UNICEF's Disaster Risk Reduction and Preparedness at School

A Report on Evaluation of Approaches and Capturing the Lessons

Project implemented by: Consortiums Led by ActionAid and Save the Children - UK

Evaluation Conducted by:

Khurshid Alam (<u>www.khurshidalam.org</u>)
M. Shameem Siddiqi (<u>www.shameemsiddiqi.org</u>)
Khaled Hossain
Abdullah Al Rashed
Md. Ashraful Haque
Sumaiya Kabir

Dhaka, Bangladesh 22 March 2011

Acknowledgement

On behalf of the team of evaluators, I am delighted to submit this report to UNICEF.

The report is largely built on the information, analysis and reflection of many people involved in the evaluation. First, we would like to appreciate participation of the children, members of SMCs and teachers of all the 22 schools that our team visited. The Executive Directors of the implementing partners and the project staff provided us with encouraging lessons and open reflections. The senior staff members of the consortium partners provided valuable input to the entire process of the evaluation. We greatly acknowledge input of Shohel Rana and Asgar Ali Sabree at AAB; Kamran Jacob, Motiur Rahman, MH Neogi of Save the Children UK and Monir Hossain Chowdhury of Concern. We were highly encouraged by the openness of these individuals to identify lessons and recommend actions to improve future actions in making primary education of Bangladesh disaster resilient.

Finally, we would like to acknowledge the great support and technical input provided by staff members of UNICEF: Fahmida Shabnam, Mohammad Golam Kibria, Mohamed Nurul Islam, Katrina Rosemary Hudacin and Shamima Siddiky.

Khurshid Alam Dhaka. 22 March 2011.

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Abbreviations and Acronyms

AAB ActionAid Bangladesh

ADC Additional Deputy Commissioner APIT Advancing Public Interest Trust

BDT Bangladesh Taka

CAMPE Campaign for Popular Education

Char Island

DRM Disaster risk management
DRR Disaster Risk Reduction

Ebtadey Madrasa Religious school offering primary education

EFA Education for All

EiE Education in Emergencies

PARSES Participatory Actions towards Resilient Schools and Education Systems

GoB Government of Bangladesh

HH Household

MDG Millennium Development Goals
MIS Information Management System
Madrasahs Religious education institutions
NGO Non-governmental Organization

NAPE National Academy for Primary Education

PTA Parent-Teacher Association
PTI Primary Training Institute
SC UK Save the Children UK

SMC School Management Committee

TOR Terms of Reference

UNICEF United Nations Children's Fund EiEMIS Education in Emergency MIS

UP Union Parishad
US\$ United States Dollar

Upzila Sub-district, the administrative structure immediately below district.

Executive Summary

Disasters pose a serious risk to children's access to quality education. Disasters threat life and wellbeing of students and education staff as well as limit their access to school, deteriorate quality of education, delay recovery of school and increase drop-out. The situation is likely to exacerbate by the impact of climate change as well as threat of earthquake.

The government of Bangladesh (GoB) undertook a number of initiatives e.g. improvement of physical infrastructure and inclusion of disaster in the school curriculum. Such initiatives reduced the physical risk, but challenges remain in the alignment education and disaster risk management system of the country. These challenges were highlighted in the discussion after the two massive disasters in 2007. The Education Cluster, led by GoB and UNICEF, piloted a set of approaches to find an effective strategy to protect primary education from disasters. With funding support from UNICEF Bangladesh, the project was implemented by two consortiums led by Save the Children UK (SC-UK) and ActionAid International Bangladesh (AAIB). The project worked with 1,400 schools in flood and cyclone affected areas in 2009 and 2010.

This summary presents the key lessons from the above-mentioned pilot project. UNICEF commissioned an evaluation to examine the effectiveness, efficiency, sustainability and replicability of the various institutional and programmatic approaches to recommend a set of approaches that can be replicated at scale.

Key Lessons from the Evaluation:

- 1. Community initiatives and leadership to protect their school from disaster are highly evident in line with their capacity. Externally facilitated projects produce effective result if they are built on such leadership.
- 2. Success of school-based DRR initiative depends on a multi-stakeholder partnership within the school community (i.e. students, parents, teachers and SMC) and wider stakeholders (e.g. local government, elected representatives and government departments).
- 3. Systematic risk analysis using participatory methods helps school community to generate collective analysis and actions. Children add significant value to the process, but their participation in the planning can be limited by cultural norms.
- 4. School communities can translate their analysis into contingency and long term plans, and such a plan can sustain when it is integrated with school improvement plans (where it exists) along with appropriate institutions and leadership.
- 5. External facilitation to school community has been helpful but may not be feasible at national scale. Further research should be conducted on possible of integration of DRR in regular education process.
- 6. Effective coordination is yet to exist between education and disaster institutions at sub-national level which is an influence of national policy and institutional mind-set. Further initiatives should be taken to examine and address the existing gaps.

7. Capacity is yet to adequate (e.g. human, knowledge/skills and finance at the education institutions) to adopt a disaster risk management approach. More discussions are required within Education Cluster to integrate necessary capacity building initiatives in the existing programmes.

Recommendations and Possible Implications

Building on the conclusions of the evaluation, a set of recommendations is presented in this section that covers four major areas.

A. General

- 1. Design and implement a follow-on phase of the pilot project in order to consolidate the interventions in preparation for wider replication and scaling-up. The context of earthquake should be factored in the main design of the project.
- 2. In selecting the field level implementing partners, preference should be given to those who are already present in the respective geographic locations. This will help ensure easier access to the communities and other stakeholders, and contribute to the likely continuity of the interventions beyond the duration of funding.
- 3. UNICEF and the consortium partners should work with the government to identify the policy and institutional barriers to facilitate the local level initiatives.
- 4. Adopt child-centeredness as the overarching principle of future initiatives.
- 5. The involvement of the local government must be prioritised in order to create local political agenda and leadership for resilience building in education.

B. Concepts

A conceptual synergy can be built on three important concepts which exists in Bangladesh and elsewhere in South Asia i.e. DRR though school (mostly used by ActionAid), EiE, and school safety in the context of earthquake. Based on these concepts, three overall objectives can be set for the next phase of the project with a goal to build resilient primary education. These include: (i). protection of life and reduction of injury among children, teachers and school community; (ii). continuation of education in emergencies, and (iii). investing in children to ensure they grow as future leaders in disaster risk reduction and to climate change adaptation.

C. Specific recommendations for GoB

- 6. Consider the development of a resilience building strategy for education on the basis of the learning of this pilot project. Considering the multi-sectoral nature of the problem, engagement of all relevant sectors, departments and other stakeholders should form integral parts of the development and implementation of the strategy.
- 7. Risk factors to education should be included in the existing disaster management systems, tools and procedures. This is expected to resolve the conflicting priorities of the institutions related to education and disaster management.
- 8. Examine the potential of the existing institutions (e.g. National Academy for Primary Education-NAPE, PTI, infrastructure facilities, etc) to implement the capacity building components of the strategy. A separate contingency fund at the district level can also be considered to improve the timeliness of disaster response.

Part One: Background

Introduction

1.1. This report presents the findings of the evaluation conducted on a project titled 'Disaster risk reduction and preparedness at school level' implemented by two consortiums led by Save the Children UK (referred to SC UK) and ActionAid Bangladesh (referred to AAB) with funding from UNICEF Bangladesh. This evaluation was commissioned by UNICEF to: (i) assess performance of programmatic and institutional approaches relevant for selected hazard zones; (ii) an in-depth analysis of lessons from the project; and (iii) make recommendations for UNICEF, Education Cluster and Government of Bangladesh (GoB) to design future projects making primary education resilient to disasters. The TOR is attached in Annex A.

The Project in Brief

- 1.2. Following adoption of Education for All (EFA) Action Plan 2001, GoB made significant investment to improve access, quality and inclusion in the primary education. The achievements were noticeable gross enrolment and gender parity enhanced but many challenges remained with rates of dropout, repetition and competency that are caused by factors related to many social and political contexts. After poverty, however, disaster is the most important factor causing denial of children to access quality and continued education, in both disaster and normal times. Almost all the country's schools are already located in areas prone to regular flooding, cyclone, tidal surges and are at high risk from earthquakes. Since the devastating cyclone of 1970, an estimated average of 900 education institutions are completely damaged each year by cyclone, flood and river erosion.
- 1.3. In order to mitigate disaster risk in primary education a number of initiatives have been implemented over last two decades. GoB made important investment in improving school infrastructure and inclusion of disaster in the curriculum. National and international NGOs have also been implementing a few projects in selected areas offering solid knowledge and creditable approach. Part of their struggle with disaster, initiatives by the community and local government is historically evident in rural areas. While these initiatives individually and collectively contained education's risk to a degree, a coordinated and comprehensive effort is yet to emerge.
- 1.4. It was not until 2007, when Bangladesh faced two devastating disasters, consecutive monsoon floods and category four cyclone Sidr, disaster risk reduction in education received significant attention in the country. Cyclone Sidr killed over 3,000 people causing an economic loss of US\$ 1.7 billion while the floods caused damage amounting to US\$ 1.1 billion. The occurrence of these major disasters led to the launch of the Education Cluster to coordinate efforts among the NGOs and GoB in primary education. Central to the post

2007 efforts was the launch of Education in Emergency (EiE) strategy¹ by UNICEF and a two-year workplan jointly developed by the Education Cluster to protect primary education from disasters.

