoting Disaster Resilient Education in Assam

The year 2016 saw India embark on a journey of disaster resilience by launching its National Disaster Management Plan (NDMP). Hailed as one of first NDMPs to be aligned with the global Sendai Framework for Disaster Risk Reduction (SFDRR), India has taken an active stride in protecting its citizens against various disaster and climate risks. The Indian state of Assam exemplifies the spirit of NDMP by actively taking several resilience building initiatives.

The state of Assam has always been of strategic and cultural importance to India, and of keen interest to AIDMI. Assam is exposed to a variety of climate and disaster risks which include floods, earthquakes, landslides, strong winds, among others. Floods and the concomitant river erosion have had particularly debilitating impacts on Assam's citizens and the economy and citizens. In response to the state's enhanced vulnerability, AIDMI has found now in 27 districts over past four years, the Assam State Disaster Management Authority (ASDMA) routinely takes up initiatives to build the resilience of Assam and empower its citizens to manage such risks.

Children represent one of the most vulnerable demographic groups that are exposed to the adverse impacts of disasters and emergencies. Their vulnerability to such adverse impacts springs from their unique stage of physical, mental and social development along with their over-dependence on parents and other caregivers during emergencies. AIDMI has found in now over 3000 schools children of Assam have shown their capacity to understand and address disaster risks. To protect children during disasters and emergencies, ASDMA has launched



Mr. Kamal Kishore Hazarika, District Project Officer, DDMA, Kokrajhar, addressing all the participants during the first day of the training.

phase 4 of 'Training of Teachers on School Safety including School Disaster Management Plans and Conduct of Mock Drills in Assam' programme. ASDMA is unique in India in this continued focus on children and schools. The children are eager. The teachers are able. The parents are supportive. And the Government of Assam is encouraging.

Working with teachers, children and the administration was a rewarding and enriching experience. Through this programme, the ASDMA trains school teachers in the essentials of disaster management so that they may make their schools safer for the children. Preparation of School Disaster Management Plan (SDMP) and carrying out mock drills (simulation exercises) gives practical exposure to the teachers and students of Assam on how to protect themselves and others during emergency situations. Having covered all the 27 districts of Assam, this programme is perhaps the most extensive and comprehensive effort taken by any state disaster management authority (SDMA) to safeguard the schools in India.

ASDMA's school safety initiative has covered 4934 teachers as participants from 3702 private and public schools across all the 27 districts of the state and has been largely successful in achieving its stated goals. While these numbers seem impressive, perhaps an even greater achievement of this initiative was that it encouraged teachers to voice their own perspectives on risk and safety in their respective schools. The process was enabling. This was welcome because it allowed for a more inclusive, relevant and holistic discourse surrounding school safety to emerge in Assam at the level where it matters the most. Through drafting of SDMPs, the teachers took ownership of the risk reduction process in their respective schools and shared with district authorities.

AIDMI has always strived to build the resilience of poor and marginalized communities of India to the various hazards faced by them. By collaborating with ASDMA on this initiative, AIDMI hopes to contribute in the effort of promoting a resilient education in Assam as well as make NDMP work at local level. ■ - Mihir R. Bhatt, AIDMI

School Safety Efforts in Assam

Disasters and risks to Assam are becoming increasingly complex due to the diversity of hazards affecting the state. Not only does the state lie on seismic zone V (which makes it susceptible to major earthquakes), it has been routinely ravaged by incessant annual flooding. Erosion, landslides and storms are other hazards that routinely wreak havoc on the state. The emergencies resulting from these hazards can quickly escalate in scope and severity resulting in significant human and economic losses.

One of the major adverse impacts of disasters and emergencies is the damage caused to schools and the subsequent disruption of education services. The disruption of education services has a debilitating impact on the future of many children. Therefore, the idea of safety of schools against disasters and emergencies becomes indispensable. Moreover, in the event of a disaster, schools serve as emergency shelters for the local community as well. Given the overall importance of schools in society, concerted efforts



Photo: AIDMI.

