Empowering Students in Disaster Risk Reduction (DRR): Insights from a School Mock Drill Initiative in South West Khasi Hills, Meghalaya

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Abstract

With an emphasis on a number of school safety simulation drills conducted at various schools in the South West Khasi Hills District of Meghalaya, this article assesses the implementation of Disaster Risk Reduction (DRR) in educational institutions. In collaboration with the National Disaster Response Force (NDRF), the District Disaster Management Authority (DDMA) conducted these exercises to provide teachers and students with critical disaster preparedness and response skills. The study highlights how important such initiatives are to safeguarding children's rights, guaranteeing their safety in line with the Right to Education (RTE) Act (2009), and abiding by national and international laws pertaining to disaster relief and child welfare. The findings underscore the education sector's importance in disaster resilience development, as well as how these drills equip students to take active roles during disasters. The Education Department is advised to continue and expand on these activities.

Keywords

Disaster Risk Reduction, School Safety, Mock Drill, Child Rights, Right to Education (RTE) Act, National Policy on Disaster Management, School Disaster Management Plan, Capacity Building, Inclusive Education, South West Khasi Hills, Education Department.

Introduction

India's diverse and complex geoclimatic characteristics make it especially vulnerable to natural disasters. With over 57% of the country's land area subject to earthquakes, floods, cyclones, and other natural catastrophes, places like Meghalaya, which is in Seismic Zone V, face increased disaster risk. Schools are places of learning and development, thus guaranteeing children's safety and protection is a top responsibility, particularly in disaster-prone locations. Meghalaya experiences frequent natural disasters such as earthquakes, landslides, and flash floods, making disaster preparedness in educational institutions crucial for both immediate safety and long-term resilience. The District Disaster Management Authority (DDMA) of South West Khasi Hills District, in collaboration with the National Disaster Response Force (NDRF), organized a series of school mock drills in May 2022 in recognition of the vital importance of disaster preparedness. In addition to creating School Disaster Management Plans (SDMPs), these exercises aimed to create a sense of security and equip educators and students to handle emergencies. Important national and international frameworks that are intended to safeguard students' rights in times of disaster, including the United Nations Convention on the Rights of the Child (UNCRC), the Right to Education (RTE) Act of 2009, and the National Policy on Disaster Management (NPDM) of 2009, are also closely aligned with the initiative.

Legislative Framework and Student Welfare

Right to Education (RTE) Act, 2009:

According to the Right of Children to Free and Compulsory Education (RTE) Act, all children aged 6 to 14 are entitled to free and compulsory education in a safe and supportive environment. Section 8 of the RTE Act specifically states that governments must ensure that schools provide safe settings for students. This includes both physical infrastructure and safety measures like disaster preparedness training. The simulated drills staged in the South West Khasi Hills are a direct application of the RTE Act, ensuring that schools meet their responsibilities to provide not just educational opportunities but also physical security in disaster-prone areas such as Meghalaya.

National Policy on Disaster Management (NPDM), 2009:

According to NPDM, disaster risk reduction (DRR) is essential in all fields, including education. Schools must develop disaster-preparedness plans, conduct frequent safety drills, and cultivate a culture of disaster awareness. By carrying out these simulated exercises, the DDMA and NDRF help schools put the NPDM's recommendations—which aim to remove risks and vulnerabilities for children—into practice. By disseminating information on disaster risk reduction, schools play a crucial role in making sure those students, teachers, and the communities at large are better equipped to handle emergencies.

United Nations Convention on the Rights of the Child (UNCRC), 1989:

The United Nations Convention on the Rights of the Child, approved by India in 1992, acknowledges each child's right to life, development, protection, and participation. The UNCRC's Articles 6 and 24 emphasize children's rights to life, health, and safety, including protection from natural disasters. The treaty emphasizes that children must be protected from potential harm and given the opportunity to develop resilience in the face of an emergency. Schools protect these rights by involving students in simulated exercises that allow them to play an active role in ensuring their own and their classmates' safety.

National School Safety Guidelines, 2017:

To help schools become safer and more resilient, the National Disaster Management Authority (NDMA) released these guidelines. Creating School emergency Management Plans (SDMPs), holding regular safety drills, and establishing school-level emergency response teams are all advised by the standards. The South West Khasi Hills simulated drills follow these guidelines by making sure that SDMPs are regularly reviewed and updated and by promoting preparedness through practical exercises.

