Knowledge, Attitude and Practice Study on School Safety Programme

A Comparative Study of Intervention and Non-Intervention Schools
Best Practices
DISCLAIMER

THE VIEWS EXPRESSED IN THIS CASE STUDY ARE THOSE OF THE AUTHORS ALONE AND DO NOT NECESSARILY REFLECT THE POLICIES OR THE VIEWS OF UNICEF AND/OR GRAMEEN DEVELOPMENT SERVICES.

Photos: ©Knowledge Community on Children in India/2013
Knowledge, Attitude and Practice Study on School Safety Programme

A Comparative Study of Intervention and Non-Intervention Schools
Best Practices

Sunakshi Bhatia
Giulia Contò
Yasin Khan
Paul McGlinchey

In collaboration with
Grameen Development Services
Muzaffarpur
Contents

Acronyms 7

Executive Summary 8

1. Introduction 12
   1.1. Background to the study 12
   1.2. Relevance of international and domestic standards 14
   1.3. School Safety Programme 15
   1.4. Purpose and objective of the research 18

2. Methodology 19
   2.1. Research questions 19
   2.2. KAP Study 19
   2.3. Data collection 20
   2.4. Challenges and constraints 22

3. Findings 23
   3.1. Are children in particular and school community aware of and practise dos and don’ts of different disasters? 23
   3.2. What are the different modes through which children acquire knowledge on different disasters and school safety? 32
   3.3. Do the children understand risk and vulnerabilities, have they been able to identify them in their schools and have appropriate measures been taken to make schools a safer place? 35
4. Conclusion

4.1. Effectiveness of child-led participatory methods
4.2. Effectiveness of innovative practices to mitigate risks
4.3. Effectiveness of links with the broader community
4.4. Effectiveness of the enhanced sense of responsibility of children
4.5. Challenges encountered by the programme

5. Lessons learnt

5.1. Sustainability
5.2. Promoting strategic partnership
5.3. Targeting urban and rural schools
5.4. Promoting cost-effective, short-term solutions
5.5. Sensitise to gender/disability/social inclusion issues

Bibliography

Appendix 1

Appendix 2

Appendix 3

Appendix 4

Acknowledgements
List of figures

Figures
Figure 1 Knowledge level of dos and don’ts during floods 24
Figure 2 Knowledge level of dos and don’ts during earthquake 26
Figure 3 Knowledge level of dos and don’ts for WASH 28

Table
Table 1 Modes of learning and teaching methods 33

Testimonials
Testimonial 1 Teacher dousing fire 29
Testimonial 2 Sharing knowledge on safe cooking 30
Testimonial 3 Connecting the SDMP with the VDMP 36
Testimonial 4 Overcoming the lack of hand pumps 37
Testimonial 5 Parents build a boundary wall 37
Testimonial 6 Integrating DRR in specific subjects 44
Testimonial 7 School safety as a vehicle for community cohesion 45
Testimonial 8 Accessing external resources 46

Textboxes
Textbox 1 Gender and social inclusion 22
Textbox 2 Urban schools 26
Textbox 3 Gender and social issues 31
Textbox 4 Urban schools 36
Textbox 5 Future gazing 48
# Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEO</td>
<td>Block Education Officer</td>
</tr>
<tr>
<td>CBDRR</td>
<td>Community Based Disaster Risk Reduction</td>
</tr>
<tr>
<td>DEO</td>
<td>District Education Officer</td>
</tr>
<tr>
<td>DRR</td>
<td>Disaster Risk Reduction</td>
</tr>
<tr>
<td>FGD</td>
<td>Focused group discussion</td>
</tr>
<tr>
<td>FPT</td>
<td>Focal Point Teacher</td>
</tr>
<tr>
<td>GDS</td>
<td>Grameen Development Services</td>
</tr>
<tr>
<td>GoI</td>
<td>Government of India</td>
</tr>
<tr>
<td>GPSVS</td>
<td>Ghoghardiha Prakhand Swarajya Vikas Sangh</td>
</tr>
<tr>
<td>HS</td>
<td>High school</td>
</tr>
<tr>
<td>IDF</td>
<td>Integrated Development Foundation</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>KAP</td>
<td>Knowledge, attitude and practice</td>
</tr>
<tr>
<td>KII</td>
<td>Key informant interview</td>
</tr>
<tr>
<td>MS</td>
<td>Middle school</td>
</tr>
<tr>
<td>NDRF</td>
<td>National Disaster Relief Force</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
</tr>
<tr>
<td>ORS</td>
<td>Oral rehydration solution</td>
</tr>
<tr>
<td>PE</td>
<td>Peer educator/peer-to-peer educator</td>
</tr>
<tr>
<td>PRI</td>
<td>Panchayati Raj Institution (decentralised elected bodies of governance at the district, block and village level)</td>
</tr>
<tr>
<td>SCK</td>
<td>Samajik Chetna Kendra</td>
</tr>
<tr>
<td>SDMC</td>
<td>School Disaster Management Committee</td>
</tr>
<tr>
<td>SDMP</td>
<td>School Disaster Management Plan</td>
</tr>
<tr>
<td>SDRF</td>
<td>State Disaster Response Force</td>
</tr>
<tr>
<td>SSA</td>
<td>Sarva Shiksha Abhiyan (‘Education for All’ programme of the Government of India)</td>
</tr>
<tr>
<td>SSEVK</td>
<td>Samajik Sodh Evam Vikas Kendra</td>
</tr>
<tr>
<td>SSFPT</td>
<td>School Safety Focal Point Teacher</td>
</tr>
<tr>
<td>SSP</td>
<td>School Safety Programme</td>
</tr>
<tr>
<td>UNCRC</td>
<td>United Nations Convention for the Right of the Child</td>
</tr>
<tr>
<td>VDMC</td>
<td>Village Disaster Management Committee</td>
</tr>
<tr>
<td>VMPS</td>
<td>Village Disaster Management Plan</td>
</tr>
<tr>
<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
</tr>
<tr>
<td>SDMC</td>
<td>School Disaster Management Committee</td>
</tr>
<tr>
<td>SMC</td>
<td>School Management Committee</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, sanitation and hygiene</td>
</tr>
</tbody>
</table>
“I have lost my mum and grandmother in a fire. If I had learnt how to prevent fires or put them out, maybe I could have saved them”
– Annu Kumari¹, Supaul

The vast majority of the territories of Bihar have been severely affected by natural and man-made disasters. The impact of disasters lies not only in the immediate loss of life and destruction of property, but in the disparate and lasting impact on the most marginalised and vulnerable communities. Floods impact approximately 73 per cent of the territories of Bihar every year with varying intensity;² over 28 out of 38 districts lie in seismic zone IV or V;³ and man-made fires constitute a severe threat throughout the state.

While the entire population is affected, the differential impact of disasters on children is often overlooked. Indeed, children are particularly vulnerable to the effects of disasters due to their young age, limited physical capabilities and dependency on parents and caregivers. This heightens the risk of disruptions in access to education which is a fundamental human right guaranteed under the Millennium Development Goals and UN Convention on the Rights of the Child. In addition to the risk of physical injury, children face the threat of being separated from their families or displaced from their homes, resulting in homelessness and extreme poverty.⁴ They may also face underlying threats such as malnutrition and disease or exploitation and

¹ The child respondent provided full and informed consent for her name to feature.
² “Ensuring Safe Learning Environment for Children” – A Roadmap for District Administration (UNICEF 2013) pg. 7
³ ibid
⁴ Narsey P, Reshika S and Holland P, Relationship Between Natural Disasters and Poverty: A Fiji Case Study (SOPAC, UNISDR 2009) pg. 20
⁵ http://www.unicef.org/india/reallives_4651.htm
Furthermore, the impact of social harm may carry long-lasting effects on their lives, resulting in the disruption of their emotional well-being and cognitive development. Children are at a heightened risk of distress selling, and they may be trafficked or face child labour in order to support their families through financial hardship.

### School Safety Programme

In 2011 UNICEF initiated the School Safety Programme (SSP) in 155 schools across eight disaster prone districts of Bihar, specifically designed to equip children with the necessary knowledge and practical skills to counteract the devastating effect of disasters. The programme envisages a sustainable life cycle supported by a dedicated community of actors inclusive of staff and children. Indeed, Disaster Risk Reduction (DRR) has been mainstreamed into the weekly schedule and curriculum of intervention schools. The regularity of School Disaster Management Committee (SDMC) meetings, peer-to-peer education (youth leaders identified to spread knowledge across year groups); mock drills and hazard hunts are key determinants of sustainability and forward momentum within the programme. Furthermore, the programme has mobilised children and staff from Bal Sansad (children parliament), Meena Manch (girls platform) or School Management Committees (SMCs) instituted under Sarva Shiksha Abhiyan (a flagship programme of Government of India for achievement of universal elementary education), and provided them with an effective mechanism for identifying, reporting and addressing risks.

This knowledge, attitude and practice (KAP) study targeted 14 intervention schools and seven non-intervention schools across seven districts of Bihar (Madhubani, Supaul, Dharbanga, Sitamarhi, East Champaran, Samastipur and the urban district of Patna), to identify the shift in knowledge, attitude and practice which has occurred through the programme under three thematic areas: the awareness and practice of children and school communities on the dos and don’ts for different disasters; their modes of learning about disasters; and the identification and mitigation of risks within school communities. The research tools included focus group discussions (FGDs) with children and the SDMC and key informant interviews (KIIs) with the headmaster; School Safety Focal Point Teacher (SSFPT); SMC president and non-governmental organisation partners. These were supplemented by child-friendly participatory exercises to stimulate and engage children.

---

6 [http://cretscmhd.psych.ucla.edu/nola/Video/MHR/Governmentreports/Psychosocial%20Issues%20for%20Children%20and%20Adolescents%20in%20Disasters.pdf pg.5](http://cretscmhd.psych.ucla.edu/nola/Video/MHR/Governmentreports/Psychosocial%20Issues%20for%20Children%20and%20Adolescents%20in%20Disasters.pdf)
Findings

In intervention schools, children displayed a comprehensive and nuanced understanding of natural and man-made hazards, the dos and don’ts for different disasters, and could delineate between structural, non-structural and invisible risks. Children also showed consistent enthusiasm and aptitude in demonstrating the practical skills which they had acquired through regular training and participatory exercises to mitigate risks (e.g. floods, earthquakes, village fires and snake bites). Children from both intervention and non-intervention schools expressed dissatisfaction with textbooks which are often dense and theoretical. In contrast, the SSP pioneers participatory teaching practices which engage and empower children. It equips children with practical knowledge and life skills which they regularly practice. Indeed, children often identified themselves as first responders and were no longer reliant on external relief assistance. In non-intervention schools, children remained hampered by their sense of powerlessness, fear and dependency in disaster contexts. They felt they had neither the capacity nor the means to address risks around them, or to enhance the safety of their families. Teaching practices were exclusively hierarchical and relied on memorisation of dense theoretical textbooks, with little emphasis on life skills or practical application.