Dr. Rajib Dutta Choudhry, District Project Officer (DPO), Kamrup (Rural), sensitised participants on need of school safety and briefed about initiatives of ASDMA and DDMA.

should be taken to ensure their safety against various climate and disaster risks.

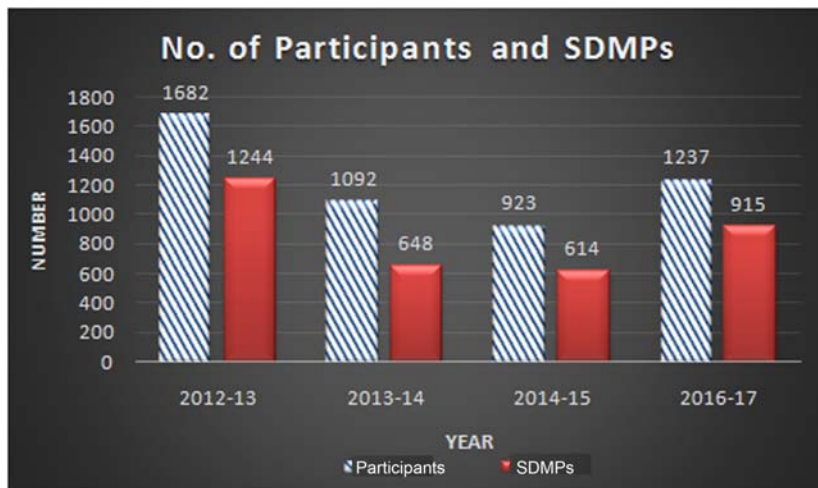
The Assam State Disaster Management Authority (ASDMA) recognizes the above need for safer schools and education. Consequently, it has strived to build the resilience of schools through various initiatives. One such initiative is the capacity building project titled, 'Training of Teachers on School Safety including SDMP and Conduct of Mock Drills'.

Under this project, school teachers from select schools of a district are given training to reduce the disaster risks in their schools through drafting a school disaster management plan and through practicing mock drills. AIDMI is the technical institute that conducts these trainings. Since 2012, a total of 113 trainings covering 4934 teachers across all the 27 districts of Assam have been completed. These trainings have yielded 3421 school disaster management plans (SDMPs).

The following graphs capture the key highlights of ASDMA's School Safety Initiative:



Further, ASDMA with AIDMI has implemented 'Pilot School Disaster Management Plans through 'Model-School' Approach' in Kamrup Metro with 4 Schools (2 governments and 2 private) to understand the challenges faced by schools towards building safer education. A series of meetings with teachers, students and stakeholders were held to explain the objective and importance of SDMPs, to conduct Hazard, Vulnerability and Capacity Assessment (HVCA) of their



schools and to prepare SDMPs (which are based on the guidelines suggested by National Disaster Management Authority (NDMA) under National School Safety Program (NSSP)). Different teams such as Disaster Management team, Search and Rescue team, Fire Safety team amongst others involving school staff and students were formed under School Disaster Management Committee to carry out a 'School Safety Audit' that helped them find out about gaps in safety and non-structural mitigation measures. These teams are committed to build disaster resilient schools by conducting periodical safety audits, updating SDMPs, conducting mock drills and other DM activities. Disaster Mitigation Fund worth INR

35,000 was provided to each school to build disaster resilient schools. Following are some of the non-structural mitigation measures found under the project:

1. Additional fire extinguisher for mid-day meals kitchen
2. Fixing book shelves, admirals and securing chemical laboratory bottles/racks and placing of warning signs with safety measures
3. Electricity safety audit and repairing/replacement vulnerable appliances including calendar for routine check up
4. Fire safety audit and fire safety measures by placing of sand buckets, displaying maps of fire extinguisher locations/ evacuation routes/location of Emergency Support Function (ESFs), display

- of emergency numbers through visible tools, routine assessment of gas cylinder accessories checking/ replacement/repairing
5. Measures for control of mosquito breeding and other vectors and preparation of annual routine
6. Development of IEC materials on water/vector borne diseases, safe evacuation processes, first aid, earthquake preparedness, integrative school-teacher-students-parents involvement
7. Provision for emergency exit channels and diversification of exit routes through temporary channels for safe/rapid emergency evacuation
8. Cleanliness of water drainage system to ensure rapid drainage of logged water through appropriate channel.
9. Training of Teachers and staff members on Conducting Mock Drill, Search & Rescue, First Aid and Rights Protection, Accountability and DRR.