1.5. Two consortiums formed comprising national and international NGOs to implement the workplan. Save the Children UK-led consortium included Plan International as technical partner and nine local NGOs to implement the plan. ActionAid-led consortium similarly formed with Concern WorldWide and Advancing People's Interest Trust (APIT) and formed partnerships with 11 local NGOs to implement the plan. The total budget of the project was US\$ 2.5 million. The following table presents budget, partnership and coverage of the two consortiums.

Table 1: Coverage and objectives of the project

Key area of	Consortium		
the project	ActionAid Bangladesh Save the Children Fund – UK		
Specific Objectives of the project	Enhance coordinated and informed actions of national level platform for reducing disaster risks in education;	Ensure effective and coherent education needs assessment, information management and coordination;	
	 Increase capacity of stakeholders on sustainable preparedness measures to reduce disaster risks in education; Stimulate organised actions for emergency response and recovery in education; Facilitate actions for integrating education needs in DRR mechanisms and making education system resilient to DRR. 	 Increase capacity of stakeholders on sustainable preparedness measures to reduce disaster risks in education; Ensure adequate contingency planning and preparedness to provide continuous access to education for children in disaster affected areas. 	
Technical	Concern WorldWide	Save the Children USA and Plan	
partners		International	
Geographical Coverage	10 districts	10 districts	
No. of schools	400	1,000	
No. of implementing partners	11	9	
Budget	\$1,140,000	\$1,311,866	

¹ Developing and implementing the cluster approach to ensure coordinated response and promotion of standards within the education sector (to increase education sector contribution to better Prediction, Prevention and Preparedness for emergencies due to natural disasters and to promote evidence-based policies, efficient operational strategies and fit-for-purpose financing instruments for education in emergencies); building capacity, resilience, and preparedness within the education sector to cope with disasters at national, district and school levels (to increase resilience of education service delivery); and iii). restoring access to children who have lost schooling opportunities due to disasters (to improve quality of education response in emergencies and post-crisis transitions).

Evaluation Methodology

- 1.6. The methodology of this evaluation was designed on the basis of: (a) The methodology, process and overall outcomes of the study outlined in the TOR from UNICEF Bangladesh entitled, "Effectiveness study and process documentation of the projects on disaster risk reduction and preparedness at school level"; (b) Brainstorming meetings among UNICEF, the project consortium partners and the consultant team to work out the key aspects of the study; and (c) Comments received on the inception report presented to UNICEF and the two consortiums.
- 1.7. The primary audiences who have been kept in perspective are the GoB and the Education Cluster. However, there are several secondary audiences including the school community, education managers, civil society, etc. The term 'audience' is used here to mean the users of the evaluation report. The evaluation respondents are described later in this report. Programmatic and institutional approaches for nationally scalable programmes on disaster resilient primary education were the main areas of focus of the study. Emphasis was put on the critical lessons based on experiential learning of the project partners.
- 1.8. While reading the methodology and the rest of the evaluation report, the readers are requested to keep the following key characteristics of the study in perspective:
 - This is not a classic or conventional evaluation for primarily measuring the performance against the project log frames and management performance. Rather, this is a lessons learning exercise;
 - It was built on in-depth observation and analysis rather than large sample based quantitative assessment;
 - The focus was on primary education; and
 - Flood and cyclone were the main hazard considerations in line with the design of the project that has been evaluated.

Conceptual Framework for Evaluating the Approaches and Lessons

- 1.9. One of the key focuses of the study was to understand why certain approaches worked better than some others to create conditions for disaster resilient primary education. Keeping this in perspective, the study used the following four main criteria to guide its conceptual framework for collection and analysis of information, and making recommendations:
 - i. **Effectiveness:** Ability of an approach to reduce specific vulnerabilities of primary education / schools in particular hazard contexts.
 - ii. Sustainability: Ability of the approaches to: (i) Enhance leadership of the actors in school community; (ii) Enhancement of understanding and capacity of children to cope and demand appropriate services; (iii) Binging about changes in institutional knowledge and capacity; (iv) Local ownership; (v) strengthen collaboration and programme linkages at various levels beyond funding; and (vi) Contribute to local resource mobilisation.

- iii. **Efficiency:** (i) Capability of the approaches to deliver efficiently; (ii) Adoption of the approaches by others for (perceived) efficiency; and (iii) Indicative cost assessment.
- iv. **Replicability:** Easy and simple to adopt, and affordable to scale up without negative consequences.
- 1.10. The main recommendations cover the following:
 - For UNICEF and the consortium: What to consider in the next phase of the programme.
 - For national / GoB actors: (a) What conceptual frameworks should be taken up; (b) What programme approaches should be taken up; and (c) What institutional approach should be considered for scaling up.

Sample Design and Sample Size

- 1.11. A multi-stage purposive sampling technique was used in the study. The central unit for sampling process was the primary schools in different agro-hazard zones where the UNICEF funded pilot project has been implemented. In line with the geographic areas of the pilot project, the samples were selected from the following zones:
 - i. From the **flood zones**, schools (a) very close to rivers; (b) located within 10 kilometres of river; and (c) in typical flood plain; and
 - ii. From **cyclone zones**, schools (a) physically close to the recent cyclone paths from both south and east coast; (b) located in the middle part of Bangladesh that is exposed to both cyclone and flood; and (c) adjacent to the Sundarbans.
- 1.12. Efforts were made to include districts affected by disasters during the project life. As for school selection, three schools were selected from each zone with one government primary school, one registered government primary school, and one community school. Thus, the study covered a total number of 18 schools. One district was purposively selected from each of the above-mentioned zones. In each selected district, the study involved the following institutions:
 - Government education department at district and upazila levels;
 - The education committees at district, upazila and union levels; and
 - The disaster management committees at district, upazila and union levels.

In each school, information was collected from: (a) School Management Committee (SMC); (b) Parent-Teacher Association (PTA); and (c) the students (boys and girls) in the selected schools. In addition, the study team interacted with and collect information from selected representatives from the project consortiums, implementing partner organisations, key policy makers within the government, and UNICEF.

Study Methods and Tools

- 1.13. The following tools were applied for the collection and analysis of information:
 - Literature review for identification of key approaches and lessons;
 - Individual in-depth interviews for evaluating programme approaches and institutional arrangements, and collection of lessons;
 - Group discussion for evaluating programme approaches and institutional arrangements, and collection of lessons;
 - Institutional analysis / mini case study; and
 - Workshop for collective analysis for generating recommendations and collection / interpretation of lessons.

Part Two: Problems, Concepts and Approaches

The Context and the Problems

- 2.1 Although there is no doubt among the disaster and education policy makers and practitioners about the significance of disaster risk to education, knowledge gap exists in its degree and nature. A study² conducted by ThinkAhead in 2009 commissioned by Plan Bangladesh and SC UK established the magnitude of the problem through a sample survey with 324 schools in 10 districts of Bangladesh.
- 2.2 The study suggests that disasters affect all aspects of primary education i.e. access, quality and inclusion constituting a significant challenge to achieve the country's MDG goal in education. It shows that at least one fifth of the schools experienced full collapse of the infrastructure during 1998-2008. Cumulatively, the schools in the study locations experienced 4,483 school day losses with a significant higher average in the flood areas (37 days per school) than cyclone areas (8 days per school). 2007 disasters caused varying degrees of damage to infrastructure, learning environment and wellbeing facilities for children in 93% schools. One fifth of all surveyed schools experienced more than four weeks of school closure in 2007. The current GoB policy to construct school-cum-disaster-shelters and regular use of school buildings for the same purpose showed an additional impact on number of days of closure and severe impact on learning environment.
- 2.3 Based on an in-depth assessment conducted in 16 schools in 4 cyclone and flood affected unions the study suggested that disaster contributed as high as an additional 3% to the existing drop-out rate of 47% (national average). While gender difference of drop-out was found to be inconclusive for cyclone but more girls were dropped out in flood areas. Frequency of flood and its cumulative impact can explain the difference. The girl child, especially the students of grade four and five, face specific challenges to access education during a disaster. The reasons include engagement in household work, early marriage and privacy related issues such as absence of separate female-only toilets in the school.
- 2.4 Impact of disaster on the quality of education is very high, and children from poor households (HHs) experienced this more than those who come from wealthy families. The families that can afford private tutors and have members who can support them in their studies are in a better position to recover the losses. Subject wise loss was found to be most

² Alam, Khurshid et al. Disaster Resilient Primary Education in Bangladesh: Problems, priorities and actions for disaster risk management in primary education. Save the Children UK, Plan International and ThinkAhead Limited. April 2010. Dhaka.

