HOPE 87
Hundreds of Original Projects for Employment

COMPREHENSIVE SCHOOL SAFETY

The recognition of children's rights to survival and protection as well as to education and participation is the core of these child-centered, child-participatory, and evidence-based efforts towards school safety.

School Based Disaster Risk Management (SBDRM)
Towards a model approach – progress, key gaps and needs identified

CSSF Model

Progress in Pakistan/KP

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ACRONYMS

CSSF	Comprehensive School Safety Framework
UN	United Nation
ADPC	Asian Disaster Preparedness Centre
UNICEF	United Nations International Children's Emergency Fund
IFRC	International Federation of Red Cross and Red Crescent Societies
HOPE'87	Hundreds of Original Projects for Employment
INEE	Interagency Network for Education in Emergencies
SFDRR	Sendai Framework for Disaster Risk Reduction
RRR	Risk Reduction and Resilience
EFA	Education For All
AEPAM	Academy for Education Planning and Management
SAARC	South Asian Association for Regional Cooperation
ASEAN	Association of Southeast Asian Nations
NDMP	National Disaster Management Plan
DM	Disaster Management
NEP	National Education Policy
NPA	Nation Plan of Action
MDGs	Millennium Development Goals
KP	Khyber Pakhtunkwa
DRR	Disaster Risk Reduction
HFA	Hyogo Framework for Action
ESP	Education Sector Plan
PTC	Parent Teacher Council
NDMA	National Disaster Management Authority
NIDM	National Institute of Disaster Management
MHVRA	Multi Hazard Vulnerability Risk Assessment
CBDRM	Community Based Disaster Risk Reduction
MOVERE	Mobilization of Volunteers Emergency Response Exercise
GOERE	Government Officials Emergency Response Exercise
PSSF	Pakistan School Safety Framework
IPEMC	Inter Provincial Education Ministers Conference
MOFE&PT	Ministry of Federal Education and Professional Training
PC	Planning Commission
MoE&SE	Ministry of Elementary and Secondary Education
DRRSC	Disaster Risk Reduction Steering Committee
PITE	Provincial Institute for Teacher Education
DMT	District Master Trainer
ADP	Annual Development Plan
SDMP	School Disaster Management Plan
ECED	Early Childhood Education and Development
ECHO	European Commission Humanitarian Aid and Civil Protection
DESDRM	District Education Sector Disaster Risk Management
DP	Disaster Preparedness
PHED	Public Health Engineering Department
PDMA	Provincial Disaster Management Authority
SOP	Standard Operating Procedures
DCTE	Directorate of Curriculum and Teachers Education
ERT	Emergency Response Team
LEA	Local Education Agency

Foreword

Children are the most valuable asset and are amongst the most vulnerable segments of society. Destruction caused by major earthquakes in the South-East Asian region of the past few years remind us of insufficient progress towards safe schools. One of the most tragic aspects of the October 8, 2005 earthquake in Pakistan was the disastrous collapse of schools where over 8,000 schools were either destroyed or damaged beyond repair. Over 18,000 school-age children perished in these collapsed schools (approximately 23% of the total deaths). There is a potential threat of similar disaster in various areas of Pakistan such as Northern Areas, Kashmir, Balochistan, Khyber Pakhtunkhwa (KP), FATA, and parts of Sindh and the Punjab with approximately 30,000 such schools being located in similar seismically active zones. KP is also exposed to a few other major hazards such as Earthquakes, Flooding, Landslides.

A safe school can provide a safe space for the present and the future generations of children to live and grow. Investment in safe schools have multiple benefits as schools can also be used as 'safe havens' for shelters and relief activities center during and after a disaster, frequencies of which are increasing every day. Whereas, and anthropologically, schools have known to be a key contributing factor in socio-cultural development of a society, educating children within schools about risks and response to risk also have a multiplier effect of educating the public through children. A schools have a major role in the development, transferring knowledge and acting as safety messengers, teaching risk safety to children is a good investment as children often have a high capacity of learning.