By taking various initiatives, ASDMA has done a commendable job of protecting its citizens against the various climate and disaster risks. Its school safety initiative will go down as perhaps the most comprehensive in building the resilience of the state's school and its children. ■

- Sonali Das, AIDMI



"The discussion on specific conditions that may increase the impact of an impending hazard was important for building a perspective. The training techniques and deliberations were appealing and motivating to encourage us for greater involvement." - Mr. Rajesh Dey, Railway High School, Mariani, Jorhat

Photo: AIDMI.

Quotes from Participants

"Participating in this three days training programme, I felt very good and this programme is very essential for every school teacher and until and unless we will spread this knowledge to others then it will not work. This type of training should be conducted at regular intervals of time."

- *Dhruba Goyary, Gargaon ME School, Chirang*



"This training has undoubtedly enhanced our overall understanding on school safety. We learnt a lot. This will help us in looking at our roles as teachers from a different perspective all together."

- *Rohini Singha, MC Junior College, Harangajao, Dima Hasao*



"There was much to think and write. We have taken many trainings but this was very unique. We could comprehend issues that hardly came to my mind before. My sense of visualization has increased manifold."

- *Smt. Ruma Biswas, Assistant Teacher, Swami Vivekananda Bohumukhi Vidyamandir High School, Silchar*



"I am very impressed by the trainers, who have provided a clear idea about the said training. The impact of the training will extend to the society through our respected teachers regarding the safety measures as well."

- *Bijay Narzary, Chapaguri High School, Chapaguri, Baksa*



"Identifying school risk is the key element which can drive a school to safety, it also differs based on the geographical location and surrounded environment of school."

- *Mr. Ridip Saikia, Assistant Teacher, Machkhowa Bengenaga High School, Dhemaji*



"This training has been very helpful for teachers in preparing Disaster Management Plans of their schools. The training was very nice, interactive along with knowledgeable resource persons. Thank you."

- *Namrata Sahariah, Kharupetia town Girls HS School, Kharupetia, Darrang*



DRR Education to make Hospitals Safer



Introduction
Chronically weak health systems are characterized by under-investment in health, poor facility location, design and construction, lack of emergency plans and untrained staff. A combination of these factors can result in fragile health systems that collapse during a disaster, with immediate and future public health consequences.

Health education encompasses various methods used to inform people about health issues and to persuade and enable them to adopt lifestyles that will improve their overall health condition. It highlights healthy behavior and also shows how to inculcate these behaviors with skills development and motivation.

Quality education can deliver life-saving and life sustaining knowledge, skills, and attitudes that protect children and youth during and after disasters. The inclusion of Disaster Risk Reduction (DRR) education in secondary school and college curriculum will increase the safety of health services and the resilience of hospitals located in disaster prone regions. Knowledge and skills in turn prompt first responders to act, responsibly and responsively when their families and communities are threatened.

Disaster Risk Reduction (DRR) education is about building an understanding of the causes, nature and effects of hazards while fostering a range of competencies and skills to enable learners to contribute proactively to the prevention and mitigation of disaster. The resilience of a hospital

to a disaster/emergency can be described as the hospital's ability to resist, absorb and respond to the shock of disasters/emergencies while maintaining critical functions and then either recover to its original position or an improved one.