- evident with English and Mathematics which are the two subjects that suffered most in 2007 disasters.
- 2.5 There is a reasonable level of awareness and understanding in the communities about the risks and kind of support that is required to deal with those. The communities have also taken some initiatives of their own to address these e.g. relocation of schools, rebuilding schools on donated land making it more accessible to larger number of children, community based planning for saving schools from disasters, etc. However, many of such initiatives have been taken as a result of individual and family / kinship leadership. Such initiatives in most cases have been of limited scale unless there is extended family philanthropy. At the same time, the wider community ownership was also significant as most of the people contributed in line with their resource capacity. Some people contributed their labour, some made limited financial contributions, some people gave time for coordination, etc. It was observed that community initiative and involvement were higher in the case of non-government and community schools than the government schools. Such community contribution and ownership are even higher in the case of community schools and madrasahs.
- 2.6 The study further notes that most of the schools in the country are located in areas prone to one or more kinds of hazards. Physical infrastructure of schools is regularly affected by disasters because historically school construction did not factor in disaster risks. Up to 90% of schools can be affected badly by any disaster in the impact zone. The current frequency and magnitude of disaster has serious implications for achieving and sustaining current progress in the primary education. Climate change is predicted to increase both frequency and magnitude of disasters. Such a scenario is most likely to have significant implications on the primary education. For example, a student in a disaster prone area currently faces two to three large scale disaster in his/her entire school life with a significant implication on his/her right to quality education. Upward frequency thus shall have far more consequences on his/her life.

What Constitutes the Risk to Primary Education?

- 2.7 The study identified a set of major factors that constitute the risk to primary education in Bangladesh:
 - First, the physical location of the schools, and their fragile construction that is inadequate to withstand disasters.
 - Second, use of schools as disaster shelter, especially in flood prone areas, makes those schools incur additional day-loss of schooling. Even if schools are open, children from pocket areas cannot access schools because approach roads are inundated or damaged. This problem is heightened for the girl child and the students of class one to three.
 - Third, when household and local economy is affected, children are also engaged in household income-related activities instead of continuing their education.
 - Fourth, there is a serious lack of institutional preparedness from school to national level in protecting education from disasters.

- Fifth, while there is a high level of awareness about the importance of EiE, skills and knowledge gaps are evident to transform them into concrete actions. Very limited initiatives are undertaken to support that transformation. Various disaster preparedness activities approach schools as means for risk reduction rather than acknowledging and addressing risk to education.
- Sixth, disaster risk management (DRM) in education is yet to be developed in policy and
 practice terms in Bangladesh. Education and disaster management are vertically aligned
 without a meaningful horizontal linkage. This is clearly evident both in existing disaster
 and education related policies and guidelines.
- Seventh, the study identified important DRM actions which are yet to be defined as roles and responsibilities of both education and disaster management related strategic and operational documents. As a result, there is a problem with role clarity at both school and union level.

Concepts and Approaches Developed and Used by the Project

2.8 SC UK and AAB utilised their past experience and knowledge to transform Education Cluster's post 2007 disasters assessment and workplan to develop a number of approaches to address the vulnerability of primary education in Bangladesh. Although these approaches were developed independently by the SC UK and AAB, they had similarities in nature and process that is explained in following table.

Table 2: Key approaches adopted by the consortiums

	Core Activities Undertaken		
Key Approaches	ActionAid	Save the Children UK	
Approach one: Building knowledge, analytical capability and planning skills among school community and education stakeholders.	Use of participatory vulnerability analysis, preparation of vulnerability reduction and contingency plans at school (400), UP (80), upzila (20) and district levels (10).	Use of vulnerability analysis and preparation of contingency plan. Creation of guidelines.	
Approach two: Awareness raising and capacity building.	Training of school community (teachers, SMC, PTA) and education managers/officials on vulnerability analysis, facilitation and planning. Interactive theatre and mock drill.	Capacity building needs assessment and development of training manual on EiE. Training for school community and other stakeholders. Institutionalisation of Education in Emergency MIS.	
Approach three: Institution building and enhancement of coordination.	No new institution was created by AAB consortium, except student squads in 40 high schools.	Creation of Education Cluster at district level.	
Approach four: Investing in children.	Interactive theatre performance and creation of high school based	Creation of child friendly early warning. Production and distribution	

	climate change research groups.	of child learning materials.
Approach five:	Provide BDT 75,000 to 50 schools.	Provide BDT 16,000 each to all 1,000
Financial support and		schools.
enhancement of local		
resource mobilisation		
Approach six:	Training for local and national	Development and publication of
Influencing discourse,	journalists, publication of policy	research and policy briefings.
policy and mindset through	briefings and organising national	Workshops and seminars at national
policy analysis and	dialogue and sharing.	and district level.
advocacy.		

Part Three: Evaluation of Approaches

Building on Table 2 from the previous section, this section presents critical reflection on all the approaches and the broad activities undertaken by the project. At the end, an analysis on the implementation approaches is presented. Analysis presented in this section includes some reflections on the lessons learned in the project.

A. Reflection on Programmatic Approaches

Approach one: Building knowledge, analytical capability and planning skills among school community and education stakeholders.

Vulnerability analysis

- 3.1 Development of collective analysis on vulnerability of the schools to flood and cyclone was conceptualised as the first step for enhancing risk reduction capacity of the school community i.e. students, teachers, SMCs and parents. The two consortiums used different sets of tools and methods to engage school community in the analysis. AAB customised widely used participatory vulnerability analysis (PVA) toolkit developed by ActionAid for this purpose. SC UK, on other hand, developed a guideline to facilitate the analysis process leading to the development of a school contingency plan through group discussion methods. Both processes introduced new concepts i.e. definition of disaster, EiE (only SC UK), contingency plan and vulnerability reduction plans to the school community.
- 3.2 Total 1,400 vulnerable schools went through the process and generated wealth of knowledge critical to protect the schools from future disasters. The disaster issues were not unknown to the participants but the process helped them to work out the interrelations among various issues that led to the increased bargaining and advocacy capacity; mapping the potential resources; improved the coordination among teachers, SMCs and guardians; and participation of SMC members. The knowledge, capacity building and impact through such processes were found to be very important, not just carrying out the analysis as standalone 'end-in-itself' exercise. Encouraging and nurturing such a culture of continuous engagement in and around the communities should be emphasised in the next phase of the project.

Case Study 1: New Skills and Knowledge through PVA

Royganj Upzila in Sirajganj is located on a *char* (a riverine island) that is regularly affected by different natural hazards such as river erosion and flood. In the remoteness of the char, *Tin Nandina* Government Primary School stands on the river *Korotowa*. As the river already devoured one of the flanks of the school premises, there is no space left in between the building and the banks. To add to the risks, the earthen access roads become barely usable in the monsoon as those get inundated in the high water levels; many students come to school by boats. Due to the unavailability of boats also the fear of risks associated with travel, *Tin Nandina* School experiences a fall in attendance by about 45 percent every rainy season. During floods, the school remains shut for indefinite periods.

The school was selected by the UNICEF's Education in Emergencies project through GKS, a local partner. At the beginning of the project, one teacher and one SMC member received a five-day PVA training. Thereafter, 30 students, 30 parents and 30 persons from the SMC, PTA, teachers and local elites took part in three separate PVAs. Those who received PVA training facilitated the PVAs with the collaboration of GKS staff. PVAs took place over 3 days—two-hour sessions every day. Each group, through their PVA, identified vulnerabilities and local resources through social mapping. They also prepared an institutional map depicting union, upazila and district level institutions and drew a capacity wheel. Then every group designed their own action plan. The action plans were later compiled with the participation of 10 from each thirty-member PVA group.

The compiled action plan was a rather ambitious one. It included building a bridge on the river Korotowa to facilitate access to school from the other bank, raising the access roads, reserving a boat to transport students in the monsoon, etc.

Knowing the difficulty of implementation of other plans, the school community started implementing one plan they could afford like repairing the access road, though only partly. At the entrance of the school there was a big depression in the ground which gets inundated during the rainy season and becomes a threat to the children. The community decided to fill the hollow and build a drainage system so the road does not go under water after a rainfall.

All the school students volunteered to work on the repairs. While the construction workers were building the drainage system, students helped cut earth and carry bricks. For the little ones, it was a very difficult job to do, but they sorted out way to facilitate it. The students took their benches, turned those upside down, put bricks and mud on those and slid the benches like a sledge car to the construction site. Hundreds of children participated in the work while the community watched the spirit with utter surprise.