An analysis of the findings shows that one of the most effective ways of creating a safe school environment is through creating links with the broader community that includes parents, nearby schools, Panchayati Raj Institutions (PRIs) and the Village Disaster Management Committee (vDMC). Children were also proactive and confident in sharing their DRR knowledge and skills with family and peers, serving as agents of change within the broader community. Alternatively, the programme has engendered a sense of shared responsibility with parents. The active engagement of the SMC president as a ward member often facilitates the integration of SDMP with the VDMC to achieve common goals such as raised roads to improve access to villages, resources for which could be leveraged by the VDMC. Improved village roads have resulted in safer and flood resistant roads for children, safeguarding against interruption of education in the face of disasters.

One of the key strengths of the SSP is its ability to secure the participation of children through hazard hunts, in which structural, non-structural and underlying risks are regularly identified and incorporated into the School Safety Plan. Through this process, children have the opportunity to put their knowledge into practical action, reporting risks and ensuring they are addressed. The programme orientates children to develop an evolving rather than fixed and theoretical understanding of risk. A number of testimonials indicate that lack of funds, delays in construction and inadequate resources can impede the ability of schools to address structural risks and undertake
longer term measures. However, children have become more resourceful and vigilant of risks, with students devising innovative solutions. In terms of underlying risks, children willingly assume responsibilities as they have internalised the concept that poor hygiene may result in ill health. Student members of the SDMC in a number of schools commit to checking other students’ hygiene and keeping schools clean.

Lessons learnt

The study has identified a series of lessons learnt which would help in scaling up of the School Safety Programme at state and national level. These include:

- **Key mechanisms to promote sustainability**
  Formation of shadow SDMC, active involvement of school management in all stages of the programme, mainstreaming of DRR into weekly schedule and broader curriculum.

- **Strategic partnerships**
  Building links with broader community (SMC president/integration of SDMP with VDMP), networks to support cross-learning, identification of different sources of training.

- **Building flexibility in the programme to target urban and rural schools**
  Building flexibility into the programme would optimise impact in urban schools with greater financial resources and facilities through pioneering and innovative teaching practices including the use of multimedia, whilst rural schools can collaborate closely with village communities.

- **Promote cost-effective, short-term solutions**
  Use of innovative and cost-effective measures to improve school safety in the short term, such as the use of soap water dispensers to counteract the scarcity of hand pumps for large schools.

- **Sensitise to gender/disability/social inclusion issues**
  A systematic sensitisation of the SSP to gender, disability and social inclusion issues would work towards promoting equitable coverage of the programme, without discrimination.
1
Introduction

1.1. Background to the study

1.1.1. Disaster risks in Bihar

Bihar is highly vulnerable to recurrent floods and severe earthquakes which have ravaged the landscape, resulting in mass casualties and the displacement of rural communities. The state is prone to a broad spectrum of natural disasters which include floods, earthquakes, cyclones and droughts, with frequent fatalities resulting from man-made hazards such as road accidents and house fires. Its unique geographic position and seismic status endanger the lives of its dense population, which currently exceeds 100 million. Over 15 per cent of the state is located within a highly active and volatile seismic zone (zone V while 63.7 per cent of Bihar remains under seismic zone IV).

Indeed, Bihar’s proximity to the Himalayas places large numbers at risk of glacial melts and severe flooding, which have intensified in recent years. The Kosi river (also referred to as ‘River of Sorrow’) floods in 2008 provide a poignant reminder of the destructive force of natural disasters, affecting 4.8 million people, 300,000 houses and 340,000 hectares of crops. The threat of floods persists in 76 per cent of north Bihar and is compounded in low-lying areas which remain water-logged for extended periods, resulting in public health crises such as epidemics, malnutrition and starvation.
Instances of moderate to severe drought affected 13 southern districts of the state in 2007, 2008, 2009 and 2010, affecting the agricultural yield. Other local hazards include sharp wind speeds (which exceed 47 m/s) and affect 27 out of 38 states. These hazardous features leave the state susceptible to “serious disruption[s] in the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community of society to cope using its own resources”.

1.1.2. Impact of disasters on children

During disasters, children are particularly vulnerable and require special protection. Their young age, physical ability and dependency on a support system place them at severe risk of harm. Indeed, despite failures to adequately document the disparate impact of disasters on children, it is estimated that children constitute 40 per cent of the causalities that occur during disasters.

The destruction of homes and separation from family often leave children exposed to homelessness and extreme poverty. In the aftermath of a disaster, children are likely to face malnutrition and ill health, often resulting in long term psychosocial harm. Children experience grief, struggle to cope or feel withdrawn and non-communicative. Disruptions in access to education and the absence of a support network and nurturing environment will often impede healthy growth, cognitive development and emotional well-being. They may also experience abandonment or neglect as families and communities, or government may be unwilling or unable to meet their basic needs. Children are also at particular risk of distress selling, trafficking and forced labour. Indeed, disasters often obscure the secondary issues which children face such as violence and abuse. It is clear that whilst disasters may strike for a very limited amount of time, they carry lasting consequences which can affect children for a lifetime.

1.1.3. Role of school communities in disaster risk reduction

The role of schools in the occurrence of a disaster is fundamental at a number of stages. First and foremost, in their daily curricular activities schools can offer adequate preparation to the children to make them aware of the different disasters, of the dos and don’ts of specific situations, and the underlying risks that children face. Preparedness greatly enhances safety and confidence during disasters. Schools are responsible for taking the structural and non-structural measures necessary to mitigate the impact of disasters on the school community. In the aftermath of a disaster, school activities can be an anchor

---

8 ibid
9 ibid
11 Tackling the Fury of the Kosi. Documentation of UNICEF response during Kosi floods in Bihar.
of regularity and safety to child victims. Moreover, in times of crisis, school premises can offer material support, such as food and shelter, and be a safe space for the whole village community that is affected. Finding refuge in the schools might offer further protection against the dangers of trafficking and forced labour.

As outlined below, a number of schemes have been focusing on the need to support and enhance the role of schools in disasters. However, obstacles such as lack of teachers’ training, limited amount of time within the curriculum, non-innovative teaching methods and a failure to adequately prioritise dedicated teaching prevent a full realisation of such programmes. Many schools in Bihar, therefore, are still lacking the knowledge, skills and infrastructure necessary to face a disaster.

1.2. Relevance of international and domestic standards

It is clear that disasters often interrupt access to education and increase the risk of human rights violations faced by children. They can also aggravate inequalities and intensify socio-economic disadvantage. In recognition of the vulnerability and specific needs of children, the Government of India (GoI) has ratified a number of international human rights instruments on respecting, protecting and fulfilling the rights of every child.

In terms of international development and human rights standards, the GoI has been making incremental progress towards achieving the Millennium Development Goals (MDG) for a number of decades. Particular priority is placed on ensuring that “children everywhere, boys and girls alike” are enabled to “complete a full course of primary schooling” even in hostile learning environments such as disaster contexts (MDG Goal 2). The GoI have also ratified the UN Convention on the Rights of the Child (UNCRC), which affords children a broad spectrum of protections from economic and social rights to civil and political rights which are highly relevant to disaster contexts.

In terms of disaster-specific instruments, the South Asian Association for Regional Cooperation (SAARC) Framework for Care, Protection and Participation of Children in Disasters reinforces India’s commitment to scaling up disaster management to safeguard, for example, access to education in support of children’s survival and human rights. Alternatively, the Hyogo Framework for Action (2005-2015) aims to build the resilience of communities and nations to disasters. In particular, Priority 3 seeks to ensure that “knowledge, innovation and education [are fully utilised] to build a culture of safety and resilience at all levels”. In addition, the Children’s Charter for Disaster Risk Reduction codifies the views of children from 21 countries on the impact of disasters on their lives. It demands that (i) schools are kept safe and education is not interrupted, (ii) child protection
be a priority before, during and after a disaster, (iii) children have the right to participate and to access the information they need, (iv) community infrastructure must be safe, and relief and reconstruction must help reduce future risk, and (v) disaster risk reduction must reach the most vulnerable.

On a domestic level, Article 21-A of the Constitution of India guarantees access to free and compulsory education before, during and after emergencies. The Right of Children to Free and Compulsory Education Act, 2009, imposes binding legal obligations on schools to guarantee access to free and compulsory education for children aged 6-14 years. This is complemented by Sarva Shiksha Abhiyan (SSA), a ground-breaking flagship programme which promotes universal access to “quality” and “useful” education for children aged 6-14 years. The effectiveness of SSA is contingent on community ownership of school based interventions (e.g. engagement of Village Education Committees and Panchayati Raj Institutions) and the leveraging of funds from government schemes. SSA also introduces Meena Manch (leadership platform for adolescent girls) and Bal Sansad (youth parliament). In contrast, the Disaster Management Act, 2005, establishes the institutional framework for disaster management at national, state and district level.

1.3. School Safety Programme

A critical priority must be placed on strengthening the safety and resilience of schools, in order to meet domestic and international standards and mitigate the risks faced by children in Bihar. In 2011, UNICEF initiated the School Safety Programme (SSP), which has been rolled out across 155 schools in eight districts of Bihar, reaching over 80,000 children. This has been facilitated through the sustained capacity building efforts of grass-root partner non-governmental organisations (NGOs). The life cycle of the programme consists of eight key steps which have proven to be highly effective and sustainable in building the resilience of school communities. At the heart of the programme is the adoption of a child-centred participatory model in which the entire school community is mobilised to identify and address risks, whilst building stronger networks between schools, the Village Disaster Management Committee (VDMC) and government institutions. The eight key steps are:

1. Sensitisation of Education Department and school management

For the programme to be successfully implemented, the Education Department identifies at-risk schools and the District Education Officer

12 “Ensuring Safe Learning Environment for Children” – A Roadmap for District Administration (UNICEF 2013) pg.13
(DEO) and Block Education Officer (BEO) issue orders to the headmaster who appoints a School Safety Focal Point Teacher (SSFPT). To initiate the programme, school management are sensitised to school safety issues and the SSFPT is trained in greater depth at district level.

2. Organising the school community for planning and action

The SSP mobilises existing institutions created under SSA: Bal Sansad aims to develop the leadership skills of children; Meena Manch, a platform for adolescent girls to express their needs; and the School Management Committee (SMC), a body which aims to manage the school in a bottom-up and transparent manner, and whose president is a ward member. These bodies form a separate School Disaster Management Committee (SDMC), whose purpose is “to serve the school community to ensure their safety in the face of any kind of risks that threaten their physical well-being and access to education”.13

3. Identification of risks and vulnerabilities

The school community comes together to discuss the possible hazards which could disrupt its well-being. The community is then mobilised to identify such risks within the school premises through the exercise of hazard hunts. In this exercise, the children themselves identify hazards and then present them to the whole school.