Mr. Anwar Ul Haq
Provincial DRR Focal Person (Ex Deputy Secretary)
Elementary & Secondary Education Department
Khyber Pakhtunkhwa

Preface

HOPE'87 started its journey towards safer schools in 2007, soon after the Kashmir earthquake of 2005. The first interventions focused on the structural safety of the infrastructure and school buildings. Through interactions with the children and teachers, the need to combine and integrate preparedness, disaster management and response combined with a sustained and continuous process of knowledge transfer through education was identified.

A set of approaches was field tested in different areas of Pakistan from 2009 to 2011. The 2009 Swat displacement, 2010 floods and complex emergencies in north west part of the country provided the opportunity to better understand the effects of disasters on the education sector. This learning further helped refine the approaches to school safety and a methodological approach was developed in 2012. The comprehensive school safety framework developed by GADRRRES in 2013 provided further guidance and enriched the content.

With consistent and regular support of European Commission Humanitarian Aid & Civil Protection (ECHO) and Austrian Development Cooperation (ADC) since 2011, the model has gone through different stages of piloting and testing to scale.

With the aim of consolidation of the model approach for school safety, especially in KP province the initiative for a study on the progress, key gaps and needs identified was initiated.

The dedicated staff at HOPE'87 Pakistan provided help and support to conduct interviews with key government departments and functionaries. These staff including Ahmed Abbas (Director Operations), Syed Israr Ali (Senior Program Manager), Zohaib Omer Mirza (DRR Manager), Dawood Iftikhar (M&E Manager) and Saba Saqlain (Advocacy and Communication Manager) reviewed the draft report and provided inputs from time to time. Dawood Iftikhar (M&E Manager) and Mohammad Qasim worked tirelessly for the layout and composing of the report.

I would like to extend a special thanks to Mr. Anwar-ul-Haq DRR Focal Person and Mr. Qaiser Alam Khan Special Secretary of Ministry of Elementary and Secondary Education (KP) for their valuable inputs and insights.
In the end a special thanks to my wife for her continued and unwavering support.

Mr. Shoaib Haider
Country Director
HOPE'87

Dedication

To all the grown-ups:
I ask the indulgence of the grown-ups who may read this book for dedicating it to a child.
I have a serious reason: this child is the hope for the future we have in the world.
I have another reason: this child helps me understands everything about the safety of children.
I have a third reason: this child went to a school, where s/he had little say. S/he needs to be heard.
If all these reasons are not enough, I will dedicate the book to the grown-up who was once a child at school.
All grown-ups were once children—although few of them remember it.
And so I correct my dedication:

To all grown-ups,
When they were a little child at school – was your school 'safe'?

chapter 2

Executive Summary

In Pakistan, one of the main factor of the slow progress on MDG targets for education indicators was a series of natural disasters, along with political events which affected the country during the past 7-8 years. During the last decade more than 20,000 schools were damaged or affected by natural and man-made disasters; remaining schools served as temporary shelters for the affected families for varied duration of time. Schools and educational activities were adversely affected and progress in educational indicators slowed (source: National Plan of Action (NPA) to accelerate education-related MDGs 2013-16, GoP, UNICEF, UNESCO. Sep 2013).

In KP, the total number of schools under elementary and secondary education (EnSE) department is 27,905 for children (ages5–16yrs, 37.14% for girls).

Level of schools: 81.56 % primary (age 5–10yrs, 36.89% for girls), 9.43% middle (age 10–13yrs, 42% for girls), 9.01% secondary (age 13–16yrs, 34.33% for girls). The total number of children in these schools is 4,174,229 (42.85% girls). The school children especially girls are most affected by the disasters, with the least coping capacities for responding, recovering from and preparing for crises.

The analysis below is based on the SBDRM model and looks at the key problems, needs and risks at: over arching policy level and alignment to planning processes followed by the 3 pillars of school safety (1. Structural safety, 2. School Disaster Management (SDM), 3. Risk reduction and resilience education).