A total BDT 2,500 was spent which was raised from within the community. In addition, children donated labor worth BDT 1,200. "Now it is easier to come to school", Mohammed Rubel, a student of class five commented. However, the voluntary work actually did more for the school. Assistant teacher Rabeya Bosri said, "Through this activity, trainings left a clear imprint in everybody's mind. So, we are not going to forget what we have learnt anytime soon."

Above all, self-confidence is what the head teacher thinks the school community achieved. "The greatest lesson we have learnt through these activities is that we do not have to depend on the government for fulfilling all our needs; we can do many small things all by ourselves to become resilient to disasters."

- 3.3 The degree and quality of participation, preparation and the quality of facilitation of the actual exercise differed significantly between the two project consortiums. The AAB-led consortium got longer time to conduct PVAs in a relatively smaller number of schools compared to the consortium led by SC UK. One of the major challenges faced by SC UK and its partners was to cover a larger number of schools in a limited time frame.
- 3.4 Children who participated in the process were able to generate valuable analysis and important issues that affect them to access education during a disaster. The process itself motivated children, in all the visited schools, to take part in the project activities at a later stage. However, engagement of children was higher in information generation than compilation of information. This affected the quality of compilation and quality of the contingency plans. In most cases, the contingency and action plans included issues based on consensus among adults in which issues raised by children got de-prioritised. Similarly, organising sessions jointly with boys and girls did not help girls to raise their issues. The factors that affected such reduced engagement of children include: (a) The culture of children is that they are not supposed to give opinion in front of teachers and other elders; (b) Perceived inadequacy of funds that resulted in the inclusion of only those steps that could be carried out with the given amount of money; and (c) The compilation form given as an example was taken as the only form for compilation that restricted the flexibility.
- 3.5 The analyses were done mostly through extractive processes where children and other stakeholders were invited for the event as it was part of the requirement. The engagement was not so 'organic' and continuous. For example, the final outputs of the analysis such as map, matrix etc were not always kept in the schools. As a result, the teachers and students interviewed were not able to refer to what analysis was done by them. Such a practice did not help to build ownership over the process and outcomes.
- 3.6 Limited time given to the project implementing partners can partially explain why the analysis was conducted in a hurried manner. After doing the necessary preparatory work (including development of guidelines and training of staff and volunteers), the partners had to rush to finish the analysis work in a large number of schools. Such a hurried approach to getting things done in a very short time affected the quality of engagement of children and others, and the outcome. This should be considered as an important lesson from the project.

Vulnerability Reduction and Contingency Planning

3.7 Like vulnerability analysis, both the consortiums prepared contingency plans (CPs) involving children. In addition, the ActionAid-led consortium prepared additional action plans as well. Both the consortiums used different concepts and approaches in the planning. ActionAid transformed the vulnerability findings into a long term vulnerability reduction plan while SC UK focused on contingency planning for future disasters. ActionAid also included the idea of CP in the later part of the project. Both the consortiums, again, concentrated their efforts primarily at the school level planning. AAB also compiled the

- school level planning at union level and subsequently produced compiled plans at upazila and district levels.
- 3.8 The relevant core issues were reasonably well included in the plans. Given the shortage of time and resources, the schools have come up with practical plans and approaches. However, social issues such as access of girl child to school in disaster received less attention in analysis and planning that needs to be taken into account to ensure continuation of education in disasters. The quality of the planning varied largely among the consortium partners. Both the consortiums engaged children in the planning process. The whole contingency planning process was influenced by an idea of alternative schooling which the evaluators are of the opinion that is not feasible in all places. The evaluators encourage the consortium to develop a broad thinking to include various options and contextualize ideas into a locally translatable approach, especially when access is affected, so education can continue with limited damages.
- 3.9 The evaluators believe that the project has missed a valuable opportunity in its compilation process i.e. buy in of a wide range of actors, political and in local government, who can be involved in this project to make it wider in coverage and effective in the long run. The project management also overlooked the potential synergy that could have been achieved through a coordination of different activities. For example, SC UK consortium has established a District Education Cluster without a plan while AAB led consortium produced a plan without an implementation mechanism. While plans were handed over to the UP, there is evidence of it being used in only a few places (e.g. Doldolia, Kurigram) where they were followed up by the school community.

Case Study 2: Students of Sarenga Government Primary School can play all the year round

Sarenga Government Primary School in Shariatpur district is always affected by annual flooding. During the monsoon, even in local flooding, students find it very difficult to reach the school because roads get muddy and inundated at some spots. The school playground would remain flooded during the entire monsoon period which contributes significantly to the students' discomfort. Attendance has been generally low in this season mentioned by the Head Teacher.

The school was listed in the project in 2009. At the early stage of the project a PVA was conducted with participation from students, teachers, members of SMC, and some parents. The low playground was identified as the main vulnerability of the school by all the participants. Raising the playground, as a result, was prioritized in the contingency plan that followed. In December 2010 the project provided BDT 16 thousand to the school, which was not sufficient for raising the entire playground.

The SMC and teachers contacted the local Member of Parliament (MP) for further assistance. The MP was very happy to be informed of the efforts made by the school and committed to arrange necessary funds. School estimated the cost to be BDT 50,000 to complete the work. MP later mobilized an additional amount of BDT 34,000 from government fund.

The project created the opportunity for collaboration with the government in constructing a child-friendly environment in Sarenga Government Primary School. The playground was raised to the height of the floor of the school building and, as a result, the students do not have to stay indoors all the times during the monsoon season.

3.10 The planning exercise brought in important skills to the school community on how to transform an analysis into a plan. The implementation of such plan was better where they were hinged upon existing leadership indicating importance of leadership building as a precondition of success. Based on the experience elsewhere, the evaluators would like to emphasis on the importance of institution building at the school that can help nurturing, promoting and sustaining the leadership for implementation of the plans. The project helped school community to define the roles and responsibility for specific actions but overall leadership in overseeing the follow up was not assigned to anyone or an institution. The project staff and school community believe that institution building at school level could have been an option to deepen the ownership of the plans. Similar projects in the South Asia³ also suggest that the likelihood of ownership and sustainability of school-based plans greatly depend on the existence of an institution to take them forward.

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³ School based disaster management committee with specific roles and responsibility has been an important element of safety approaches in Nepal and India. Please see *Alam, K. et al. Comprehensive school safety approach and outline for up scaling strategy for Nepal. ActionAid. Nepal. 2007.* Interested reader may write alam@khurshidalam.org to access the report or visit PreVention website for a copy.

Approach two: Capacity Building

- 3.11 Capacity building activities for the stakeholders were planned as important approaches to reduce disaster risk to education. Both the consortium invested a massive amount of resources to enhance knowledge and skills of all important stakeholders critical for DRR in education i.e. school community, local government officials, disaster management committees; and district and upzila education offices. In order to design such a comprehensive approach, SC UK conducted a systematic stakeholder mapping and capacity building needs assessment, and developed a manual for training to be conducted for two to three days. The AAB consortium, on the other hand, focused on participatory vulnerability analysis at school level and engaged union, upzila and district stakeholders in the discussion on compiled vulnerability reduction action plans.
- 3.12 The trainings have a great influence on the mindset of the stakeholders. For example, the education officials at upzila and district levels achieved high level understanding about the importance of education in emergencies and the role they can play. While the issues were not new to them but many acknowledged that they now approach the problem from a systematic perspective. Some officials said that they never thought of continuing schools in disaster. One of the key challenges for DRR in education is the limited institutional relationship between disaster and education stakeholders. The national framework (unwritten) of disaster management in Bangladesh is influenced by the imperative of life savings without paying sufficient attention to development such as education. Often, maintaining a balance between the competing priorities-e.g. continuing schools versus providing shelter to disaster affected people in the school, for local disaster management committees is a great challenge. The joint training enhanced dialogue between disaster and education officials, which the evaluators believe is a strategic value addition of the capacity building initiative. In overall term, a long-term perspective to disaster problem for education was enhanced as a result of participation in this training.

Case Study 3: Balancing ongoing priorities for education and DRR priorities

'Sujandal Hazi Shariatullah Nurani Hafizia ar Ebtedayee' Madrasah is located in the Sadar Upazila of Shariatpur District. Small in size, the school had only one tin-structure of eighteen feet by eighty two feet with no partitions i.e. just one classroom. It did not have any benches as students were taught only to recite and memorize the holy Qur'an; no other subjects were taught. Later, 15 chairs were purchased and new teachers were appointed when Ebtadey section was introduced.

On selection for the project, the students, teachers and SMC members prepared a contingency plan with an objective of continuing education in various emergencies especially in the monsoon. The plan included the following actions:

- 1. Raise the playground;
- 2. Repair the toilet;
- 3. Purchase a boat for transportation of the students in the rainy season;
- 4. Repair the access road;
- 5. Motivate parents and students about attending classes during the monsoon; and
- 6. Purchase education materials.