4. Development of School Safety Plan

The SDMC categorises and prioritises the risks that have been identified, discusses possible measures of intervention or mitigation, and identifies skill building needs, and eventually compiles a comprehensive document, the School Disaster Management Plan (SDMP), outlining a clear long and short term action plan to implement the School Safety Plan.

5. Plan implementation

The SDMP is presented by the SDMC to the whole school. Actors such as SMC, Panchayati Raj Institutions (PRIs), BEO/DEO and the whole school

13 “Ensuring Safe Learning Environment for Children” – A Roadmap for District Administration Pg. 22
community are assigned roles towards addressing and mitigating the risks identified. In a time span of 24 to 60 weeks the programme aims at implementing the SDMP by addressing the infrastructural problems of the school, fixing the non-structural hazards, and organising periodic maintenance of the school.

6. Knowledge and life skill building

Two or three students from each class are given the role of peer-to-peer educators (PEs) and are trained by the SSFPT and the supporting NGO. On a weekly basis PEs, monitored by the SSFPTs, share their knowledge on dos and don’ts of disasters, first aid, fire safety and other skills with the whole community of children. PEs are responsible for organising practical exercises such as mock drills, and knowledge building activities such as discussions, rallies or games. In addition, training of child reporters who can write about school safety in print media are taking place.

7. Linkage of schools with community and service providers

In order to join the efforts towards a safer school with the broader community, the SDMC is shared with the PRI and with parents for support purposes. The safety agenda is taken forward also through meetings with the local service providers such as civil defence, fire stations and National Disaster Relief Force (NDRF).

8. Regular monitoring of risks and revision plan

To ensure that the safety of the school is maintained, further risks which may emerge are identified through follow-up hazards hunts, and the SDMP is updated. Some risks such as cleanliness of toilets need periodical monitoring. In addition, the children’s knowledge is supported by regular mock drills and teaching.

UNICEF provides a facilitation role in the programme – it aims to equip schools to become sustainable and proactive rather than provide financial support or address risks directly. UNICEF primarily encourages the schools to identify risks and to address them within their own potential. But the primary strength of the UNICEF SSP lies in the full engagement of children in the entirety of the cycle. Children are given adequate knowledge to assess the safety of their environment, both at school and at home. They are encouraged to share skills with their peers and families. They are driven
to take action themselves. The programme seeks for a change in the children’s attitude: they feel safer, empowered and identify as agents of change. Moreover by ensuring the regular use of participatory and engaging methods for trainings students, the SSP addresses some of the problems which previous programmes encountered.

The programme is particularly critical to Bihar in which 95.2 per cent of government schools are situated in rural areas\textsuperscript{14} and face lack of material resources, poor infrastructure and scarcity of supporting institutions. Schools are therefore particularly vulnerable to the devastating consequences of a disaster, and the School Safety Programme can change the lives of present and future generations.

1.4. Purpose and objective of the research

The objective of this study is to document evidence of the enhanced knowledge, confidence levels and practical skills of children related to DRR across 14 schools targeted by the UNICEF SSP. The study will provide a comparative analysis with seven non-intervention schools. Our main research questions seek to: (a) document the awareness level of dos and don’ts in response to different disasters; (b) identify the different modes through which children successfully learn about disasters; (c) document the ability of children to identify the risks and vulnerabilities which affect school communities, and whether appropriate measures have been taken to address these risks.

The findings aim at identifying best practices that support an effective implementation of the programme. Moreover, the study could be used to support possible replication and scaling up of the programme on a state-wide and national level.

\textsuperscript{14} Journey of School Safety, pg.8
2 Methodology

2.1. Research questions

1. Are children in particular and school community aware of and practise dos and don’ts of different disasters?

2. What are different modes through which children acquire knowledge on different disasters and school safety?

3. Do the children understand risk and vulnerabilities, have they been able to identify in their schools and have appropriate measures been taken to make school a safer place?

2.2. KAP Study

This research adopts a KAP – knowledge, attitude and practice – framework. This approach provides a clear focus for research questions and serves as a validation tool for findings.

Knowledge

The study aims to assess knowledge and awareness of children and the school community on different hazards, risks and vulnerabilities. This includes practical knowledge of dos and don’ts for different disaster scenarios and necessary school safety measures. It also includes an understanding of structural, non-structural and underlying risks which emerge before, during and after disasters.
Attitude

The study seeks to document the enhanced confidence in the children’s ability to take preventative measures and respond when faced with hazards and disasters. Indicators include the transfer of knowledge to peers, family and the broader community, the regularity of DRR activities, sensitisation to the specific needs of vulnerable groups and the representation of children from Meena Manch and Bal Sansad in the SDMC. It aims to assess whether children take the initiative in reporting risks; identify the school community as a first responder during disasters; and act as agents of change within the broader community.

Practice

The study aims to determine whether the Focal Point Teacher (FPT) regularly encourages children to participate in hazard hunts, mock drills and child reporting; whether PEs and SDMC regularly teach the school community; whether children demonstrate good practice in response to threats (e.g. hand washing for good hygiene), are able to demonstrate practical skills (e.g. duck, cover and hold for earthquake, stop, drop and roll for fire) and whether children are proactive in raising and addressing school safety concerns and hazards. These practices demonstrate evidence of social and behavioural change and sustainable habits.

Ultimately, knowledge, attitude and practice culminate in the full participation of children in developing and implementing the SDMP. Through increased knowledge of risks, they are inclined to identify and report them, and work towards their mitigation in partnership with the broader school community.

2.3. Data collection

In advance of fieldwork, the team undertook a rapid desk review of secondary data sources on the existing programme (e.g. SDMPs, process documents, annual reports and relevant surrounding literature) before undertaking primary data collection.

Once the different stakeholders were identified, the research tools and questionnaires were tested and finalised through field tests in two schools. The research tools consisted primarily of focus group discussions (FGDs), semi-structured key informant interviews (KIIs) and child-friendly participatory exercises. FGDs, conducted with the children and the SDMC, allowed us to spur discussion, to better understand the functioning of the SDMC body in its entirety, and to practise child-friendly group exercises such as mock drills. KIIs, conducted with the headmaster, SMC president, SSFPT and NGO partner, allowed us to draw detailed insights on the implementation of the programme, identify best practices and cross-check the information retrieved through the SDMPs.
Child-friendly participatory exercises

The interviews were sensitised to the needs of children and drew on a variety of interactive and child-friendly activities which complement existing practices under the SSP with which children are familiar – mock drills, drawings, demonstrations (e.g. use of stretcher, treating snake bite, etc.), observational walks around the school and hazard hunts. These exercises help to build trust and encourage children to actively participate and share their knowledge.

The primary findings were collected from 21 schools (14 intervention and seven non-intervention schools) across seven districts (Supaul, Dharbanga, Madhubani, Sitamarhi, East Champaran, Samastipur, Patna).

Our fieldwork concluded with a contextualising interview with key officials at the State Disaster Management Authority and Disaster Management Department in Patna.

Selection criteria

Intervention schools were identified by UNICEF Bihar Office and partner NGOs using the criteria below. These criteria also informed the selection of non-intervention schools in neighbouring areas.

• Multi-hazard prone areas: targeted to reach at-risk children
• Remote areas: remote and isolated areas are more vulnerable to disasters
• Rural-urban context: reflects the flexibility and adaptability of the SSP in different contexts

Collection and analysis of qualitative and quantitative data

The study identified measurable indicators to assess knowledge levels that form the basis of a comparative analysis between intervention and non-intervention schools. The use of qualitative methods assisted with cross-checking and triangulating our findings to verify their reliability. This approach allowed statistical analysis and graphical representations alongside testimonials from individual children and stakeholders articulating their views or experiences.
Gender and social inclusion

Gender issues
The gender ratio was calculated from the sample of children present in each school visited and the SDMC constitutions were examined to assess the representation of girls within the committee. Questions were also oriented to ensure equal knowledge across genders. These measures were undertaken in order to ensure the findings were sensitised to existing gender disparities in access to education throughout Bihar.

Social inclusion
In terms of thematic coverage, it was not realistic to sensitise the findings to reflect the full scale of social inclusion issues or gender disparities which exist across Bihar. This would not be measurable or achievable within the scope of the KAP Study.

2.4. Challenges and constraints
The fieldwork coincided with summer recess. This limited the availability of key informants such as the SSFPT, headmaster and SMC president in a number of schools.

In a number of schools, Maithili was the mother tongue of the child respondents. However, the impact of language and cultural barriers was assuaged by the cross-cultural sensitivity and advanced translation skills possessed by the native Hindi speakers in the team.

Time and resource constraints allowed the coverage of only a limited sample of the schools that had been targeted by the UNICEF SSP. The use of a concentrated sample increased the reliability and depth of findings by allowing for more detailed and probing questions in the schools visited.

3 Findings

3.1. Are children in particular and school community aware of and practise dos and don’ts of different disasters?

3.1.1. Multi-hazard awareness

**Intervention schools**

Children from intervention schools were largely successful in identifying both man-made and natural disasters, understanding both the regularity and impact of disasters locally. All children could readily identify floods as the most frequent hazard in rural areas and earthquakes as the most devastating. They displayed a breadth and depth of knowledge, regularly citing natural hazards such as floods, earthquake, lightning, landslide, tsunami and snake bites, alongside man-made hazards such as road accidents, cooking fires, chemical spills, electrocution and terrorism, etc. Children were also able to differentiate between structural, non-structural and underlying risks which affected the school community. They were confident in sharing their knowledge and enthusiastic about demonstrating their practical skills. Indeed, they also articulated clear views on underlying risks such as health concerns (e.g. water, sanitation and hygiene issues, diarrhoea, malaria, etc). Additionally, they were aware of child protection issues (e.g. child marriage, forced labour, gender violence).
Non-intervention schools

In contrast, across non-intervention schools, the knowledge levels and practical skills of children were severely limited. Children often displayed disproportionate levels of vulnerability, dependency and fear in confronting disaster risks. Another ground for concern were the limitations and inaccuracies in the responses, and a general hesitance in knowing what steps to take to protect themselves. Moreover, they rarely understood the causes of disasters or the immediate and long term consequences. However, children continued to demonstrate a uniform enthusiasm for learning more about DRR, providing a positive signal for the success of future interventions.

FLOOD

The majority of children interviewed were aware of the damage and devastation brought by floods. They often cited incidents of drowning, heightened risk of snake bites, damage to livestock and crops, destruction of homes and loss of school books.

Intervention schools

Children from rural intervention schools were proactive in acquiring and sharing their knowledge and skills, specifically on practical measures they can take before, during and after floods. They recommended packing adequate supplies (e.g. long lasting food stuffs, first-aid kits, drinking water, etc.) before evacuating to safe places above the flood level (e.g. schools serving as
shelters, etc.). They stressed the need to ration food, share limited resources and protect livestock by taking them to a raised platform.