Scope of DRR Education

The Sendai Framework for Disaster Risk Reduction adopted at the Third UN World Conference on Disaster Risk Reduction in 2015, provides ample recognition to DRR education and calls for sustained global public education and awareness campaigns, increased investments to promote the resilience of education systems and educational facilities, and reducing the exposure and new risk for medical facilities. It also underlines the critical need to increase public education and awareness in post-disaster recovery and reconstruction by sharing of experience, good practices, training and education.(1)

Knowledge can be learnt from books, but if it is to be internalized, then it needs to be drawn upon and tested within real life contexts. Skills need to be practised if they are to be honed. Skills, attitudes and values must be optimally challenged, tested and rethought through dialog and debate for best results.

The DRR Learning Methodology

A varied number of learning modalities are available to educate the youth in aspects of DRR in healthcare sector:

(a) Interactive Learning: brain storming (i.e., spontaneously offering ideas on a given topic, all ideas being accepted, prior

to the categorization, organization and evaluation of the ideas)

- (b) Discussions in pairs, small groups and with the whole group
- (c) Interactive multi-media presentations (by students, teacher, DRR-related visiting speakers)
- (d) Affective learning: sharing feelings about threats and disasters; empathetic exercises based upon those caught up in disasters
- (e) Inquiry Learning: team case study research and analysis
- (f) Internet enquiries; project work
- (g) Surrogate Experiential Learning: filmmaking, board games, role plays, drama (sketches, mime, puppetry), simulation gaming; school assemblies on disaster topics
- (h) Field Experiential Learning: field trips to disaster support services; hazard mapping and vulnerability assessment in schools and in communities; community hazard transects; reviewing emergency plans; interviewing local community members on hazards and hazard/disaster memories
- (i) Action Learning: student community partnerships to raise hazard awareness, develop risk maps and risk reduction plans; poster campaigns; street theatre; risk reduction campaigns (e.g., tree planting)
- (j) Imaginational learning. This modality entails using one's imagination to envision positive and negative outcomes, to reach into past times of hazard and learn from them, to mentally walk through what to

do in crisis circumstances, to envision the impact a hazard might have on a community (prior to working on pre-emption). Under this heading, guided visualization activities and circle storytelling (i.e., telling stories sitting around a circle) might figure in the DRR pedagogical repertoire.

The Goals of DRR Education

The ultimate target of DRR education is to:

- Gain an understanding of key disaster risk reduction concepts and practices related to hazard, disaster, emergency, risk, risk reduction, vulnerability and resilience and also the application of these concepts to specific hazard circumstances in the local community.
- Gain thorough knowledge of multi hazard building codes and mitigation measures to ensure the disaster safety of hospitals. The process and procedures of detailed structural and non structural analysis, good practices of making hospitals safe from disasters risk reduction in the design and construction of all new health facilities, and by reducing vulnerability in existing health facilities through selecting and retrofitting the most critical facilities.
- Ability to compute all components of the Hospital Safety Index prepared by the Disaster Mitigation Advisory Group (DiMAG) and categorize hospitals according to their vulnerabilities.(2)
- Methods of setting up mobile/tented portable hospitals having the capability to support field surgery, and other critical care in the field in the absence of/damage to hospitals.
- Creation of surging plans to improve surge capacity and mass-casualty/incident triage.

- Conduct of disaster trainings and drills at least twice yearly to improve hospital medical response efficiency.
- Evolve training curriculums and update them regularly. The content of training included cardiopulmonary resuscitation, advanced airway management, basic skills for the treatment of trauma, transfer of casualties, disaster management and triage.
- Have a practical understanding of key DRR practices like, hazard mapping and monitoring, early warning, evacuation, forecasting and basic safety measures.
- Understand the meanings and principles of conservation, sustainable development and the dynamics of climate change.
- Have the ability to engage in dialogue and discussion with peers, teachers, family and community members from different socio-cultural backgrounds about hazards, disasters and disaster risk reduction, using appropriate and creative modes of communication (e.g., brochures, arts, music, song, theatre, puppetry, posters, poems, social media, radio, film).
- Develop critical thinking and problem-solving as well as social and emotional life skills essential for groups threatened or affected by disasters.
- Have the ability to campaign for sounder disaster risk reduction measures using electronic and traditional media, drama performance, art, petitioning, lobbying and engaging in public forums in which ideas are shaped and shared (3,4).