The project provided a financial support of BDT 16 thousand to implement the plan. However, following these events, the Madrasah faced a new crisis.

The students of the Ebtadey section have been enlisted in 2010 to participate in the national Primary Education Completion Examination but the Madrasah did not receive subsidised text books from the government that year which are given free of cost as most students cannot afford. Almost all the students are very poor or orphan. The Madrasah authority then decided to update the contingency plan and implement the following tasks: i). Purchase books; ii). Raise the playground; and iii). Repair the toilet.

Shariatpur Development Society (SDS), the implementing partner of the project, approved the plan. BDT 11,470 was spent on buying the books, BDT 1,400 for repairing the toilet and BDT 5,760 for raising the playground. Of the total expense amounting to BDT 18,630, BDT 2,630 was raised from contributions by the community.

Thus, a non-disaster issue was prioritized over disaster related issues due to absolute scarcity of resources. The flexible approach of the project helped to continue education in the long run.

3.13 In summary, the capacity building activities resulted in the following value addition:

- Institutional value addition, in which the project was able to create an important foundation for joint work between disaster and education stakeholders.
- Promoting DRR in education approach. Education issues are more likely to be included in the future emergency planning, if not in regular development.
- Partnership⁴ for DRR, although at an early stage, is emerging as a creditable approach.
- Transformational value addition i.e. the project has contributed to transforming government's existing knowledge to protect education from disasters.

⁴ This refers a kind of institutional arrangement among the organizations for working together to promote DRR.

Approach three: Institution Building and Enhancement of Coordination

- 3.14 The project has adopted three different approaches to institution building and enhancement of coordination. The AAB consortium focused on the institutional relationship building through joint vulnerability reduction plan while the SC UK consortium established new institution i.e. Education Cluster at district level.
- 3.15 AAB consortium's approach was influenced by reciprocal or collaborative model that sought to establish relationship between actions generated through planning exercise and the duty bearers such as UP, upzila and district administration. The consortium partners who engaged local government in the school planning exercise were able to tap into UP's leadership in the implementation of the plans. But this practice was not common in all distracts visited. The potential of the UP was not given the importance it required nor was it utilized to its full extent. Involvement of the UPs is likely to enhance the preparedness and planning in the schools including resource mobilisation. The UP or Union Disaster Management committee (UDMC) was not invited, in most cases, to the school based exercise, which could have been an opportunity to build an important relationship. The consortium members wanted to compile the school plans at UP level, which was in fact compiled by the project staff; and then submitted to the UP. As a result, there was no effective dialogue between school and the local government. Similar practice is also evident at upzila and district levels. The partners compiled the upzila plans by themselves and then invited the stakeholders to comment.

Case Study 4: New Institutional Relationship Helps Speedy Recover of the impacts of cyclone *Aila*

Chandnimukha Purbopara Registered Primary school was established in 1998 on the bank of the Kholpetua River in Gabura Union of Shyamnagar Upazila in the district of Satkhira. It was registered as a government primary school in 2004. Built with bamboo and *Napa* leaves, the school was completely devastated by the cyclone Aila in May 2009. Unable to rebuild the structure, the community resumed schooling in the adjacent marketplace. However, the learning environment was so poor that it was impossible for teachers to provide quality education.

The school was enlisted in the AAB project in July 2009, implemented by Shushilan, a local NGO. A PVA was conducted with participation of the students, teachers, parents and SMC members to assess the vulnerabilities, risks and capabilities of the school. Thereafter they came up with a contingency plan to increase the resilience of the school. The plan included construction of a school building, benches, chairs and tables, toilets, installation of a tube well and renovation of the access road.

Once the school building was reconstructed and some benches and tables were made with the grant provided by the project and community contribution, the school authority applied to the Upazila Education Officer (UEO) for the construction of a toilet. The UEO could sense the urgency but was unable to arrange funds from the government for this. However, he contacted Shushilan and drew their attention to the needs of the school.

Officials from Shushilan visited the school and hold meeting with the school authority and Education Department-decided to construct two toilets and install a rainwater harvesting system. Shushilan is now expected to implement the tasks by July 2011. In this way, a triangular institutional relationship was initiated as a byproduct of the project, which helped Chandnimukha Registered Primary School to increase resilience to disasters.

- 3.16 SC UK consortium partners invested great efforts to establish an education cluster at district level. The formation process itself generated lot of dialogue among the actors. This major outcome of this initiative was an enhancement in leadership of the education department at the district level to promoting new knowledge on DRR in education. However, the evaluation also noted a great variation in understanding about the usefulness of a new institution by the government officials outside the education department. The Additional Deputy Commissioners (ADC) in Cox's Bazar and Sirajganj believe that the existing coordination mechanisms are enough to play the role while many others believed that it may foster coordination provided sufficient mandate is given by the central government to the cluster. Currently, the education cluster is not considered as an official institution/committee of the district administration. To overcome all these challenges, the next phase of the project should provide sufficient attention to a number of issues:
 - Invest in developing a plan for the cluster;
 - Secure government mandate for any new institution created; and
 - Invest sufficient time and resources to activate the cluster.

- 3.17 Information management has been a challenge for Education Department to monitor vulnerability of the schools and production of post-disasters assessment in a proactive fashion. SC UK consortium developed an Education in Emergency information management system (EiEMIS) to support the Education Department to address the problem. The EiEMIS was already provided to the District Primary Education Department with a brief orientation on its operation and maintenance. While the MIS generated a lot of interest in the department, the system was not in use in any of the visited districts.
- 3.18 The key lessons from the initiatives for further reflection include, that: i). the MIS was not developed based on a thorough assessment of relevance, need and capacity, ii). the existing capacity to manage such a system was not present in the department; iii). MIS clearly created a chance of duplication with already existing system in use by the department, and finally, the iv). training to operate the MIS was not sufficient. The evaluators suggest for the next phase to consider the MIS as a research project to understand whether technological intervention can enhance efficiency in information management. This will help to develop understanding about the nature of MIS that is most relevant at the district level. At the end, emphasis should be placed on mainstreaming the system to the existing MIS used by the Education Department The MIS was delivered only a month before the project ended resulting in no follow up from the project.

Approach four: Investing in Children

- 3.19 Protection of children's right to education was the key concept that influenced the project design of both the consortiums. A number of activities were designed as part of creation of disaster knowledge among the children:
 - i. Creative supplementary reading materials were provided to students;
 - ii. Children were engaged in the vulnerability analysis and planning;
 - iii. Children were supported to design and perform interactive theatre and mock drills; and finally
 - iv. Creation of children's squad and establishing weather station in the high schools.

Case Study 5: Sustaining Children's Interest in Disaster and Climate Change

Shaheed Dr Humayun Kabir High School is located at Bokaulkandi village in Charvaga Union, some 15km east of Bhedorgani Upzila of Shariatpur district.

Until a few years back, the school infrastructure and learning environment was satisfactory. The school had originally been built on 1km east of the current location. In 2008, the entire school premise was subjected to the effects of river erosion.

The SMC barely managed to save the corrugated-tin roof, windows and doors. In the following two months, the SMC and local people erected a makeshift school at its current location. NUSA, a local NGO, helped the school with some landfill under Disaster and Rehabilitation project of Concern. However, with the fragile structure, muddy access roads and playground resulted in student attendance low. Consequently, the school was listed in the AAB project.

The project motivated the students through various activities for example in forming a Students' Squad. As part of formation, eight students and two teachers for the school took part in a district-level training program on climate change and natural disasters. Following that, a forty-member students' squad was formed under the leadership of trained students. The squad was divided into four separate groups each comprising of two girls and eight boys.

The key role of squad was to measure and record daily temperature and humidity of the atmosphere from January to December 2010. They also made a record of the rainfall. This activity incited a great deal of interest among the students. As a result, attendance in the period of August to September increased by 10% compared to that in the same period in the previous year.

A student in class eight said, "Sleeping in the rainy days had always been a pleasurable thing, but nowadays it is more interesting to come to school". Asked why, he replied, "We measure rainfall".

The introduction of scientific equipments helped increase attendance at school during natural disasters.

- 3.20 In overall terms, the children in the selected schools now have better and systematic knowledge and understanding about the disaster they may face and actions they should take to protect their education. This understanding was developed not only through the reading of supplementary materials but also going through the vulnerability analysis, drills and implementation of some of the plans in which they participated. Children clearly remembered the key preparedness messages from all the initiatives. However, the knowledge and learning was not school-wide as only selected students participated in the process. For example, materials were not given to all students and often selected students were taken to the union level training. The children from classes four and five were given priority in the process, without creating an institutional system for continuation of the knowledge.
- 3.21 Children's involvement in high schools was the highest followed by the primary schools. There was hardly any involvement of the students in the *Madrasahs*.