**Non-intervention schools**

In contrast, knowledge levels of dos and don’ts during floods across rural non-intervention schools were alarmingly low (19 per cent) and it is clear that children remain acutely vulnerable. Indeed, there is an emerging knowledge gap between the two cohorts of children in rural areas (see Figure 1). This clear discrepancy reinforces the disparate risks faced by children in non-intervention schools when facing floods.

**EARTHQUAKE**

The feedback from children identified earthquakes as the most devastating disaster to which Bihar is prone. Children also articulated their fears and personal experiences, reflecting that whilst there are often forewarnings with floods, earthquakes are frightening and unexpected. Whilst the majority of children were too young to have had direct experience of major earthquakes, those with training fully understood the dangers involved and necessity of taking precautions.

**Intervention schools**

Within intervention schools, knowledge levels on dos and don’ts were uniformly high (91 per cent). Children correctly demonstrated the ‘duck, cover and hold’ technique in mock drill exercises. Over two thirds of the children could also explain what measures they would take at home or if furniture was not available. They also displayed specialised skills, including how to assist an injured child in evacuating a building using a makeshift stretcher or rescuing someone trapped under debris. This reflects not only their knowledge and resourcefulness, but a shift in attitude, where they identify themselves as able to protect their family and friends from harm.

**Non-intervention schools**

However, there is a deficit of practical skills across the non-intervention schools, with a marginal number of 9 per cent being aware of ‘duck, cover and hold’ practices in an earthquake scenario. This stands in marked contrast to children in the intervention schools (see Figure 2).
Textbox 2. Urban Schools

In the case of urban schools, the discrepancy between intervention and non-intervention schools is less pronounced and stands at approximately 42 per cent. This can be attributed to multiple factors including access to media coverage, textbooks and isolated training interventions. The knowledge level in urban non-intervention schools is reasonably high, with 58 per cent of children being aware of dos and don’ts in earthquakes, compared to 100 per cent in the intervention schools.

FIRE

The majority of children had first-hand experience of the devastation brought by fires across Bihar. They noted the relevance to their lives, stories of tragedy and loss, of fires spreading rapidly through rural communities due to highly flammable thatched roofs. They also highlighted the underlying climactic factors such as strong winds and high temperatures, which intensify the risks.

Intervention schools

Children from intervention schools demonstrated an in-depth understanding of precautions to take to reduce risks of fire; mitigating actions to adopt in the onset of a fire; and how to safely evacuate burning buildings. Indeed, 67 per cent knew to remain calm, “stop, drop and roll” if they caught fire, and were aware of the need to extinguish the fire from the source.
before it escalates. Over three quarters of the children highlighted the need to take adequate precautions to cook safely, (e.g. avoid leaving the stove unattended, isolate flammable materials and keep water bucket/ fire extinguisher). Alternatively, children identified the common practice of using smoke to ward off mosquitoes from livestock, and the proximity to their home representing a fire hazard. Overall, the findings were greatly encouraging, with children demonstrating a willingness and enthusiasm for communicating their knowledge at home to protect their parents.

Non-intervention schools

The children from non-intervention schools struggled to accurately identify dos and don’ts for fires, with only 9 per cent demonstrating reliable knowledge. A small percentage mentioned the need to use a protective blanket, to cover mouth with cloth and crawl to avoid inhalation of toxic smoke. Awareness of ‘stop, drop and roll’ was particularly low, especially in the absence of mock drills which are regular practice across intervention schools.

WATER, SANITATION AND HYGIENE (WASH)

The study highlighted the sensitisation of children from intervention schools to a range of underlying risks. Children expressed views on the link between poor hygiene and ill health, the dangers of open defecation, and the need for clean toilets. This reflects a shift in socio-cultural norms and provides evidence of a change in patterns of behaviour, and a broad notion of risk. In particular, the study sought to assess hand-washing practices, ability to clean hand pumps and prepare oral rehydration solution (ORS).

Intervention schools

A significant number (78 per cent) of children readily displayed their knowledge of good hand-washing practices (see Figure 3). This was cross-checked through practical demonstrations. Children recognised the need to thoroughly scrub and wash hands with soap before meals and after visiting the toilet. This figure reflects a broad social and behavioural change. In particular, children from the SDMC stressed the importance of soap being available at hand pumps, and over 60 per cent of all students expressed the need to clean hand pumps after floods. In case of diarrhoea, most children were familiar with the correct way to use ORS.

Non-intervention schools

The children struggled to demonstrate appropriate hand-washing techniques and bars of soap were rarely available at hand pumps. This finding is particular disturbing as children did not understand the diffuse adverse consequences of poor hygiene. In rural schools, the vast majority of students were not familiar with ORS. Indeed, even children who had received ORS
as part of a relief package did not understand how to use it appropriately to counteract diarrhoea. Similarly, in urban non-intervention schools confusion remained over whether it could be used to treat malaria.

3.1.2. Awareness of the school community

The SSP establishes a sustainable network of motivated actors designed to promote the ongoing participation and empowerment of all children and staff alike, to strengthen the resilience and preparedness of the entire school community. Indeed, strategies have been adopted to reach junior children who do not have DRR integrated in their curriculum, and ensure knowledge is not simply concentrated amongst senior students. In High School (HS) Shastri Nagar, Patna, and Middle School (MS) Jitwaria, Samastipur, for example, DRR knowledge is transmitted throughout the school during morning assembly time to maximise coverage of the programme across year groups.

Figure 3. Knowledge level of dos and don’ts for WASH

<table>
<thead>
<tr>
<th></th>
<th>Hand washing</th>
<th>Cleaning of hand pumps</th>
<th>Aware of ORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural-Intervention Schools</td>
<td>78</td>
<td>61</td>
<td>67</td>
</tr>
<tr>
<td>Rural Non-Intervention Schools</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Urban-Intervention Schools</td>
<td>100</td>
<td>91</td>
<td>100</td>
</tr>
<tr>
<td>Urban Non-Intervention Schools</td>
<td>83</td>
<td>13</td>
<td>17</td>
</tr>
</tbody>
</table>
Knowledge is transferred to the broader student body primarily through the SSFPT with support from the SDMC and PEs. These children are chosen according to their leadership and advocacy skills in order to engage a broader audience. In most schools, the SDMC shares with the school community on a monthly basis, the steps taken to further implement the SSP. In this way, children are aware of the hazards identified in the school and of the safety measures being taken. Bal Sansad and Meena Manch, which in non-intervention schools are merely a name on paper, through the SSP are given an opportunity to truly exercise leadership skills through the transfer of knowledge.

Teachers and headmasters are initially trained at block and district level, together with further training by the supporting NGO. They expressed their increased feeling of empowerment and engagement after the training. Mr. Amar (Samajik Sodh Evam Vikas Kendra, East Champaran) shared that several headmasters wished to become FPTs, and asked to attend the SDMC meetings. “I used to be very shy, sidelined, and thought that DRR was not for me. Now I feel involved, I am more committed and want children to participate” (FPT, HS Shastri Nagar, Patna). However some teachers in rural areas expressed the wish to receive more practical and less theoretical teaching, and more frequently (FPT, MS Tumaul, Dharbanga). On the other hand, in non-intervention schools several headmasters expressed frustration at their lack of DRR knowledge. “I wish I could give DRR knowledge to my students, but I don’t have sufficient training,” shared Father Aloisius, HS Don Bosco, Patna.

**Testimonial 1. Teacher dousing fire**

Teachers from HS Bankipur Girls, Patna, doused a fire using fire extinguishers, successfully applying their DRR knowledge and testing their skills to combat a real life threat.
3.1.3. Awareness of the broader community

The SSP has helped to spur a culture of information sharing and knowledge transfer in a number of different contexts. Recent findings estimate that the trickle out of knowledge to surrounding communities, through direct knowledge transfer to parents stand at 83,510 families across rural and urban areas. Indeed, in 13 out of 15 intervention schools visited, children regularly disseminated their DRR knowledge to their families. This indicates a broad shift in attitude where children identify themselves as ‘agents of change’ within their local communities.

Testimonial 2. Sharing knowledge on safe cooking

“Since the start of the programme, my mum has started collecting all the food before she starts cooking, and keeps always a bucket of water near the chulha (oven). In this way we can prevent fires,” shares a girl in MS Jitwaria, Samastipur. Other children check whether their parents’ nails are clean, and share with their siblings the dos and don’ts of floods and earthquakes.

Several FPTs, sensitive to the importance of DRR, encourage the children to share their knowledge. The FPT in MS Madhepur, Madhubani, issues as homework the task to practice mock drills while they play with non-intervention school children. Chintamani Singh, FPT in MS Tumal, has the habit to visit two or three of his students at home every evening, and can therefore clearly testify that they transfer their knowledge to their extended families.

The whole village community benefits from the children’s knowledge – in MS Hajipur Basant and MS Sirkhiriya, located in neighbouring villages in the district of Sitamarhi, Grameen Development Services (GDS) facilitates rallies where the students present slogans and demonstrations of DRR issues. One detail makes them particularly effective: the students move to the neighbouring village for their demonstrations. A sense of pride and competition contribute to highly engaging performances.

Conversely, children from non-intervention schools lacked both the knowledge and practical skills, and the confidence and sense of empowerment, required to spread awareness of DRR at home and within their broader community. Indeed, even the children with some knowledge

---

16 UNICEF Annual Report 2012, School Safety Programme, pg. 6
of necessary precautions lacked the impulse to share information or the understanding that it could save lives, protect their families and friends or strengthen the resilience of broader communities.

Several FPTs, sensitive to the importance of DRR, encourage the children to share their knowledge. The FPT in MS Madhepur, Madhubani, issues homework to practice mock drills while they play with non-intervention school children. Chintamani Singh, FPT in MS Tumal, has the habit to visit two or three of his students at home every evening, and can therefore clearly testify that they transfer their knowledge to their extended families.

The whole village community benefits from the children’s knowledge – in MS Hajipur Basant and MS Sirkhiya, located in neighbouring villages in the district of Sitamarhi, Grameen Development Services (GDS) facilitates rallies where the students present slogans and demonstrations of DRR issues. One detail makes them particularly effective: the students move to the neighbouring village for their demonstrations. A sense of pride and competition contribute to highly engaging performances.

Conversely, children from non-intervention schools lacked both the knowledge and practical skills, and the confidence and sense of empowerment, required to spread awareness of DRR at home and within their broader community. Indeed, even the children with some knowledge of necessary precautions lacked the impulse to share information or the understanding that it could save lives, protect their families and friends or strengthen the resilience of broader communities.

Textbox 3. Gender and social inclusion issues

In MS Banailipatti, Supaul, the school community, aware of the issues of child labour, staged an intervention for the son of the cook, previously working in the kitchen, to be admitted into school. In MS Hajipur Basant, the girls from Meena Manch repeatedly visited the family of Pinky Kumari to dissuade them from marrying her at a young age and demanding that she have the opportunity to complete her education. In MS Tumal, the students staged a play on gender violence and discrimination faced by young girls, concluding with the slogan “brothers and sisters are born equal, girls and boys have equal rights”.
3.2. What are the different modes through which children acquire knowledge on different disasters and school safety?