Overarching policy level: At national level the different elements of SBDRM were referred to in several key documents; National Education Policy 2009 (under Education in Emergencies), NPA (key challenges to access – structural safety, inclusion of DRR in curriculum), School safety action plan 2012 (heavily structural improvement centered), Education sector plan (ESP) KP (limited to response preparedness), National Disaster Management Plan NDMP (curriculum only), NDMP implementation roadmap 2015-2030 (first time referred to 'School Safety'). None of the above mentioned policy and guidance documents referred to the integrated and coordinated systematic Comprehensive School Safety approach (developed by GADRRES – adopted as the SBDRM model) with focusing on reducing underlying risks by investing in multiple components that enhance preparedness, build resilience and redress core development deficits. To this end the Pakistan School Safety Framework (PSSF) drafted by NDMA (with support of HOPE'87, British Council, UNICEF) has been tested in both public and private schools. Key needs identified are:

- Incorporate the learning's of testing in PSSF and subsequent legal cover.
- Integration of SBDRM model approach in the NEP 2009.
- Education in Emergencies in Pakistan remains reactive due to lack of locally contextualized EiE guidelines and education continuity plans.
- Lack of any national or provincial guidelines for education continuity based on INEE standards.

Pillar 1 – Structural safety of school buildings is discussed in detail as part of the UNHABITAT application for DP/DRR action (developed under a coordinated approach). Briefly, however there is urgent need to prepare tools and guidelines for the retrofitting of the existing school buildings, together with a prioritisation schedule for retrofitting by the education department.

Pillar 2 – SDM: PC1 for replication and roll out of SDM trainings and activities was prepared during previous action. Based on the learning's during testing at scale in 3 districts, PC1 was rationalized by DCTE and has been approved by departmental planning committee of EnS Department for putting it on the agenda of Provincial Development Working Party and included in the shortlisted schemes of ADP scheme for 2017-18. The key needs identified are:

- Support the MoEnSE and DRR Focal person of education department for the preparation of PCII – PCIII in a timely manner for effective roll out, replication and scale up of

SBDRM model, prioritizing urban centers.

- Making use of the SDMPs prepared by school teachers and data entered in MIS helped the district education managers prepares district DRM plans for 3 districts. Another key need is to integrate the SDMPs data in the education management information system (EMIS) for data collection and information management on at least annual basis. This is necessary for practical manifestations of the DESDRM and PESDRM integration in to the DRM plans at district and provincial levels.
- Empowerment of PTCs to act at SDMC and take practical DRR measures at school.
- Develop/enhance linkages with the child protection measures (ban on corporal punishment, child protection bill etc.) need to enhanced for psychosocial support measures and particularly in urban areas for family reunification planning, student release procedures approved by parents/guardians and safe school transportation in urban centers.
- Lack of clear link between community early warning system and school early warning system. The system (which is already in place (theoretically), developed by PDMAs) does not provide an end-to-end solution. Education manager along with school principle should be the lead authority to initiate early warning system. Things to do after receiving early warning is already clearly mention in SOPs.
- Contingency plans based on INEE standards for better response preparedness need to be developed by the MoEnSE. Simplified solutions for alternate modes of instruction need to be identified, tested and adopted. Explore linking with home based workers through CFW, so that if transportation is an issue, local home based school can be an option against CFW till schools are able to reopen. Alternative locations need to be identified by DEOs along with district administration while following minimum standard outlined in INEE. To enable education mangers, a capacity building program may be required so that they are able to exercise it in a true spirit where DCTE and PITE are focal points for alternative modes of instruction.
- Regular practice of evacuation drills across all schools linked to the community simulation drills where possible.
- Establish and strengthen linkages to community emergency response teams (ERTs) and specialized agencies such as Rescue 1122, law enforcement agencies (LEA), especially in urban centers for early warning, SOS messaging.
- Lack of structured monitoring by the education department. Integration in to regular monitoring and evaluation structures of provinces can be the starting point.

Pillar 3 – Risk reduction and resilience education: With only entry level work done under pillar 3 of SBDRM in a structured manner the following key needs have been identified:

- Lack of consensus-based key learning focus for reducing household and community vulnerabilities, and for preparing for and responding to hazard impacts which can serve as a foundation for formal and non-formal education.
- Lack of scope and sequence for teaching about critical thinking for expected and un-expected, man-made and natural disasters, climate change impacts and problem-solving for risk reduction need to be developed.
- Cross-curricular infusion of DRR education into formal school curricula.
- Lack of quality teaching and learning materials for DRR education.
- Expansion of regular extra-curricular DRR activities to increase school and local community resilience.
- Establish and strengthen engagement with the provincial curriculum review committee and the text book boards for the inclusion and publication of text books in the next editions due to be printed and available in 2018.

chapter 3

The Systematic Model Approach

The Systematic Model Approach

The Comprehensive School Safety Framework has been defined collectively by a host of UN agencies, international organisations and non-governmental organisations in March 2013. These include UNICEF, INEE, IFRC, UNESCO, World Vision, Plan International, ADPC, Child Fund, SEAMEO, and Save the Children. The framework works towards a global approach for climate-smart disaster risk reduction, bringing development, and humanitarian action in the education sector.