- 3.22 Contextually appropriate approaches and materials were not found to be used in some cases. Materials on floods were given in all of the areas including the cyclone prone areas, some materials were distributed too late, school calendars were not taken into consideration (e.g. mock drills and dramas were arranged just before final exams) the drills were general to disaster and were not specifically focused on education in emergencies.
- 3.23 Concern Worldwide, a technical partner of the AAB-led consortium, implemented an additional small-scale pilot in the context of earthquake in five schools in Dhaka city. The pilot carried out one-day awareness programme in each school where a video of what actions to take during earthquakes was shown. Along with this prime activity, buckets, small first aid kits and posters were given to each school. The students clearly remembered all the key messages from the activity which highlighted the usefulness of the visual methods. However, no follow up activities were designed to strengthen the increase in awareness and knowledge among the children. The evaluators are of the opinion that preparing school for earthquake requires serious strategic engagement and adequate resources allocation especially in the context where frequency of earthquakes is low but the scale of the risk is massive. An ideal school safety initiative in Nepal is illustrated in the following box.

Box 1: School safety approach in Nepal

A comprehensive school safety approach in Nepal should focus on safety of the students, teachers and school staff which should have three primary purposes: a). Reduction of injury and death by improving infrastructure and school readiness and awareness, b). Building future leadership and c). Resuming and/or continuation of education during (except earthquake) and after a disaster.

Four elements of comprehensive school safety approach:

- Building leadership for school safety. Information dissemination and awareness raising about potential effects of earthquake risk (and other hazards) on population, children and schools and their reduction. Providing training on critical areas like first aid, leadership, swimming lessons, etc.
- Making school structures resistant to earthquake and floods.
- Enhancing school preparedness plan. Putting in place school disaster preparedness plan and regular evacuation drills which are linked to the community contingency plans. School activities should not be a stand-alone activity as it very much interlinked with the community before, during and after a disaster. This should include an active institution to review and implement the plans.
- Planning for arrangement to run school during and soon after a disaster.

However, there are challenges to achieve school safety in Nepal. Nonexistence of knowledge sharing mechanism and limited cooperation among developmental sectors and actors are among the major challenges. Funding for school safety programs is significantly limited and are for short duration. As a result, NGOs face difficulties in following up school safety programs after a project phases out. Finally, school safety as an approach and practice is yet to be developed as pedagogy. Therefore, a number of critical areas have not been well researched. These knowledge gaps include sustainable frequency of disaster simulation exercise, ratio between first aid providers and number of students and disaster preparedness information by various age groups of students.

Clearly, the sustainability of school safety programs is more likely where existing mechanisms, institutions and neighbouring communities are engaged in the planning and implementation of such programs. School community, particularly students and teachers, is willing to learn and adopt school safety measures.

Adopted from: Alam, K. et al. Comprehensive school safety approach and outline for up scaling strategy for Nepal. ActionAid. Nepal. 2007.

- 3.24 The interactive theatre and mock drills were mentioned by the children, teachers and parents as most interesting and effective means to promote awareness about disasters. The broad guidelines and training provided by AAB consortium allowed the children and responsible teachers to develop locally appropriate messages for the audience. Many parents said that children will now take with them their books when they go to the cyclone shelter. Additionally, learning by the community members in the process was also high. Many interviewed local government officials and community people mentioned that that people will consider disaster loss in education which they did not think about before.
- 3.25 In summary, the project did not adequately define the role children should play in the process of DRR in education. The child centred approach, widely practiced by the consortium partners, could have been a great help in the design and implementation strategies of the project. The evaluators suggest a few issues to consider in future project design. First, adopt child centeredness as the overarching principle of project design and implementation. Partner staff who would work with the children should be supported with adequate training on implementation of child centeredness principle. Second, build leadership among children to influence various decision making and project implementation processes.

Approach five: Financial support and enhancement of local resource mobilisation

- 3.26 The consortium members provided financial assistance directly to the schools to implement the actions included in the plans. Two different approaches were used by the consortiums: BDT 16 thousand provided to each project school by SC UK while BDT 75 thousand each by AAB to a selected number of schools. The strategy to provide such financial assistance as input was a relevant, practical and creditable one; and they were used very effectively by the schools. The school communities considered the support as an input. It is essential to note that all recipient schools required funds more than the minimum of BDT 16,000 i.e. they were in genuine need of financial support.
- 3.27 The financial input was used in various ways, but mostly to undertake physical works that reduced some of the key risks of the students related to access, facilities and physical improvement of school compounds. The support encouraged the school community to generate local resources as high as six times more than the actual amount provided. The community contribution was higher where less amount was given (16 thousand) than the schools where a bigger amount was provided. This indicates an important lesson i.e. financial input works well in relation to local resource mobilisation if it is considered as strategic rather than operational.

Case study 6: Participatory Contingency Planning and Implementation helped to increase attendance

Water logging is a persistent problem for Kolarowa Upazila of Satkhira District. Continuous siltation in the riverbed of the adjacent Kobodak River pushed the water levels higher and made the Gajna Registered Primary School in Kolarowa vulnerable to water logging.

Although the adjacent embankment provided protection to the Gajna Village during dry months, the school was subjected serious problems in the monsoon. The school building was flooded in 2007 and 2008. Even in 2009 when no major floods were recorded in Bangladesh, the playground was completely inundated and water entered the classrooms. Classes were held in the backyard of the head teacher's residence from August to November. During that time, average attendance fell down to 60 percent.

The school was enlisted under UNICEF's Education in Emergencies project towards the end of 2009. The school community received training to assess the school's vulnerabilities and develop a contingency plan. Flooding of the classroom was identified as the main problem which affected attendance. The collective community of students, teachers, parents and local government leaders decided to raise the floor to increase resilience against flooding.

The floor of the school building was raised by one foot in 2010. This cost an estimated BDT 60 thousand. The project provided with a grant of BDT 16 thousand and the rest of the amount was raised from the community by the school. Consequently, on raising the floor it was possible to hold classes inside the school even in the rainy season. According to the head teacher, in the period of August to November 2010 average attendance was 85% while in 2009 the figure was 60%.

Community participation, induced by the incentive provided by the project, reduced vulnerability to flooding and increased attendance in the rainy season. The community is confident in its self-reliance. The school's head teacher said, "We always expected that the government would develop our school, but now we realize that we were wrong. Actually, we can do many things all by ourselves".

3.28 The process of handing over money and its utilisation provides a few important lessons. SC UK partners formed a committee in the school to receive a cheque on behalf of the school. They school community enjoyed the freedom to plan and spend the fund. In the case of BDT 75 thousand, money was not directly transferred to the schools; rather partners of AAB consortium spent it on behalf of the school based on a joint agreement. This is clear from the analysis that direct transfer created multiple benefits in mobilising further resources and creating contingency fund. For example, a few schools were found to set up their own disaster funds for the future utilising the learning from this project. A school in Tala Upazila in Sathkhira and another in Ulipur in Kurigram are two example of such practice.

Approach six: Influencing Discourse, Policy and Mindset through Policy Analysis and Advocacy.

- 3.29 Advocating for wider change in policies and practices were important means identified in the plans of both the consortiums. The AAB consortium included APIT as their advocacy partner to conduct and publish national level policy analysis and briefings, organise national level policy dialogue, and mobilise civil society organisations to influence the relevant policies and institutions. SC UK adopted a modest plan that included child-led advocacy at local level, and national level advocacy to promote efficient information management and coordination for education in emergencies. The consortium adopted reasonably common change objectives i.e. change in the discourse, creating enabling an environment to sustain local processes such as Education Cluster and change in policies and institutions both in emergencies and education.
- 3.30 At the local level, the projects initiated a significant change by promoting new discourse and agenda. For example, new discourses such as EiE, PVA, contingency plans, continuation of education would most likely be remembered in local level decision making. This is likely to increase the likelihood of education receiving more priority in emergency response. However, such processes were not adequate at the local government level as mentioned in other parts of this report. The project could have achieved far more results if it had adopted a child-led advocacy process. For example, children could have been invited to some of the district and Upzila level meetings to share their experiences.
- 3.31 National level advocacy initiatives were shared between Education Cluster and the project adopting three strategies: i). engaging high level officials from ministry of education and disaster management in dialogues; ii). organising national seminars and convention to showcase the project's approaches; iii). publication of policy related papers; and iv). media activities. According to the project's staff, the minister and senior officials are now more aware of the issue. For example, PEDP III will reportedly include a component on EiE. The disaster concerns for education were reflected in a number of newspapers.
- 3.32 However, the impact of advocacy initiatives was limited at national level for a number of reasons, e.g.:
 - The project did not have an advocacy strategy based on sound policy analysis.
 UNICEF's role was not sufficient to encourage the consortium members to come up
 with a joint advocacy plan, which could have ceased a number of opportunities to
 influence relevant policy processes such as revision of Standing Order on Disaster
 (SoD) and National Education Policy.
 - The partnership between AAB and APIT did not work out effectively, and it resulted in partial implementation of the advocacy plan.
 - The project staff had more of an operational focus than a strategic one. Such focus
 was a result of too many activities to be carried out in a very short timeframe. This
 constrained the ability of the project team to see the big policy picture and
 opportunities for changes. More attention should have been given to establish

- partnership and networks with policy players such as Campaign for Popular Education (CAMPE).
- The knowledge management and communication were among the weakest parts of the project strategy and sufficient resources were not allocated for these aspects.