3.2.1. Participatory approaches: transition from passive to active learning

The overall SSP aims to challenge the notion that children are powerless or incapable of protecting themselves. The emphasis on active participation and interactive activities built into the programme fosters an enabling learning environment. Children are encouraged to express their views and demonstrate their practical skills. This recognition and opportunity to build confidence levels and self-esteem is a highly effective medium for acquiring knowledge. In addition, children understand the positive implications of the day-to-day, practical application of the skills acquired.

Non-intervention schools

In contrast, children from non-intervention schools learn about DRR through passive memorisation of their geography and science books. The teaching is delivered in a hierarchical manner and children do not feel engaged or challenged by theoretical textbooks alone. Findings illustrate the deleterious impact of this approach on motivation levels and knowledge retention. Risks are only conceptualised in abstract terms, and children lacked the capacity to demonstrate practical skills and struggled to identify the relevance or importance of DRR to their day-to-day lives.

3.2.2. Modes of learning and teaching methods

Intervention schools have pioneered different modes of learning for children to better understand risks and the dos and don’ts of disasters. These comprise of theoretical, interactive and practical methods such as textbooks and leaflets, computer aided leaning materials (in urban schools), mock drills and demonstrations, hazard hunts and peer-to-peer educators. The different modes of learning, the methods of integrating them into the existing school curriculum, and the response of the child respondents are displayed in Table 1.
Table 1. Modes of learning and teaching methods

<table>
<thead>
<tr>
<th>Teaching method/mode of learning</th>
<th>Integration into schedule</th>
<th>Response of children</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Textbooks and learning materials</strong></td>
<td>Innovative strategies have been adopted to integrate DRR into subjects such as arts, geography, psychology, physical exercise, etc. Learning materials support the integration of DRR into school curriculum for classes 6, 7 and 8.</td>
<td>The children found textbooks alone to be quite dense and theoretical, with limited relevance or application to their daily lives. This was particularly evident from non-intervention schools which rely exclusively on textbooks.</td>
</tr>
<tr>
<td><strong>Mock drills and demonstrations</strong></td>
<td>The frequency of mock drills varies across schools between weekly and bi-monthly practices.</td>
<td>Children shared that they enjoyed mock drills and demonstrations most among the teaching methods. Children from intervention schools demonstrated their skills with accuracy and enthusiasm.</td>
</tr>
<tr>
<td><strong>Hazard hunt</strong></td>
<td>Every intervention school undertook at least one initial hazard hunt at the beginning of the programme. Most schools conducted the exercise monthly or bi-monthly. Hazard hunts in many schools were not held as regularly due to risks already being identified.</td>
<td>In most schools the SDMC takes up the responsibility for hazard hunts. If asked to do a hazard hunt during interviews, children would promptly conduct the exercise and report a number of relevant issues.</td>
</tr>
<tr>
<td><strong>Peer-to-peer educators</strong></td>
<td>PEs deliver training sessions during free periods, prayer (Chetna Satra or assembly), Bal Sabha and other school community occasions.</td>
<td>PEs are proud of their role and responsibilities. Other children manifest curiosity and enquire about their specific trainings, activities and increased knowledge.</td>
</tr>
<tr>
<td><strong>Innovative teaching practices</strong></td>
<td>Intermittent (occurs in urban areas i.e. Patna city)</td>
<td>Children from intervention schools in Patna were enthusiastic about sharing their learning due to an existing ethos instituted by the SSP. One boy from MS Banki (non-intervention), Madhubani, did attend an NDRF event but failed to share his knowledge at home or school.</td>
</tr>
</tbody>
</table>

Children in intervention schools still draw part of their knowledge on DRR from geography and science textbooks, particularly from class 9 and 10. NGO partners such as Integrated Development Foundation and GDS have compiled teaching materials which are more child-friendly and accessible. This includes multimedia CDs and visual aids. UNICEF has also provided the NGOs with posters and leaflets used as teaching materials.

Most intervention schools regularly practised mock drills such as ‘duck, cover and hold’ for earthquakes, ‘stop, drop and roll’ for fires and first-aid skills for accidents. Children received specialised first-aid training on how to rescue a physically impaired classmate, how to treat a snake bite prior to seeking medical attention, how to improvise a makeshift stretcher or sling, or a life-jacket from plastic bottles.

There was no evidence of interactive activities being undertaken in any of the non-intervention schools.

During hazard hunts children themselves define risk by reporting structural, non-structural and underlying risks around the school. Risks are then categorised, prioritised and incorporated into the SSP. The active participation and ownership of school safety by the children themselves is critical to promote sustained impact.

No mechanism was in place for the reporting and addressing of risks within non-intervention schools.

The programme encourages schools to identify vocal students from Meena Manch, Bal Sansad or the SDMC to serve as peer-to-peer educators.

A number of intervention schools in Patna city have pioneered innovative teaching practices such as DRR training with use of computer suites, multimedia CDs and movie screenings, drawing competitions, slogan writing and use of child reporters. Children have also participated in workshops and demonstrations provided by the Red Cross and NDRF.
3.2.3. Duty bearers and responsibilities

**Civil society and NGO partners**

The NGO partners that implement the programme carry out the initial capacity building phase. They train SSFPTs and collaborate to appoint suitable members from SDMC and PEs. Their training includes dos and don’ts, structural and non-structural risks, as well as more technical knowledge (e.g. how to use bleaching powder, hand washing; stretchers, how to make life jackets with plastic bottles).

**School Safety Focal Point Teachers**

The SSFPT organises and encourages participation in hazard hunts and mock drills to share and disseminate to the broader school community the DRR knowledge and training they have received through workshops with NGOs, government (e.g. NDRF, fire brigades) or civil society groups (Red Cross, etc). They build the capacity of PEs as leaders and team players. SSFPTs also deliver DRR trainings to the students together with PEs and SDMC.

**Peer-to-peer educators and School Disaster Management Committee**

The role of the PE is dynamic and evolving, though common practices include teaching the student body on disaster risks and dos and don’ts ideally once a week, (with some children substituting for absent SSFPTs during disaster management classes) and conducting hygiene inspections on cleanliness and nails during prayer times. In contrast, children from non-intervention schools were not receptive to teaching practices which were entirely hierarchical and non-participatory.

---

Students showing a chart of identified risks, MS Hajipur Basant, Sitamarhi.

---

17 “Ensuring Safe Learning Environment for Children” – A Roadmap for District Administration (UNICEF 2013) pg. 24
3.3. Do the children understand risk and vulnerabilities, have they been able to identify them in their schools and have appropriate measures been taken to make schools a safer place?

3.3.1. Sensitisation to risks and vulnerabilities

The programme encourages children to conceptualise hazard as something which “affects their physical, mental and emotional well-being that can interfere with their education”. This broadens the definition of risk and ensures that it is child-centred. The programme sensitises children to structural and non-structural risks around the school environment (e.g. need to raise hand pump above flood level or need to avoid dense vegetation due to snakes), whilst raising their awareness of invisible or underlying risks (e.g. unclean water or poor personal hygiene resulting in diarrhoea) which are often overlooked but can be detrimental to health and safety.

In non-intervention schools, children’s conception of risk was narrow and static, often limited to floods, fire and earthquake, as stated in their textbook. Their understanding of risks and vulnerabilities was limited to their personal experience and fears (e.g. in the case of snake bites). Moreover, their understanding of consequences was restricted to physical damage or loss of properties.

3.3.2. Identification of risks

Every intervention school conducts a hazard hunt, an exercise in which children are asked to identify any visible or invisible risk within the school premises. The members of Bal Sansad and Meena Manch or the SDMC students generally take over the responsibility. However, the majority of children demonstrated the capacity and inclination to look out for potential risks. An innovative method is taken up by HS Shastri Nagar, Patna, where a complaint box has been instituted. Every student can report risks in this way, and they are then regularly incorporated in the SSP.
In non-intervention schools, on the other hand, there is no systematic or organised way for identifying hazards. Identification is sporadic and contingent, and risks are often not included in the School Development Plan. Children do not identify themselves as responsible nor capable for identifying risks, displaying a passive attitude towards the safety of their school and family life.

### 3.3.3. Reporting of hazards

The vast majority of students from intervention schools report the risks that they identify. When conducting hazard hunts, children are instructed to report the risks identified to the FPT. In their daily life reporting practices vary: students inform the headmaster, the teacher or the FPT. Some students feel more comfortable reporting to the SDMC student members, or the Bal Sansad’s prime minister. These risks are discussed and categorised before being incorporated into the School Safety Plan alongside proposed mitigating measures and training needs. The information is shared throughout the SDMC and discussed among the students, FPT and SMC president. The SMC president, active ward member and trusted by the village community, presents the SDMP to the VDMC.

**Testimonial 3.**

Connecting the SDMP with the VDMP
MS Vikas Public School’s students proudly report: “We told the FPT that we had to go out of the school and cross the road. There were no toilets so we had to go to the field. It was unsafe, but now we have two toilets.” Thanks to Ashok Kumar (Ghoghardiha Prakhand Swarajya Vikas Sangh), the SDMP was integrated with the VDMP, and sufficient funds were allotted to the construction of toilets.

In non-intervention schools, on the other hand, 67 per cent children do not report the risks that they may see within the school premises. Only one third of the children report them to the teachers. Bal Sansad and Meena Manch, have a very limited role, if any. The absence of people delegated to school safety prevents the children from reaching out for support.

**Textbox 4. Urban school**

Only in non-intervention HS Don Bosco, Patna, the response was different: students reported hazards to their teachers and, thanks to the commitment of the headmaster, the problems were promptly addressed. In this instance, the attitude of children in non-intervention schools was highly different between rural and urban areas. In Patna, the attitudinal discrepancy between intervention and non-intervention was less pronounced.
3.3.4. Addressing structural, non-structural and underlying risks

The research evidenced a stark distinction in the level of infrastructure between intervention and non-intervention schools. All intervention schools have been raised above safety level, while only two had not yet installed raised hand pumps. All schools had constructed toilets (apart from two that were about to build them), although the vast majority of them were not used by the students due to the lack of privacy, gender sensitivity or poor sanitation. Despite uniform progress, structural risks persisted in many intervention schools due to financial constraints or delays in construction. However, structural risks had been identified and had been included in the SSP in every school visited.

**Testimonial 4. Overcoming the lack of hand pumps**

Students showed evidence of creative solutions: in MS Banailipatti, the SDMC fills five buckets of water at the sole school hand pump, and helps all the students wash their hands before their meals. In Rajkiya Adarsh Rajput Samaj Middle School, Madhepur, the SDMC members fill old water bottles with washing soap and water. Through a hole in the cap, they squeeze soap on the hands of all students, giving them the chance to wash their hands. “Hand cleanliness helps to prevent diarrhoea and vomiting,” they say.