Child Rights in Emergencies (UNICEF):

According to UNICEF's emergency child rights standards, children are among the most vulnerable during disasters. In addition to providing urgent physical protection, schools should implement methods to help students' psychological and emotional health during and after disasters. This plan includes ensuring that children with disabilities participate in all preparedness efforts, implementing safe evacuation protocols, and providing psychological first aid. To accommodate the inclusion of students with disabilities, the South West Khasi Hills simulated drills used a buddy system to ensure their safe evacuation. Both the RTE Act's inclusive education provisions and UNICEF's standardsare consistent with this.

Methodology

The school safety drills were held over ten days, from May 10 to May 20, 2022, at several schools in the South West Khasi Hills District. The drills used an organized two-phase methodology:

1. **Preparation Phase**:

Prior to the mock drills, schools held coordination meetings to outline the disaster scenario to be simulated (earthquake, fire, cyclone), review the School Disaster Management Plan (SDMP), and assign roles to key participants such as the Incident Commander, warning teams, and search and rescue teams. This phase also included identifying pupils with special needs to verify that evacuation protocols adhered to the RTE Act's inclusive education standards. Teachers and support workers were briefed on how to ensure the pupils' safety throughout the evacuation.

2. **Execution Phase**:

The mock drill simulated the start of a disaster by starting with the sound of an alarm on the designated day. Before being evacuated to designated safe areas, students were told to use the "duck, cover, and hold" technique. Teachers conducted a synchronized evacuation after the drills, which included full-scale simulations of various emergencies like earthquakes and fires. As part of the scenario, senior students who had been trained as search and rescue team members helped find and evacuate any "injured" people, while first aid teams provided rudimentary medical assistance. Following each exercise, a debriefing was held so that participants could assess how well the evacuation went and modify their SDMPs.

Results and Findings

1. Improved Awareness and Preparedness:

The simulated exercises made students, educators, and parents more aware of the dangers of disasters. The DDMA and NDRF's cooperation enabled the provision of expert disaster management guidance, including detailed information on the Disaster Management Act of 2005, the activities of local government, and the responsibilities of school communities in disaster preparation and response.

2. Capacity Building of Students and Teachers:

Senior students were equipped to handle emergencies by taking on leadership roles in search and rescue and first aid. Teachers also benefited from the hands-on training as they practiced their roles as incident commanders and team leaders. Students gained confidence and a sense of responsibility as a result of these tasks, which aligned with the RTE Act's goals of empowering children through education.

3. **Inclusive Evacuation Strategies**:

The exercises demonstrated how important inclusiveness is in disaster relief. Children with disabilities got additional assistance, and a buddy system was implemented to ensure their safe evacuation. This method is critical for ensuring that disaster preparedness adheres to the UNCRC's principles on the rights of children with disabilities and the RTE Act's obligation for inclusive education.

4. **Development and Testing of SDMPs**:

Using the simulated exercise, each school updated its School Disaster Management Plan (SDMP), which now includes specific protocols for evacuation, communication, and cooperation with local authorities. These measures comply with national policies such as the National Policy on Disaster Management (NPDM) 2009 and the National School Safety Guidelines (2017). The infrastructure of schools required to be improved in a number of areas, including emergency exits, fire safety devices, and communication during evacuations.

5. Identification of Infrastructure Gaps:

A number of schools lacked first aid kits and fire extinguishers, among other essential emergency supplies. It is imperative that infrastructure be changed to improve school safety since in some cases, school buildings were not structurally built to survive disasters like earthquakes. The Education Department's overarching objectives of makingsure that school facilities support students' safety and wellbeing are in line with this.

Discussion

The success of the mock drills shows how important it is for educational institutions to promote disaster preparedness and resilience. However, sustaining and expanding these programs requires a persistent commitment from the Meghalaya Education Department in addition to collaboration with national and regional disaster management organizations. The following areas are necessary to build a disaster-resilient educational system in Meghalaya:

1. Institutionalizing DRR in School Curricula:

To ensure the long-term viability of disaster preparedness operations, disaster risk reduction must be fully integrated into Meghalaya school curricula. This not only provides students with the knowledge and skills required to respond to disasters, but it also fosters a culture of safety and resilience. The Education Department should work with the DDMA to develop age-appropriate DRR modules that may be included into current courses such as science, geography, and social studies.