B. How the Approaches were Implemented

Evaluation of the management of the project was not part of the ToR of the evaluation. The evaluating team identified a number of design and implementation related factors that contributed to the performance of the programmatic approaches, which might be useful thoughts for future project development.

- 3.33 Project design and resource allocation had a significant impact on the overall performance of the project implementation and the results they produced. The geographical spread for SC UK consortium, as a pilot project, was too ambitious compared to the partner's capacity, project time and resource allocation. The start up phase consumed a major chunk of the time in setting up the project i.e. selection of partners, selection of schools and development of materials and providing necessary training. As a result, the implementing partners received limited time to engage the stakeholders in a high quality standard. Inadequate allocation of fund for field operation was also another challenge faced by the staff of partners. The project wanted to select the most vulnerable school that eventually led to selection of remotest school for which operational cost was inadequate. For instance, total travel cost allocated for each district was BDT 15,000 although only boat fare in riverine areas was BDT 1,500 per day. These resulted in a rushed PVA and contingency plans without any room for follow up. One partner, though an exceptional case, conducted the exercises of five schools together.
- 3.34 In Bangladesh, there is no baseline at the national level that could enable the project teams to select vulnerable schools at such a scale. However, it was observed that in most cases the partners on both the consortiums were able to select the vulnerable schools. On further reflection, the evaluation team encourages use of the risk zoning as opposed to administrative boundaries to select schools for future interventions.
- 3.35 The project design did not sufficiently factor in wide contextual issues that might have an impact on the implementation and impact of the project. The schools are already over burdened with work and many face shortage of teachers. More attention should have been given to how activity planning can take into account the school calendar. For example, the interactive theatres were planned just before the annual examination. In such a situation, there was no incentive for the schools to effectively implement the project initiatives and sustain those. The risk factors related to disasters need to be contextualised in the wider context of the communities (e.g. adequacy of teachers, quality of the SMCs, household food security and housing affected by disasters, etc) for the effectiveness and sustainability of disaster focused interventions.
- 3.36 For Cox's Bazar and Satkhira districts, national level partner organisations not having other programmes in the EiE project areas were taken only for this project. In these cases,

the partner organisations pulled out completely at the end of the project without leaving any room for linking and following up through other projects. On the contrary, where the partner organisations had other programme activities, e.g. Muslim Aid in Kurigram, were able to make arrangements for subsequent follow up which is likely to make significant contributions to sustainability. In Cox's Bazar, the involvement of stakeholders around education was limited to teachers and students. The involvement of wider stakeholders including various institutions (e.g. UP, government officials, local communities, etc) was very low. While some reasons could be attributed to the communities, the input required from the project was also not adequate. For instance, in those areas some key project staff members were part time staff to the projects and, in a few cases, were located far from the project areas e.g. in Dhaka City.

- 3.37 The start up phase, the implementing organization did not share the plans with the schools and the wider community. Had those been shared the schools could have planned implementation approaches in a more efficient manner in such a short time frame. This would enable the schools to organise this around their calendars. As a result, it was a challenge for the schools to meet the ad hoc demands.
- 3.38 Coordination and shared learning within and among the consortiums and partners sometimes working in same district were weak and not strategic. As a result, they missed the opportunities for joint planning, creating synergy, and sharing learning from each other's work. UNICEF could have provided more strategic advice and oversight role to address these shortcomings of the project both at national and local levels. Often frequent changes in project staff at UNICEF created delays in decision making that resulted in delays and confusion in implementation. For example, the communication protocol of UNICEF is an area that the consortium partners mentioned to be least understood by them. The evaluators also suggests UNICEF to provide a thorough understanding about their policy and protocols to the partners.

Part Four: Conclusions and Lessons

- 4.1 The project was the first of its kind to address the vulnerabilities of primary education to disasters in Bangladesh at a national scale. The project design included two major disaster contexts e.g. flood and cyclone; earthquake vulnerability of schools was not among the major focus. The pattern of designs of past disaster preparedness projects have been based on the most recent disasters at that time and the affected areas of those disasters; and this project was not an exception. Since there was no major earthquake in the country in the recent past, the project perhaps did not take it as a major consideration in the design. As a result, the earthquake did not feature significantly in the design of this project which the evaluators believe has been a missed opportunity in developing an approach to deal with earthquakes. Thus, the project has been able to generate sufficient knowledge and credible approaches in dealing with flood and cyclone as opposed to risks associated with earthquake.
- 4.2 Vulnerability of primary education to disasters in Bangladesh is multi-pronged and multi-faceted calling for responses at various levels / degrees / levels of administration with engagement of various types and levels of stakeholders as well as changes in policies, institutions and mindset of the stakeholders. The project demonstrated understanding of this complexity and also designed strategies, approaches and actions accordingly. In order to create a shift from a reactive approaches and actions of the education community towards disasters to a more risk reduction approaches and actions requires a certain depth and time of engagement with stakeholders. Such a shift was initiated by this project although the input for the required depth and intensity of the engagement was not adequate to accelerate the shift.
- 4.3 Despite the limited duration and inadequate financial input for field operations, the project has been able to create noticeable impact at political, strategic and operational levels presented in the following table (Table 3: An analysis of indicative impact of the project). The problem, related consequences and necessary measures to address education in emergencies for boys and girls came into the limelight as a result of systematic and participatory analysis of the project. Similarly through workshops and dialogues with various stakeholders at Union to district levels changes were evident in all the researched districts. At the national level, through studies, information sharing and dialogue with government and civil society representatives, the project generated a higher degree of importance given to disaster problems for education and the urgency in addressing those.

Table 3: An analysis of indicative impact of the project

Major disaster risks to primary education ⁵	Major vulnerabilities contributing to the risks (not in order of importance)	Risk reduced as a result of the project	Factors related to reduction of risks
Risk one: Closure of school as a result of disaster.	 Fragile infrastructure and physical location. Inadequate planning for alternative school. Schools being used as disaster shelters. 	Reduction in the duration of school closures is most likely, although risk persists in most of the schools.	 i. Increased knowledge and awareness of importance of continued education in disaster at various levels. ii. Physical vulnerabilities in some schools have been addressed. iii. Resources provided by the project were inadequate to address the magnitude of physical vulnerabilities.
Risk two: Reduction in student attendance and increase in drop-out.	 Difficulty in physical access to school in disaster. Children get engaged in income and household activities. Humanitarian policy and practice do not include education. 	Post-disaster attendance is most likely to improve, but significant impact on disaster related drop- out is least likely.	iv. Project identified and addressed problems with physical access.v. Increased awareness among stakeholders.vi. Contextual challenges are far bigger than the project's input.
Risk three: Slow recovery of education after a disaster.	 No effective coordination between disaster and education stakeholders. Education system yet to adopt DRM approach. 	Education likely to receive higher importance in local level disaster response planning.	vii. GoB's high priority on education. viii. Mindset of planners changed significantly at district level and below in favour of DRM in education. ix. Policy and institutional challenges were not adequately analysed and addressed by the project.
Risk four: Quality of education deteriorates.	 Learning environment at school and home gets affected; and loss of teaching-learning materials. 	Risk for learning environment still persists, but further local initiatives to reduce this are likely.	x. Contingency plans did not always include this risk in the implementation and investment plans. xi. Awareness among children

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⁵ These risks were identified in a study titled 'Disaster Resilient Primary Education in Bangladesh: Problems, priorities and actions for disaster risk management in primary education'; by Alam Khurshid et. all. Save the Children UK, Plan International and ThinkAhead Limited. April 2010. Dhaka.

Major disaster risks to primary education ⁵	Major vulnerabilities contributing to the risks (not in order of importance)	Risk reduced as a result of the project	Factors related to reduction of risks
	 Children get engaged in income and household activities after a disaster. 	Students' materials are most likely to be protected.	about protection of education materials increased.
Risk five: Incidents of death and injury, and reduction in wellbeing.	 Fragile buildings in earthquake context. Inadequate and fragile facilities for wellbeing in all hazard contexts. 	Risk still persists although awareness has increased. Continued access to wellbeing facilities is most likely in all schools.	xii. Safety approaches were ether not introduced or were inadequately resourced. xiii. Wellbeing facilities e.g. water systems and toilets were constructed or made flood resistant (not in cyclone areas).