Goals of Comprehensive School Safety

- Protect students and educators from death, injury, and harm in schools
- Plan for continuity of education through all expected hazards and threats
- Safeguard education sector investments
- Strengthen risk reduction and resilience through education

The Three Pillars of Comprehensive School Safety

Comprehensive School Safety is addressed by education policy and practices aligned with disaster management at national, regional, district, and local school site levels. It rests on three pillars:

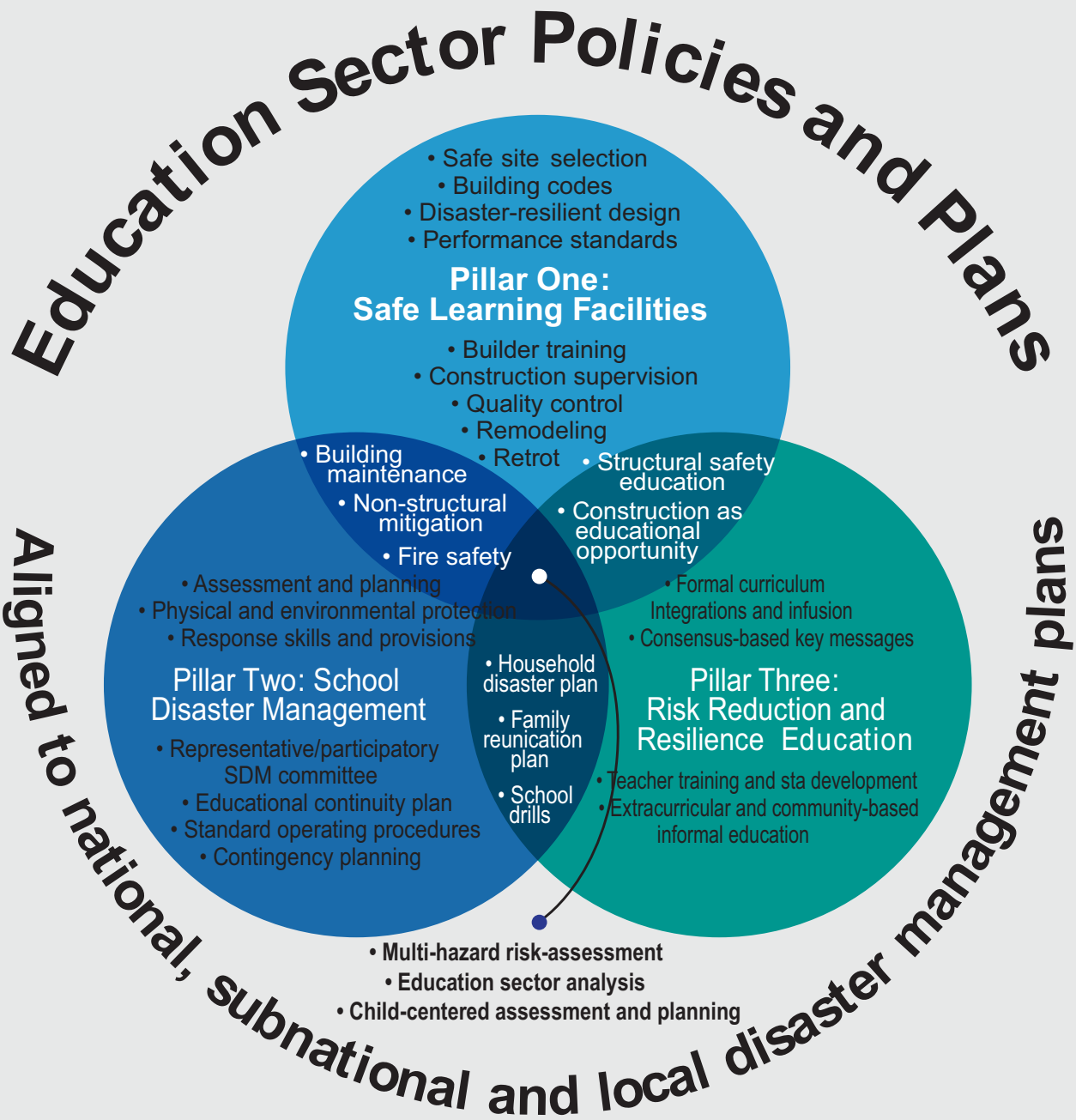
1. **Safe Learning Facilities**
2. **School Disaster Management**
3. **Risk Reduction and Resilience Education**