2. Teacher Training and Capacity Building:

The practice exercises emphasized the significance of ongoing capacity building for teachers. The Education Department should collaborate with the State Disaster Management Authority (SDMA) to organize regular teacher training sessions on disaster preparedness, first aid, and psychological support. In accordance with the RTE Act's overarching goal of providing holistic education, special emphasis should be placed on training teachers with the abilities required to support students emotionally and mentally during and after disasters.

3. Infrastructure Development and Retrofitting:

Inadequate infrastructure in certain schools puts students at danger during catastrophes. According to the National School Safety Guidelines, the Education Department must give earthquake-resistant school building retrofitting top priority. To make sure they are ready for emergencies, schools should also be equipped with basic emergency supplies like fire extinguishers, first aid kits, and emergency lights.

4. Collaboration with Local Authorities:

The success of the school mock exercises was due in part to considerable collaboration among schools, the DDMA, the NDRF, and local emergency officials. This relationship should be institutionalized by Memorandums of Understanding (MoUs) between the Education Department and relevant entities, ensuring that schools continue to receive disaster preparedness assistance and resources. Regular mock exercises should be organized, and schools should be encouraged to collaborate with local governments to enhance their SDMPs.

5. **Inclusive Disaster Preparedness:**

The importance of inclusive disaster preparedness, particularly for children with impairments, was highlighted by the mock exercises. Every school should have clear procedures for evacuating students with special needs, and the department of education should ensure that these procedures are regularly followed during drills. In order to ensure that the rights of all children are respected, disaster preparedness plans should also be reviewed to make sure they comply with the RTE Act and the UNCRC.

6. **Psychosocial Support Systems**:

Children may experience long-term emotional and psychological effects from disasters. The Education Department should establish psychological support networks in schools where children can get counseling following traumatic events. In order to assist children in times of crisis and beyond, educators must also receive training in mental health first aid.

Knowledge for Students' Well-Being.

Student welfare in disaster preparedness includes more than just physical safety. It addresses everything from their right to a comprehensive education that encompasses active community protection, survival skills, mental toughness, and risk awareness.

Empowering Students as Leaders:

Students should not only be viewed as receivers of safety measures, but also as future leaders and active participants in DRR. Children's leadership skills are developed and they gain the confidence to act in emergency situations when they participate in search and rescue, emergency response, and first aid exercises. Children feel more in control of their own and their peers' safety when they are allowed to take on these responsibilities.

Developing a Culture of Preparedness:

For students' long-term wellbeing, schools must create a culture of preparation. Frequent, comprehensive mock drills, DRR teaching, and inclusive policies ensure that students will grow up understanding the importance of safety, community resilience, and proactive risk management. These lessons will not only keep kids safe in school but also equip them withthe knowledge and outlook they need to survive in disaster-prone areas.



→ Holistic Student Development:

Disaster risk mitigation must be taken into account as part of all-encompassing student development. By including life-saving skills in the curriculum, schools are preparing students to handle uncertainty in the real world. It is assured that students who acquire both academic education and practical survival skills will grow into well-rounded individuals with the capacity to grow both academically and physically.

Conclusion

The implementation of school safety measures in educational institutions must be firmly rooted in the legislative framework established by the Disaster Management Act of 2005, the Right to Education (RTE) Act of 2009, the National Policy on Disaster Management of 2009, and the United Nations Convention on the Rights of the Child. These frameworks constitute not just a legal requirement, but also a moral imperative, to implement complete school safety measures. While the current deployment of safety exercises is a good start, the next step requires rigorous adherence to these regulatory criteria as well as practical application.

These legal frameworks operate in concert to highlight that school safety includes a child's fundamental right to an education in a safe environment, not just physical facilities or sporadic drills. By coordinating school safety programs with these established guidelines, educational establishments can generate a strong safety ecosystem that safeguards children's rights and increases resilience to disasters. This method guarantees that schools fulfill their responsibilities as caring environments where kids can learn and develop fearlessly, in addition to adhering to legal regulations.

The effectiveness of school safety programs going ahead will rely on our sustained dedication to these legal requirements, frequent compliance checks, and flexibility in the face of new obstacles. By taking an all-encompassing approach, schools may genuinely become models of resilience and safety, establishing guidelines for child protection and guaranteeing the safeguarding and upholding of every child's right to a safe education.

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