Schools are also active in addressing non-structural risks. The most common risks identified were the presence of snakes due to floods, nearby jungle patches or garbage piles; blocked safety of evacuation routes; and absence of boundary walls. Children from all schools reported the regular presence of snakes, particularly in floods. The students have therefore been instructed on measures to take in case of snake bite, and several schools keep now a first-aid kit with the necessary equipment. The school and village communities often showed great initiative in finding mutual support towards addressing those risks, resorting to short- and long-term solutions that proved to be creative and cost-effective.

**Testimonial 5. Parents build a boundary wall**

The students of MS Hazipur Basant, Sitamarhi, had identified the absence of a boundary wall as one of the main risks that affected their school due to the presence of stray animals, but the school did not possess the funds necessary to build one. A temporary bamboo boundary wall was funded by the parents, made aware of the problem by the children and the school community.
In non-intervention schools, the premises were raised, with the only exception of HS Don Bosco, Patna, set in an area that is not prone to floods. However, six out of seven schools did not have a raised hand pump; the majority did not have boundary walls; and no school had accessible toilets. Non-structural risks were not widely addressed either. As the children and school community were mostly unaware of WASH measures, children were neither washing hands, nor cleaning the hand pumps, or checked their personal cleanliness. This resulted in poor health and sanitation. Some schools showed overall negligence in addressing non-structural risks, such as jagged and exposed nails on school benches, inadequate spacing between desks or patches of high grass that could provide nests to snakes. The schools were, therefore, vulnerable to several risks, and didn’t show active engagement in finding measures for mitigation or solution.

Children in MS Madhepur, Madhubani, demonstrating snake bite treatment.
4 Conclusion

The analysis of findings reveals a number of key features which support the resilience and safety of school communities in which staff and students are empowered and equipped with DRR knowledge, confidence and practical skills. These features are absent from non-intervention schools in which children remained acutely vulnerable to disaster risks, hampered not only by their lack of knowledge but by their sense of powerlessness, fear and dependency.

The SSP promotes the mobilisation of students from all age groups on a horizontal axis and the inclusion of school management on a vertical axis, who are capable of leveraging resources and building partnerships with the broader community. Moreover, a resilient community is organised to build a sustainable structure which can be carried forward independently.

It is clear from the findings that since the initial input of the UNICEF SSP, schools continue to build resilience and achieve measureable improvements in school safety through sustained efforts and innovation. The programme has become deeply entrenched in their lives and achieved lasting social and behavioural change: children no longer feel dependent and powerless but understand the relationship between their behaviour and their safety; they act as agents of change in the community; and take action as first responders during disasters.

4.1. Effectiveness of child-led participatory methods

The findings reinforce the central importance of child-led participatory methods. Evidence reveals that children who regularly practise mock drills
and demonstrations retain and regularly share knowledge of dos and don’ts with their peers and parents. At the heart of the SSP are hazard hunts, which sensitise children to risk as an evolving concept and equip them with skills to independently identify and report hazards which can be mitigated and addressed through the SSP/SDMP. Another highly effective mode of learning is peer-to-peer education which draws on the confidence and leadership capabilities of individuals to positively influence the entire school community. Through the SSP, schools were clearly moving towards mainstreaming and regularising DRR in the weekly schedule and broader curriculum, expanding coverage to the entire school, and equipping junior students with key skills. Overall, children demonstrated a recurrent preference for practical life skills rather than dense, theoretical knowledge from textbooks. The evidence reveals that participatory methods foster an enabling learning environment that helps build a safer and more resilient school community.

4.2. Effectiveness of innovative practices to mitigate risks

Overall findings indicate that the schools targeted by UNICEF’s intervention have taken effective measures to address structural, non-structural and underlying risks. A number of testimonials indicate that lack of funds, delays in construction and inadequate resources can impede the ability of schools to address structural risks and undertake longer term measures. However, a number of innovative practices have been adopted by school communities to mitigate these risks such as the use of soap water dispensers and water jugs to address the problem of inadequate hand pumps for large schools.

Children in intervention schools have in-depth knowledge of risks and vulnerabilities that arise due to, for example, limited hygiene. This knowledge, coupled with the participatory environment created in intervention schools, works towards making children more confident and resourceful. They feel encouraged and responsible to find new solutions that can be used and managed independently. They feel ownership towards these creative solutions and showed them to us with pride.

4.3. Effectiveness of links with the broader community

An analysis of the findings shows that one of the most effective ways of creating a safe school environment is through creating links with the broader community that includes parents, nearby schools, PRI and VDMC. The integration of SDMP with the VDMP has allowed for the identification of common goals such as raised roads, resources for which could be leveraged by the VDMC. Improved village roads have resulted in a number
of flood-resilient school grounds and safer roads for children, elements that safeguard against the interruption of education in the face of disasters. It is clear from the findings that the active engagement of the SMC president and headmaster can be instrumental in building and maintaining these links.

Links with the broader parent community are forged through the attitude of children of sharing their DRR knowledge, as well as direct communication between school community and parents. As indicated by the testimonials, this can lead to effective safety measures being taken up by the parent community (e.g. the construction of a boundary wall by parents at HS Hajipur Basant, Sitamarhi).

These findings show that the SSP is engendering a sense of shared responsibility that goes beyond the school itself. Different parties that come into contact with the SSP understand the risks faced by children, the importance of finding solutions and collaborate towards creating a safer environment.

4.4. Effectiveness of the enhanced sense of responsibility of children

In the intervention schools, children have demonstrated an enhanced sense of responsibility in relation to school safety. For example, findings show that through the division of responsibilities among children, better hygiene norms can be observed. Student members of the SDMC in a number of schools commit to checking other students’ hygiene and keeping school clean. Children willingly assume responsibilities as they have internalised the concept that poor hygiene may result in ill health.

Moreover, an enhanced sense of responsibility and ownership is the key in the reporting, addressing and mitigation of hazards. Their engagement in school safety through regular hazard hunts is closely linked with a sense of empowerment, confidence and an evident change in attitude. The SSP provides a platform for children to participate and express their views freely, actively contributing to school safety through the responsiveness of school management.
4.5. Challenges encountered by the programme

Overall findings report sufficient evidence of the success of the programme, and of the stark discrepancies between students of intervention and non-intervention schools in terms of knowledge, attitude and practice. However, the SSP faces ongoing challenges with a severe lack of teachers, particularly in rural areas. Moreover, findings show that a close collaboration and involvement of the entire school management community, together with strong networks with the village community, result in prompter and more effective mitigation measures. However, testimonials show that the programme at times had to face the impediments that non-collaborative and disengaged actors (e.g. PRIs, headmasters and SDMCs) can bring.

The fieldwork was conducted in a time of transition for the programme: the first full cycle is completed and the input and facilitation of UNICEF and partner NGOs is slowly decreasing, with targeted schools demonstrating signs of sustainability, carrying the programme forward independently. A priority must be placed on augmenting the effectiveness of the SSP through sharing lessons and good practices from the sustained efforts and innovations of intervention schools. It is also imperative that steps be taken to scale up the programme to target non-intervention schools in Bihar and India more broadly, whose acute vulnerability to disasters continues to aggravate the risks faced by its students and the broader community.
5 Lessons learnt

The findings provide sufficient evidence that the programme, initiated in 2011, is highly effective in creating a safer school environment and in promoting a sense of empowerment and responsibility in children. The following section presents some of the best practices which have emerged throughout the analysis of the findings. These successful elements can be improved upon and replicated in the prospect of identifying mechanisms for scaling up the programme at state and national level. Such practices would contribute to the sustainability of the programme in the long run and to a wider breadth of intervention.

5.1. Sustainability

The fieldwork highlighted a number of strategic mechanisms which have strengthened the capacity of targeted schools to carry forward the programme independently, with minimal support from UNICEF partners. These features prove particularly relevant as UNICEF is currently withdrawing its inputs from the intervention schools, and will assist in scaling up.

Devolution of SDMC

Findings show that the students from the SDMC display above average levels of active engagement in DRR. This is due to their responsibilities in sharing knowledge, conducting hazard hunts and creating the SDMP. Creating a shadow SDMC composed of dedicated junior students ensures that when formal SDMC members (students drawn from class 6, 7 and 8) graduate, knowledge is retained and the SDMC will continue to function...
effectively. Junior students would also be provided with role models of engaged and proactive students. This handover procedure is already operational in schools such as MS Ranipatti, Supaul, and does not require external facilitation or further capacity building.

Ownership of the programme by school management through their active participation in all the stages of the programme

The team identified a correlation between schools where headmasters were proactive and fully engaged in school safety activities, and the speed and effectiveness with which structural risks are addressed. This approach ensures the school is responsive and accountable to children who incorporated identified risks into the SSP. Identifying practices for the continual active engagement of the headmaster in school safety activity is therefore fundamental for the continuation of the programme without the support of external actors.

Mainstreaming DRR into the broader curriculum

The findings identified that teachers in rural areas face a strenuous challenge in attempting to integrate DRR into their already overburdened curriculum, especially given the scarcity of teaching staff. However, DRR trainings demonstrated a level of flexibility and adaptability regarding the modes and times of incorporation within the curriculum, together with a vast variety of teaching methods. These characteristics leave great space for potential further mainstreaming of DRR in the schools’ weekly schedule. This would increase the number of children reached by the programme, fostering the further assimilation of DRR in their daily lives. Potential space for mainstreaming could be gained by integrating DRR in specific subjects (see Testimonial 6).

Testimonial 6. Integrating DRR in specific subjects

Teachers in Patna have been trained to insert DRR teachings into their own subject. “I am a psychology teacher. If children have problems or suffer distress, I try to enquire on what the problem could be, and show them the support that they can get from their peers,” says the FPT of HS Shastri Nagar, Patna.
5.2. Promoting strategic partnership

The findings highlight the crucial importance of building networks across intervention schools for cross-learning and information sharing purposes, working in partnership with the VDMC and PRIs to strengthen DRR knowledge and community resilience, and building lasting relationships with key stakeholders to promote coordination and collaboration.

Integration of SDMP into VDMP

Several schools testified the potential benefits of the integration of the SDMP and VDMP, which might lead to sharing the burden of structural mitigation or addressing communal risks. However, these instances were sporadic and contingent on the initiative of single stakeholders. Further attention to this potential source of collaboration would highly enhance school safety. Networks can be forged through the NGO’s mediation or through a proactive SMC president.

Creation of network between intervention schools for mentoring and cross-learning purposes

Ashok Kumar, member of GPSVS NGO, encourages the FPT and SMC president to disseminate their knowledge beyond the school community. He identifies the most active and innovative teachers within the intervention schools and invites them to share their activities and best practices within those schools that are less proactive. In this way, they create a long-lasting, sustainable network of collaboration and are able to spread good practices beyond one single institution.