The foundation of planning for Comprehensive School Safety is multi-hazard risk assessment. Ideally, this planning should be part of Educational Management Information Systems at national, sub-national, and local levels. It is part of the broader analysis of education sector policy and management that provides the evidence base for planning and action.

Purpose

The Comprehensive School Safety framework aims to reduce the risks of all hazards to the education sector. Over the past decade, children's advocates have come together to:

- Improve children's equal and safe access to quality, inclusive, and integrated basic education
- Monitor and evaluate progress of initiatives that reduce disaster and conflict risks
- Increase availability of and access to hazard-related evidence (such as multi-hazard early warning systems data and disaster risk information)
- Promote risk reduction and resilience in the education sector. This also includes clear focus in major international agreements (for example, Sustainable Development Goals and Sendai Framework for Disaster Risk Reduction 2015-2030)
- Strengthen coordination and networks for resilience, from local to national, regional, and international levels
- Strengthen education governance and local participation in order to prevent and reduce hazard exposure and vulnerability to all hazards and risks, and to increase preparedness for response and recovery, and strengthen resilience.



The core of these efforts is to recognise children's rights to survival and protection, as well as their rights to educational continuity and participation. They are intended to be child-centered, inclusive, participatory, and evidence-based. All children should be helped to participate in all aspects of Comprehensive School Safety. This allows them to be better protected and for their energy, knowledge, and ideas to help shape long-term sustainability.

The Comprehensive School Safety framework brings these unified efforts into focus.

Its purpose is for education sector partners to work more effectively and to link with similar efforts at the global, regional, national and local levels in all sectors.

The Comprehensive School Safety framework advances the goals of the Worldwide Initiative for Safe Schools and the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRRES). It is designed to promote school safety as a priority area of post-2015 frameworks for sustainable development, risk reduction and resilience.

Three Pillars of Comprehensive School Safety

Pillar 1. Safe Learning Facilities:

Key actors: Education and planning authorities, architects, engineers, builders, and school community members who make decisions about safe site selection, design, construction and maintenance (including safe and continuous access to the facility).

Key responsibilities for public and private schools

• Select safe school sites and implement inclusive disaster-resilient design and construction to make every new school a safe school.

• Implement assessment and prioritisation plans for retrofitting or replacing unsafe schools (including relocation).

• Minimise structural, non-structural, and infrastructural risks to make buildings and facilities safe for survival and evacuation.

• Incorporate access and safety for people with disabilities when designing and constructing school facilities.

• Design schools to meet temporary shelter needs if they are planned as temporary community shelters, and be sure to plan for suitable alternate facilities for educational continuity.

• Engage communities in safe school construction and retrofit.

• Ensure children's access to schools is free from physical risks (for example, pedestrian paths or road and river crossings).

• Adapt water and sanitation facilities to potential risks (for example, rain-fed and lined latrines).

• Implement climate-smart interventions to enhance water, energy and food security (for example, rainwater harvesting, solar panels, renewable energy, school gardens).

• Plan for continuous monitoring, financing, and oversight for ongoing facilities maintenance and safety.

• Prevent and respond to attacks on education, including use of schools by parties to armed conflict.

Pillar 2. School Disaster Management:

Key actors: Education sector administrators at national and sub-national education authorities, and local school communities who collaborate with their disaster management counterparts in each jurisdiction. At the school level, the staff, students and parents who are all involved in maintaining safe learning environments. They may do this by assessing and reducing structural, non-structural, infrastructural, environmental and social risks, and by developing response capacity and planning for educational continuity.