Conclusion

In India, there are nearly 115 government and 170 private medical colleges, 300 dental colleges, 400 nursing colleges, besides numerous

paramedical and pharmaceutical sciences institutions and universities, floating course providers in mental health/social work/community medicine/behavioral sciences. The enormous health workforce available must be indoctrinated and made to serve as agents of disaster risk reduction. Creating a cadre of (like NSS/NCC, NDRF, etc.) students, faculty members and staff well versed in aspects of healthcare during disasters must be taken up on a war footing.

A global culture of safety and resilience through the integration of disaster risk reduction in medical institutions and school curricula is necessary to avoid a sudden, forced evacuation from hospitals following a disaster. Life, investment and functional protection in hospitals and the development of a robust public and clinical health care service will minimize disaster risk and losses for a sustainable future.

Education for Disaster Risk Reduction (DRR) takes into account the relationships between society, environment, economy, and culture and their impacts. An interactive, and participatory approach with 'in the field' learning will form the basis for competencies, involvement literacy and confidence building. ■

– Surgeon Commander

Chandrasekhar Krishnamurti, M.D.,
Associate Professor (Anaesthesiology),
NRI Institute of Medical Sciences,
Visakhapatnam

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Training and Capacity Building for Nurses for Hospital Preparedness

Disasters can be natural or man-made, range from localised events to large-scale public health emergencies. The occurrence of a disaster is unpredictable and may result in chaos, mass casualties and destruction of property with devastating long-term social, physical, psychological, environmental and economic consequences that affect the health of a population and strain the capacity of the healthcare system. Globally, there has been a steady increase in the magnitude and frequency of disasters and public health emergencies in recent years. In the last decade, there has been an estimated 60% increase in disasters worldwide in which an estimated two million people lost their lives, 4.2 million were injured, 33 million were left homeless and three billion were otherwise affected.

Preparedness for disasters is a dynamic process. Disaster preparedness involves planning and preparation to effectively respond to any disaster situation. This includes implementing capacity development, coordinating the participation of responsible organizations, individuals and volunteers, and ensuring that all

personnel are equipped for response. Capacity building efforts aim to develop the professional skills or societal infrastructures within a community or organization that are needed to reduce the level of risk.

Hospitals would be among the first institutions to be affected during disaster and must continue to function when an emergency event occurs. Because of the heavy demand placed on their services at the time of a disaster, hospitals need to be prepared to handle such an unusual workload. With the increasing global frequency of disasters, the call for disaster preparedness training needs to be reinforced. Nurses form the largest group of the healthcare workforce and are often on the frontline in disaster management. Therefore, nurses should be adequately equipped with the knowledge and skills to respond to disasters, starting from their pre-service training to their in-service professional training.

Preparedness of disasters demand concrete plans for management. The International Council of Nurses (ICN) Disaster Management Continuum Model has four main

components: mitigation, preparedness, response and recovery. The aim of the model is to reduce the impact on lives and infrastructure, enhance recovery and build community resilience to disasters. The Hyogo Framework for Action, which has been endorsed by the United Nations General Assembly, highlights strengthening disaster preparedness at all levels as a priority for effective disaster management.

In a crisis, health care managers must respond rapidly and effectively to maintain or restore access to health care for the affected population. This necessitates a well documented and tested hospital disaster management plan (HDMP) to be in place in every hospital. The main objective of (HDMP) shall be to optimally prepare the staff, institutional resources and structures of the hospital for effective performance in different disaster situations. The HDMP shall be a written document and copies of the same shall be made available to all staff in the hospital. It shall have comprehensive, actionable plans for disaster Preparedness, Response and Recovery corresponding to the Pre Disaster Phase, Disaster Phase and Post Disaster Phase respectively.

In addition to having a well documented HDMP in place, it is prudent to have regular drills to test the hospital's DMP. The drills may be hospital disaster drills, computer simulations and tabletop or other exercises. Hospital disaster drills should test various components viz incident command, communications, triage, patient flow, drugs and consumables stock, reporting, security and other issues. The key



Disaster preparedness and drill at Base hospital Kantale, Sri Lanka.

hospital personnel should be trained to implement a formal incident command system, which is an organized procedure for managing resources and personnel during an emergency.