Testimonial 7. School safety as a vehicle for community cohesion

The programme has brought together divided communities through the common interest of better protecting children and building disaster-resilient communities. Kamal Kamath, SMC president and member of Samajik Chetna Kendra, Madhubani, recalls the underlying religio-ethnic tensions between Hindu and Muslim communities that pervaded the village. However, since the implementation of the SSP the conflicts have been mitigated.
5.3. Targeting urban and rural schools

The findings highlighted a stark difference in the level of knowledge, teaching methods and preparedness on DRR between urban and rural schools. The enhanced infrastructure and financial resources of urban schools, coupled with the availability and retention of dedicated teachers, has provided a fertile ground for DRR training. Additionally, urban schools benefit from the presence of grass-roots civil society groups who can assist with capacity building and ongoing delivery of training (see Testimonial 8). In contrast, schools in rural areas are supported by the strong connections that the SSP creates with the broader village community. This is not present in urban areas, where the community is more fragmented. More explicit guidelines targeting the different potential of rural and urban schools would therefore be beneficial. Such guidelines would ensure that the different actors are aware of the possibilities and strengths of their specific area, without requiring any further training or funding.

Testimonial 8: Accessing external resources

“There is only so much resources that the NGO can give. But what we can really do, is show schools how to mobilise resources, and give them a sense of which resources are out there,” says Wasi, from IDF, Patna. Intervention schools in Patna, for example, have benefited from trainings with the Red Cross, NDRF or fire brigades.

5.4. Promoting cost-effective, short-term solutions

The findings show that several schools visited during fieldwork had encountered shortage of resources that interfered with a prompt response to the hazards of the school. However, the adoption of short-term, interim measures designed to improve the safety of the school communities has proved to be a successful way of mitigating possible risks. UNICEF, by sensitising the communities but restraining from giving financial help, has spurred the adoption of innovative and creative solutions. Examples were found in the use of water jugs and soap water dispensers addressing the problem of inadequate hand pumps for large schools, or life-saving skills such as how to construct makeshift life jackets from plastic bottles, make stretchers with cloth and slings from handkerchiefs.
These instances demonstrate a significant change in the attitude of the school community. However, schools could benefit from a more systematic sharing and promotion of such practices. Such training would provide inspiration to creative cost-effective measures towards the safety of children.

5.5. Sensitise to gender/disability/social inclusion issues

The SSP promotes a child-centred and evolving definition of risk and vulnerabilities. Children have undergone an attitudinal shift and identify as responsible agents who were highly responsive and proactive to addressing the specific issues surrounding gender, disability and social inclusion (out-of-school children and scheduled caste/scheduled tribe issues). A systematic sensitisation of the SSP to gender, disability and social inclusion issues would strengthen the equitable coverage of the programme without discrimination and better protect vulnerable groups of students.

Issues of forced labour and child marriage

In schools such as Banailipatti, Supaul, children have formed coalitions to push for social change, ensuring that children trapped in forced labour or those facing the threat of child marriage are rescued and enrolled in school.

Gender issues

The SSP promotes the leadership skills of girls through the active role of Meena Manch, the adolescent girls’ platform. Girls in schools such as MS Tumaul, Dharbanga, and MS Hajipur Basant, Sitamarhi, proved to be proactive in spreading awareness on gender issues (e.g. gender discrimination and violence) through a number of means, including street plays and rallies, and were ready to actively intervene in instances of violation.

Overall findings indicate that children show active engagement, innovation and a proactive attitude towards these issues, clear indicators of a sheer attitudinal change. These responses demonstrate the ease with which these issues can be mainstreamed and integrated into the intervention

---

18 Reaching the most disadvantaged and excluded children and women is central to UNICEF’s mission, and an explicit focus in the next Strategic Plan, 2014-2017.
programme. This would ensure children are familiar with gender, disability and social inclusion issues from a young age, encouraging pluralism, diversity and sensitivity to the needs of others. It would also promote a multidimensional and child-sensitive understanding of risk, ensuring that children readily identify these risks and take decisive steps to protect their peers.

**Textbox 5. Future gazing**

It is clear that a significant deficit persists in the knowledge levels, confidence and practical skills in DRR for non-intervention schools, which leaves already vulnerable and marginalised children at severe risk of preventable harm. It reinforces the critical need for immediate action from the state government and Education Department to scale up the programme to reach these children and equip them with life-saving knowledge and skills.

The emerging good practices catalogued above provide key indicators of the flexibility and adaptability of the programme across different contexts. In terms of ease of replication, children from non-intervention schools were highly enthusiastic about learning more about DRR and evidence suggests the school community would be receptive to further interventions. Furthermore, the programme requires minimal financial input and draws on the motivation, technical expertise and capacity building efforts of grass-root NGO partners on the ground. This approach empowers school communities to carry forward the programme independently.
Bibliography

**International standards (see Appendix 4)**

- The Millennium Development Goals
- The UN Convention on the Rights of the Child
- The SAARC Framework for Care, Protection and Participation of Children in Disasters
- The Children’s Charter for Disaster Risk Reduction (2011)
- The Indian Constitution – The Constitution (Eighty-sixth Amendment) Act, 2002
- The Disaster Management Act, 2005
- The Right of Children to Free and Compulsory Education Act, 2009

**Textbooks, reports and other publications**

- Child Focused Disaster Risk Education - Participants Workbook (Bangkok, 2007) 16th Community Disaster Risk Management Course
- International Federation of the Red Cross (2011) Key determinants of a successful CBDRR programme Community Based Disaster Risk Reduction Study, ARUP International Development Geneva
- UN ISDR (2008) Indicators of Progress: Guidance on measuring the reduction of disaster risks and the implementation of the Hyogo Framework for Action
Web sites and statistical databases

http://www.educationforallinindia.com/ssa.htm#co
http://www.unisdr.org/we/coordinate/hfa
http://www.un.org/millenniumgoals/
http://fmis.bih.nic.in/history.html
http://www.emdat.be/
http://www.unisdr.org/we/inform/publications/33253
http://www.savethechildren.in/custom/recent-publication/SC-CC%20CB%20DRR.pdf
http://www.unisdr.org/we/inform/publications/29304
Appendix 1

Research tools

Children and Focal Point Teachers were the main stakeholders. Other questionnaires were tailored on these two. We include the specific questions designed for the other stakeholders. All questions were followed by further probing questions, not included in the appendix.

Children

1. What hazards/disasters do the children face in the local community and school? Which are the most frequent ones? And the most devastating? How can they affect you? Can you share any experience?

2. When was the last time that you saw a flood/have you experienced the Kosi floods? What happened then? What immediate steps did you take? If a flood occurs again, is there anything you can do to protect yourself? Can you help your family members? If yes, how?

3. Are there any animals in the water during floods? Are you scared of them? Have people been bitten by snakes? What would you do if your friend is bitten by a snake?

4. Are there any diseases that you are more prone to during floods? What steps will you take to contrast diarrhoea?

5. Imagine an earthquake comes and you are in your class. What would you do? Is there any place that is particularly safe? In case there is no furniture, what do you do? Do your parents and siblings know how to react when an earthquake comes? Did you teach them?

6. Do you know what causes fire in villages? How can we prevent fires? If you are cooking at home and your clothes catch fire, what would you do?

7. Can you demonstrate how to wash your hands? When do you wash your hands? Why is it important?

8. Does the hand pump get submerged during floods? If yes, will you still draw water from it? How would you clean the hand pump? What would you use to clean it? Have you cleaned the hand pump at your home?

9. Do some specific children teach you about DRR? How do they teach you? How often?

10. Have you ever identified hazards in school? Do you participate in hazard hunt activities? If you see a hazard in the school, do you report it? Whom do you report it to? Why do you think it’s important to report it? If you don’t report it, why not? Before the beginning of the programme would you have reported it?

11. How do you learn about disasters? Do you play games, or have mock drills? Did you ever do plays, theatre performances, and slogans? Which methods do you enjoy best?

12. How important do you think it is to learn about disasters? Before the start of the programme did you have a different outlook towards disasters? Do you feel safer now?

13. Do you talk about disasters within your family? What do you share with your family? Do you think that they put it in practice? Can you give us some examples?
14. Are you aware of changes that have happened in the school after the implementation of the programme? Can you show us which ones? Take us around the school. Do you think that there are other things that can be improved or that you wished to see in your school? Are there things that have been reported and not have been addressed yet?

**Focal Point Teacher**

1. When was the School Safety Programme initiated in your school? How was it initiated? Tell more about it.

2. What is your role as a focal point teacher? How were you chosen for this role?

3. Whom did you receive training from? What were the main themes covered under the training? Are you satisfied by the training methods?

4. Which hazards and disasters are the local community most prone to? How do disasters affect children in particular?

5. What do you teach the children under SSP? What methods do you use to teach them? What methods do you think children respond best to? How often do you teach them? Do you have any fixed schedule for disaster related discussions in timetable?

6. Do you think there are any changes in the knowledge of children before and after the implementation of the programme? Are there any changes in their attitude as well? Can you tell us any situation in which children have applied their knowledge in daily life?

7. How do you think DRR is integrated into the curriculum? Did you face any challenges during the course of this programme? If yes, what are they? Did you get any support from the NGO partner in addressing them? Please share any suggestions if you have. Can the training material be improved? Can the training methods be improved?

**School Disaster Management Committee**

1. We understand that the SDMC has the role of making the school a safer place. We would like to know more about how you work, step by step. How was the SDMC formed? Did members volunteer or were they chosen? On what criteria were they chosen? What is the specific role of children in the SDMC?

2. How did you identify the risks in your school to make the SSP? What methods did you use? Who participated in the identification of risks? Were the needs of disabled children taken care of? How often does hazard hunt exercise takes place? Are there any specific risks that female children face?

3. Once you have identified the risks of the school, what is the process of incorporation of risks into the SSP?

4. Suppose a child faces a risk in school, whom does he report to? How do you manage to address issues of so many children?

5. How has engaging students in DRR impacted the development of School Safety Plans? In what way do they contribute to the development of the School Safety Plan? What do you think their main role is in the development of a School Safety Plan?
**Headmaster**

1. Have you ever had to close your school due to a disaster? Please share the experience with us.
2. What was your role in the implementation of the School Safety Programme? What were your first thoughts when the programme was introduced to you?
3. What is your role now in relation to DRR, if any? How do you manage to fulfil this role?
4. What is the relationship of the school with the SMC president? Are you involved in connecting the school to the village?
5. How has your school changed since the implementation of the programme? In what way? Have you received any support to facilitate these changes? If yes, from where have you received support? What kind of support?
6. Do you think that the school is now more prepared as a first respondent during a disaster? What would happen in case of a flood? What would happen in case of an earthquake? Is it less likely that school will have to be closed?

**SMC president**

1. What is your role in the SDMC? What are your specific responsibilities in implementation of SDMP?
2. What are the DRR measures taken in the school? What was your role in making these changes happen? What steps do you take once the risks are identified?
3. What is the effect of this programme in the village community? How has the relationship between the school and the village community changed since the programme implementation? Is the PRI aware of the School Safety activities that take place in the school? Do they contribute in any way? Do you think their contribution is necessary?