- 4.4 At a strategic level, the major value addition of this project has been the generation of knowledge, lessons and possible approaches to address flood and cyclonic risks to primary education. Such knowledge includes gaps in the systems and policies, and the potential stakeholders to deal with these along with their possible roles and capacity building needs. While the approaches were reasonably understood and acknowledged at the school level with external facilitation and resource, the appropriate and cost-effective institutional approaches require further research and reflection for replication and scale up. At the same time, it should be noted that understanding impact requires longer duration (than what was allowed) in a project of strategic nature like this one. Moreover, there was no disaster during the project life to put the approaches under test to understand the appropriateness and efficiency of the programmatic and institutional approaches. In order to address these two challenges, the evaluators adopted two assumptions that the targeted schools would be less affected by future disasters if: (a) school communities were able to identify all the main causes of the vulnerability, and (b) adequate inputs were provided to mitigate those causes.
- 4.5 It is clear from the evaluation that all the sample schools were able to identify, analyse, document and plan on the core causes of vulnerability of the schools which in turn translated into action plans or contingency plans. However, the limited budget of the project influenced the planning process and content resulting in prioritisation of the 'affordable' actions. In most cases, the planning process itself led to the creation of local leadership and relationships among the stakeholders which has a potential impact in the implementation of some or all of the activities in the plan. On the other hand, the process itself was influenced by the adults and the popular thinking such as infrastructure, boat, etc where the interests, priorities and the ideas of children (boys and girls) were not sufficiently reflected.

- 4.6 Although both consortiums involved boys and girls at some stages of vulnerability analysis and subsequent planning, the issues of children were not sufficiently reflected in the plans because of the power dynamics and the cultural norms of rural Bangladesh.
- 4.7 The capacity for local level advocacy and leadership multiplied as a result of the project. For instance, resource mobilisation for schools was multiplied by as high as six times in some cases indicating increased capacity, leadership and initiative at local level. However, support from district and upazila administration could not be galvanised sufficiently for a number of reasons e.g. (a) the district and upazila administrations are heavily dependent on directives from the central administration which could not be facilitated during the lifetime of this short duration project; (b) the project did not get sufficient time and space to reach out to and influence the 'peripheral' policies and frameworks at the local level including resource allocation and development activities of UPs, and upazila and district administrations; (c) the education cluster created by the SC UK consortium at the district level could not sufficiently influence the non-education line departments because it was perceived as an "NGO-led non-official" initiative. It may not be unlikely that a local good practice can influence national policies and the ways institutions operate; but the time and other resources required to nurture this was not sufficient in this project. The agenda and initiative for the national level advocacy came towards the end of the project life resulting in inadequate efforts for such influencing work.
- 4.8 The project was able to identify the right institutions for engagement from school to district levels e.g. SMCs, UPs, district and upazila education offices, disaster management committees, etc. However, the engagement of the wider community was not adequate. In addition, the project's engagement with the identified institutions was not sufficient mainly due to late start of the field implementation. At the same times it should be recognised that such a delay in the start up of the project was partly due to the new approach of the design in Bangladesh. The project assumed that the existing institutional structure at the school level was sufficient to implement the contingency plan. The project also did not establish any new institutional arrangement to review and implement the plans at the school level. International experience in the region shows that new institutional structure can be effective to implement disaster management plans.
- 4.9 In terms of coverage, the project accomplished a massive task by identifying 1,400 schools, and conducting necessary exercises for analysis and planning in those schools and related institutions in a relatively short period of time. Both the consortiums were able to utilise the existing research and knowledge on DRR in Bangladesh to apply in the context of education. These were achieved in spite of delays in the inception phase of the project including delayed staff recruitment, staff turnover in one consortium, the relatively long time taken in the development of necessary guidelines. Closer engagement of the implementing local partners could speed up the process of developing the guidelines and tools. Such early involvement of implementing partners could also help in making the developed guidelines and other materials more relevant to the contexts. Such involvement of implementing partners and schools could also help in aligning the project plans with school calendars more efficiently.

- 4.10 The project had one set of objectives, but two consortiums were engaged in the implementation where the two sets of implementing organisations applied different approaches, tools and techniques. While such diversity created the potential for testing a wide variety of approaches and methods, the limited coordination and sharing between the two consortiums beyond national level missed the opportunity to create synergy and shared which, in turn, could result in the development of concrete approaches and methods. For instance, one consortium supported the creation of district education cluster while the other created a district education vulnerability reduction plan without joint planning to create greater impact.
- 4.11 Both the consortiums built partnerships with implementing organisations with and without existing presence in the project areas. In the cases where partner organisations were taken from other geographic areas, the impact and potential for continuity were less evident. In order to test such new approaches, existing local presence of partner organisations is essential for building and capitalising on relationships with relevant stakeholders, building on and deepening the understanding of the local context, and creating possibilities for greater local ownership and continuity.

Part Five: Recommendations and Possible Implications

Building on the conclusions of the evaluation, a set of recommendations is presented in this section that covers four major areas.

D. General

- 9. UNICEF should design and implement a follow-on phase of the pilot project in order to consolidate the interventions in preparation for wider replication and scaling-up. Further geographic expansion of the project might be considered only after making adequate resources financial and time available for the extended pilot. While doing this, the context of earthquake should be factored in the main design of the project. A separate limited scale pilot can also be considered for selected locations.
- 10. After consolidating a common set of concepts and approaches, there should be one consortium of partners with members having distinctive skills (i.e. education in emergencies, school safety, and DRR through schools) and competence in relevant aspects of the project.
- 11. The next phase of the project should have built-in mechanisms for coordination and real-time knowledge / learning sharing among partner organisations.
- 12. The partner organisations for the new phase should be selected from among those who worked in the last pilot phase. This will enable the new phase to build on the experience and skills from the recent phase of the project. In selecting the field level implementing partners, preference should be given to those who are already present in the respective geographic locations. This will help ensure easier access to the communities and other stakeholders, and contribute to the likely continuity of the interventions beyond the duration of funding.
- 13. UNICEF and the consortium partners should work with the government to identify the policy and institutional barriers to facilitate the local level initiatives.
- 14. UNICEF should carefully determine their role and type / level of engagement in relation to the quality of implementation of the next phase of the project.

E. Concepts

- 15. The next phase of the project design should clarify and make use of two important concepts: i). what should be a core objective and focus of the DRR in education; and and ii). how child centeredness can be built into the project design, implementation and monitoring.
 - A conceptual synergy can be built on three important concepts which exists in Bangladesh and elsewhere in South Asia i.e. DRR though school (mostly used by ActionAid), EiE, and school safety in the context of earthquake. Based on these concepts, three overall objectives can be set for the next phase of the project with a goal to build resilient primary education. These include: (i). protection of life and reduction of injury among children, teachers and school community; (ii). continuation of education in

- emergencies, and (iii). investing in children to ensure they grow as future leaders in disaster risk reduction and to climate change adaptation.
- The concept of child-centeredness should be adequately used in the project. UNICEF should facilitate a cluster-wide discussion on the principles and implementation strategies of child-centeredness. A common step-by-step guideline on analysis, planning and implementation would also be useful.

F. Some Specific Consideration for the Next phase

- 16. Mainstreaming of resilience in education at all levels should guide the project design and implementation.
- 17. UNICEF should consolidate all the methods and materials through developed vulnerability analysis, contingency planning and vulnerability reduction plan. Two key areas should be emphasised in the process: (a) Understanding of risk to students as opposed to hazard and vulnerability as a starting point; and (b) Participation of children to guide the process of analysis, compilation and planning. Inclusion of children and high level of awareness about inter-generational power relationship and cultural norms should guide the compilation process.
- 18. In all schools, separate institutions with clear roles and responsibilities should be considered with added emphasis on leadership and local resource mobilisation for the implementation of the plans that were already developed in the recent phase of the project.
- 19. The involvement of the local government must be prioritised in order to create local political agenda and leadership for resilience building in education. Similarly, the initiatives at district and upazila levels should be reinforced by appropriate central level directives and guidance. The project should engage and utilise local training facilities e.g. PTI and upazila resource centre to provide further training.

G. Specific recommendations for GoB

- 20. The government should consider the development of a resilience building strategy for education on the basis of the learning of this pilot project. Considering the multi-sectoral nature of the problem, engagement of all relevant sectors, departments and other stakeholders should form integral parts of the development and implementation of the strategy.
- 21. Risk factors to education should be included in the existing disaster management systems, tools and procedures. This is expected to resolve the conflicting priorities of the institutions related to education and disaster management.
- 22. The government should examine the potential of the existing institutions (e.g. National Academy for Primary Education-NAPE, PTI, infrastructure facilities, etc) to implement the capacity building components of the strategy. A separate contingency fund at the district level can also be considered to improve the timeliness of disaster response.