Secondary triage also may be necessary within the hospital, as demands on the system grow. Hospital DMP should consider the possibility that a hospital might

need to evacuate partially or wholly, quarantine, or divert incoming patients. For example, in the event of flooding, the ground floor services may need shifting to higher floors or a make shift operation theatre may be needed. Spare capacities for such contingencies should be included in the HDMP.

While responding to a mass casualty event, the goal of the health and

medical response is to save as many lives as possible. Rather than doing everything possible to save every life, it will be necessary to allocate limited resources in a modified manner to save as many lives as possible. ■

- Mrs. Sanghamitra Sawant,
Assistant Secretary General, Trained
Nurses Association of India,
Greater Noida, Uttar Pradesh

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Demonstrations

Practical exercises and live demonstrations are at the core of AIDMI's capacity building exercises. Such exercises help the participants to implement the ideas they learn during the theoretical sessions. These photos show an AIDMI team member explaining the 'Fireman's Lift', one of the important and commonly used rescue technique, during the session on formation of Search and Rescue Team at Udalguri, Assam. ■

Resilience to Disaster and Climate Risks in Education

The demand and debate for mainstreaming climate change adaptation and disaster risk reduction in to key development sectors has potentially seen the most rapid expansion over the past decade. The recently promulgated global frameworks be it the Sendai Framework, the Sustainable Development Goals or the Paris climate agreement, have equally voiced the concern for having an integrated approach to disaster risk reduction (DRR) and climate change adaptation (CCA) across sectors.

Education is taken as a key sustainable development indicator and the need to scale up and mainstream CCA and DRR in the education sector is imminent and unavoidable even at the local administrative levels, as it is a key policy and planning strategy for increasing children's capacity to become agents of change and enhancing their resilience to climate change and disasters. A quality education can play a crucial role in addressing socio-economic disparities that are exacerbated by climate change and disaster risk and to achieve sustainable development.

Since children are one of the hardest hit demographic group by climate change and disasters, their rights need to be protected. According to the World Health Organization (WHO), mitigating environmental risks could save the lives of 4 million children every year. Thus, inclusion of DRR and CCA in education will contribute in enhancing children's resilience in the face of climate change and disasters. Girls, boys and women are typically the most affected due to climate change and

disasters. Thus, children need to prepare for, cope with and thrive in such complex environments.

The major benefit of mainstreaming DRR and CCA in education can also serve communities through school children. After access to quality education they can also share the information with their families and neighbours and this will increase resilience and also develop a culture of safety. This will empower the whole community and contribute to its ability to reduce risk and to adapt and secure more stable and sustainable livelihood strategies. Ultimately, quality education contributes to reducing the poverty that is linked to environmental degradation and disasters.

There is increasing evidence in Assam that students of all ages can actively study and participate in school safety measures on the one hand, and can work with teachers and other adults in the community towards minimizing disaster and climate risk on the other. The participatory tools have been developed and applied in both the components with the hazard context of Assam.

The state authorities and education department can effectively reach out to schools and educational institutions and protect them as well as getting a contribution from them in integrated DRR CCA in the education sector to achieve greater community resilience. So far pilot projects by state and national authorities have provided useful lessons to design and implement district wide programme on school safety.

For capacity development, education sector is providing crucial services in terms of DRR CCA such as large human resource and infrastructure support from the state to local levels, volunteer support from NCC/NSS and scouts. However, these services and platforms need to be strengthened to get maximum advantages for making Assam safe from disaster and climate risk.

The educational institutions and department must ensure that their infrastructures are multi-hazard resilient. It requires widespread investment in capacity development by disaster management and the education sector on infrastructure services where each mason is trained for safe construction, engineer staff is trained for retrofitting techniques, technical consultant can audit and monitor infrastructure resilience needs and the policy planners are able to allocate sufficient resources for resilience of infrastructure.