**NGO**

1. How do you select schools for DRR programme?
2. What steps did you take to implement DRR in this school? What was the reaction of the headmaster?
3. What kind of training do you deliver to the school community? Did you ever face any challenges in the training? Which training methods do you regard as are more effective?
4. Do you have any suggestion to other NGOs that want to support the implementation of DRR in schools?
Appendix 2

Stakeholders interviewed

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>729 (305 boys, 424 girls)</td>
</tr>
<tr>
<td>SDMC</td>
<td>10</td>
</tr>
<tr>
<td>SSFPT</td>
<td>10</td>
</tr>
<tr>
<td>SMC president</td>
<td>7</td>
</tr>
<tr>
<td>Headmaster</td>
<td>12</td>
</tr>
<tr>
<td>NGO</td>
<td>7</td>
</tr>
</tbody>
</table>
## Appendix 3

### Field Study Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>District</th>
<th>Block</th>
<th>Schools</th>
<th>NGO Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>17/6/2013</td>
<td>Madhubani</td>
<td>Madhepur</td>
<td>Intervention</td>
<td>RSMS Madhepur</td>
</tr>
<tr>
<td>18/6/2013</td>
<td>Madhepur</td>
<td>Madhepur</td>
<td>Intervention</td>
<td>MS Khor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-intervention</td>
<td>MS Banki</td>
</tr>
<tr>
<td>19/6/2013</td>
<td>Birpur (Supaul)</td>
<td>Basantpur</td>
<td>Intervention</td>
<td>MS Parmanadpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-intervention</td>
<td>MS Banailipatti</td>
</tr>
<tr>
<td>24/6/2013</td>
<td>Darbhanga</td>
<td>Ghanshyampur</td>
<td>Intervention</td>
<td>MS Tumaul</td>
</tr>
<tr>
<td>26/6/2013</td>
<td>Sitamarhi</td>
<td>Runnisaidpur</td>
<td>Intervention</td>
<td>MS Hajipur Basant</td>
</tr>
<tr>
<td>27/6/2013</td>
<td>Sitamarhi</td>
<td>Runnisaidpur</td>
<td>Intervention</td>
<td>MS Sirkhiriya</td>
</tr>
<tr>
<td>28/6/2013</td>
<td>East Champaran</td>
<td>Banjaria</td>
<td>Intervention</td>
<td>MS Janerwa</td>
</tr>
<tr>
<td>29/6/2013</td>
<td>East Champaran</td>
<td>Banjaria</td>
<td>Intervention</td>
<td>MS Siswania</td>
</tr>
<tr>
<td>01/07/2013</td>
<td>Samastipur</td>
<td>Kalyanpur</td>
<td>Intervention</td>
<td>MS Jitwaria</td>
</tr>
<tr>
<td>07/02/2013</td>
<td>Samastipur</td>
<td>Kalyanpur</td>
<td>Intervention</td>
<td>MS Tira</td>
</tr>
<tr>
<td>07/03/2013</td>
<td>Patna</td>
<td>Patna City</td>
<td>Intervention</td>
<td>Bankipur Girls HS</td>
</tr>
<tr>
<td>07/04/2013</td>
<td>Patna</td>
<td>Patna City</td>
<td>Intervention</td>
<td>Girls HS Shastri Nagar</td>
</tr>
<tr>
<td>07/05/2013</td>
<td>Patna</td>
<td>Patna City</td>
<td>Non-intervention</td>
<td>DAV Public School</td>
</tr>
</tbody>
</table>

Organisation Name: SCK, Mr. Digambar Mandal

GPSVS, Mr. Ashok Kumar

BSS, Mr. Shyam Kumar

GDS, Dr. Mandvi Dikshit

CARD, Mr. Paras Nath Singh

IDF, Mr. Babul Prasad

DAV Public School
Appendix 4

International human rights framework

Millennium Development Goals

The Government of India have been making incremental progress towards achieving the Millennium Development Goals for a number of decades, placing a particular priority on access to universal elementary education. Goal 2 of the MDGs aims to ensure “children everywhere, boys and girls alike” are enabled to “complete a full course of primary schooling” even in hostile learning environments such as disaster-contexts.

UN Convention on the Rights of the Child

The UNCRC affords children a broad spectrum of protections from economic and social rights (e.g. right to education, health, shelter) to civil and political rights (e.g. right to freedom from violence, exploitation, etc.). In particular, it recognises the right to survival and development (Article 6), the right to education (Article 28), the right to the highest attainable standard of health (Article 24) and the need to place children at the centre of decision making on issues that affect them (Article 12 CRC).

Disaster-specific instruments

SAARC Framework for Care, Protection and Participation of Children in Disasters

The SAARC Framework reinforces India’s commitment to scaling up disaster management to safeguard continuum of service provision (e.g. to guarantee access to education) in support of children’s survival and human rights. It advocates a comprehensive, multi-stakeholder approach to scale up disaster management across schools. It also recommends that formal education be supplemented with practical and interactive learning activities. It endorses the use of ‘peer-to-peer’ educators, seeking to empower children to serve as community role models to disseminate DRR knowledge to out-of-school children and marginalised groups.


The Hyogo Framework aims to build the resilience of communities and nations to disasters. In particular, Priority 3 seeks to ensure that “knowledge, innovation and education [are fully utilised] to build a culture of safety and resilience at all levels”.

Children’s Charter for Disaster Risk Reduction

The Children’s Charter codifies the views of children from 21 countries on the impact of disasters on their lives. It demands that (i) schools are kept safe and education is not interrupted, (ii) child protection be a priority before, during and after a disaster, (iii) children have the right to participate and to access the information they need, (iv) community infrastructure must be safe, and relief and reconstruction must help reduce future risk, and (v) disaster risk reduction must reach the most vulnerable.

Ahmedabad Action Agenda for School Safety (2007)

India made a pledge to achieve “the zero mortality of children in schools from preventable disasters by 2015”. The Action Agenda included commitments to integrating DDR education in schools, to developing disaster-resistant school infrastructures, to
ensuring the safety of school and community environments and to ensuring government policy is responsive to school safety issues.

**Domestic priorities**

**Indian Constitution**

The Constitution (Eighty-sixth Amendment) Act, 2002, inserted Article 21-A in the Constitution of India which guarantees access to free and compulsory education before, during and after emergencies.

**Sarva Shikshak Abhiyan**

SSA represents a ground-breaking flagship programme which promotes universal access to “quality” and “useful” education for children aged 6-14 years. The effectiveness of SSA is contingent on community ownership of school-based interventions (e.g. engagement of Village Education Committees and Panchayati Raj Institutions) and the leveraging of funds from government schemes (e.g. Mahatma Gandhi National Rural Employment Guarantee Act). SSA also introduces Meena Manch and Bal Sansad.

**Disaster Management Act, 2005**

The DM Act establishes the institutional framework for disaster management at national (National Disaster Management Authority), state (State Disaster Management Authority) and district (District Disaster Management Authority) level. The provisions reflect a broader paradigm shift from relief-centric disaster response across India to a mitigation driven, DRR model.

**The Right of Children to Free and Compulsory Education Act, 2009**

The RTE Act imposes binding legal obligations on schools to guarantee access to free and compulsory education for children aged 6-14 years. It also seeks to promote a safe and secure learning environment and to target out-of-school children to ensure they are enrolled and continue to attend school.
Acknowledgements

We would like to take this opportunity to express our immense gratitude for what has been a transformative and deeply rewarding cultural and learning experience.

First and foremost, we would like to thank the children and school communities we visited for their tremendous hospitality, warm welcome and enthusiastic participation. They have been the heart of this internship, and their unique insights have supported our study with remarkable findings.

We would also like to pass on a special thank you to the NGO Grameen Development Services who provided us with accommodation and supported our logistical needs throughout this internship. We would like to thank Dr. Mandvi Dikshit and Bharti Verma, and extend special thanks to Aqeel Ahmad for his invaluable help throughout our fieldwork, his company and friendship.

We would also like to pass on our sincere appreciation for the support of partner NGOs who facilitated our fieldwork across seven districts of Bihar. Their sustained efforts to build the resilience of school communities helped to keep us focused and motivated through challenging conditions. Thank you to Samajik Chetna Kendra, Samajik Shodh Evam Vikas Kendra, Ghoghardiha Prakhand Samajik Vikas Sanstha, Centre for All Round Development, Bihar Seva Samiti, Grameen Development Services and the Integrated Development Foundation. We would like to take the opportunity to express the most sincere admiration for their commitment and their achievements in this project.

Finally, the team expresses its heartfelt thanks to Banku Bihari Sarkar, Ghanshyam Mishra and Shailesh Kumar Nayak of UNICEF Bihar and Mona Anand for their time, guidance and commitment to support our work.

With sincere gratitude,

School Safety Team

Sunakshi Bhatia, Giulia Contò, Yasin Khan, Paul McGlinchey
Background Note on the Internship Programme

Knowledge Community on Children in India (KCCI) initiative aims to enhance knowledge management and sharing on policies and programmes related to children in India. Conceived as part of KCCI, the objectives of the 2013 Summer Internship Programme were to give young graduate students from across the world the opportunity to gain field-level experience of and exposure to the challenges and issues facing development work in India today.

UNICEF India hosted 23 young interns from Aomori University, Azim Premji University, Cambridge University, Georgetown University, Gujarati University, Harvard University, IIT, Institute of Rural Management, Jamia Millia Islamia, Jawaharlal Nehru University, M.S. University of Baroda, New York University, Queen’s University Belfast, Simon Faser University, University of Amsterdam, University of Connecticut, University of Delhi, University of East Anglia, University of Ottawa, University of Oxford, University of Pune, and TERI to participate in the 2013 Summer Internship Programme. Interns were grouped into teams of three or four and placed in research institutions across five states (Bihar, Delhi, Jharkhand, Kerala and Madhya Pradesh) studying field level interventions for children from 27 May to 2 August 2013.

Under the supervision of partner research institutions, the interns conducted a combination of desk research and fieldwork, the end result of which were 6 documentations around best practices and lessons learnt aimed at promoting the rights of children and their development. The case studies cover key sectors linked to children and development in India, and address important policy issues for children in the country few being disaster risk reduction, child protection, education, policy planning and evaluation.

Another unique feature of this programme was the composition of the research teams comprising interns with multidisciplinary academic skills and multicultural backgrounds. Teams were encouraged to pool their skills and knowledge prior to the fieldwork period and devise a work-plan that allowed each team member an equal role in developing the case study. Group work and cooperation were key elements in the production of outputs, and all of this is evident in the interesting and multifaceted narratives presented by these case studies on development in India.

The 2013 KCCI Summer Internship Programme culminated in a final workshop, at which all teams of interns presented their case studies for a discussion on broader issues relating to improvements in service delivery for every child in the country. This series of documentations aims to disseminate this research to a wider audience and to provide valuable contributions to KCCI’s overall knowledge base.