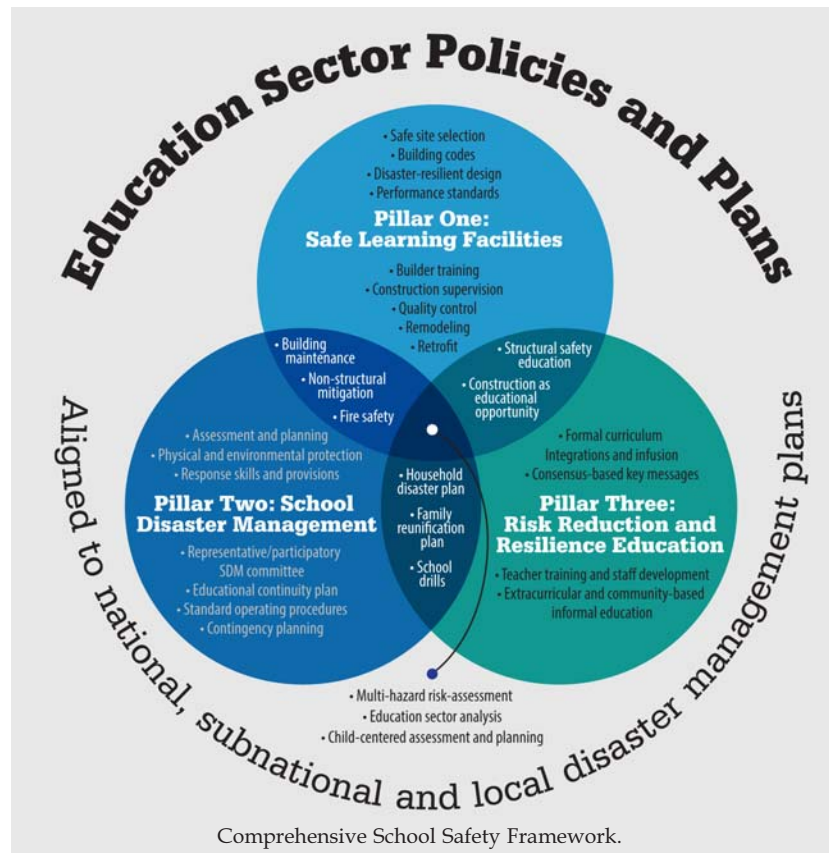
The capacity building and training actions with and for teachers, NCC/NSS and scouts and guides volunteers in DRR CCA is an important area to capitalize upon. The sector can provide tremendous opportunities for DRR and CCA that contribute to the sustainable development in the long term. The trained resources from education sector can build the widespread impact to reducing disaster and climate risk and also contribute in the climate change mitigation aspects.

The state already had experience of the NSSP pilot project, district wide school safety trainings, and pilots, etc. Now there is a need to emphasize upon massive roll-out reaching

across the state and all levels of institutions. The state has the ability for such capacity development actions. The lessons from NSSP, recommendations from SDMP, DDMP, SAPCC, etc. can provide useful inputs for covering DRR and CCA, on various components including building resilience among its stakeholders, particular audience - children and teachers; particular locations - schools and other educational infrastructures; particular services - educational services.

The department of education (Elementary, Secondary and Higher education) has taken concerted training and capacity building efforts including school safety programme. However, the DRR component through NSSP programme has not been institutionalized yet. It requires, facilitation service from technical institutions like NIDM, SDMA so that the department and its institutions are able to address basic services like fire safety, school DM planning, evaluation mapping and drills, actions. Only the training component is not enough. The consultation and facilitation with impact study is required to institutionalize the process and increase the ownership.

The following diagram represents the framework for comprehensive school safety with DRR-CCA integration for resilience.



(Source: <http://www.preventionweb.net/publications/view/51335>)

The state has already implemented school safety projects. The experience should be shared at 2017 Global Platform for Disaster Risk

Reduction at Cancun, Mexico to promote similar safety measures. ■

- Vishal Pathak, AIDMI

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