Key responsibilities

• Establish national and/or sub-national level committees and full-time focal-points to lead comprehensive school safety efforts.

• Identify sub-national and school-based risk reduction and resilience focal-points to be trained as leaders and champions of school safety.

• Provide policies and guidance at sub-national and school-site levels for ongoing site-based multi-hazard assessment and planning, risk reduction, and response preparedness. Integrate these into normal school management and improvement planning.

• Develop, train, institutionalise, monitor, and evaluate school committees. These committees should be empowered to lead identification and mapping of all hazards of schools and local community, and action-planning for ongoing risk reduction and preparedness activities. Encourage staff, students, parents, and community stakeholders to participate in this work.

• Establish national and sub-national contingency plans to support educational continuity, based on the Interagency Network for Education in Emergencies (INEE) Minimum Standards. This should include plans and criteria to limit the use of schools as temporary shelters.

• Plan for educational continuity (for example, identify locations for temporary learning spaces and alternate modes of instruction).

• Include the needs of pre-school and out-of-school children, children with disabilities, and both girls and boys.

• Link education and disaster management sectors, and public safety policies and plans at each level of social organisation (national, sub-national levels, and local and school site level). Establish communication and coordination linkages across sectors.

• Adopt standard operating procedures as needed for hazards with and without warnings. These include building evacuation, safe assembly, evacuation to safe haven, shelter-in-place, lockdown, and safe family reunification. Adapt standard operating procedures to the specific context of each school.

• Learn safety rules for specific hazards faced.

• Engage schools in making early warning and early action systems meaningful and effective.

• Engage schools in building social cohesion and peace-building.

• Conduct regular school-wide and community-linked simulation drills to practice, critically evaluate, and improve on response preparedness.

Pillar 3. Risk Reduction and Resilience Education:

Key actors: Curriculum and educational materials developers, faculty of pedagogic institutes, teacher trainers, teachers, youth movements, activity leaders, and students, working to develop and strengthen a culture of safety, resilience, and social cohesion.

Key responsibilities

- Develop national evidence and consensus-based, action-oriented key messages for household risk reduction and resilience. These will provide a foundation for formal and non-formal education as well as public awareness campaigns and messaging.
- Engage students and staff in real-life school and community disaster management activities, including mapping hazards, developing school-based contingency plans, and implementing regular school drills for relevant hazards.
- Develop 'scope and sequence' to detail learning outcomes and competencies to integrate risk reduction and resilience into regular curriculum, at all levels.
- Infuse risk reduction throughout the curriculum and provide guidelines for integrating risk reduction and resilience into carrier subjects.
- Develop quality teaching and learning materials for students and teachers. Address all dimensions of risk reduction education: conducting multi-hazard risk analysis (including those with natural and human causes, and violence and conflict); understanding risk drivers and risk mitigation measures; identifying and disseminating key messages for safety and preparedness; building community risk reduction capacity; and developing social cohesion, and a culture of safety and resilience.
- Provide pre-service and in-service teacher training on risk reduction curriculum materials and methods.
- Develop strategies to encourage teachers to integrate these topics into formal curriculum, as well as non-formal and extracurricular approaches with local communities.

Comprehensive School Safety alignment with Sustainable Development Goals 2015-2030 and Sendai Framework for Disaster Risk Reduction

The expected outcomes of integrating Comprehensive School Safety into Sustainable Development and Disaster Risk Reduction policies and practices.

1. Improve all children's equal, inclusive, and safe access to education.
2. Develop and strengthen institutions, co-ordination mechanisms and networks, and national capacities to build resilience to hazards and threats to the education sector at international, national, sub-national and local levels.
3. Incorporate risk reduction approaches into implementing emergency preparedness, response, and recovery programs in the education sector.
4. Monitor and evaluate the progress of initiatives for reducing disaster and conflict risks.
5. Increase availability of and access to hazard-related evidence, such as multi-hazard early warning systems data and disaster risk information.

Sustainable Development Goal (SDG) Targets 2015-2030 and Comprehensive School Safety

The Comprehensive School Safety framework is intended to strengthen our approaches to fulfilling these SDG targets:

TARGET 1	End Poverty in all its forms everywhere (1.4, 1.5)
TARGET 3	Ensure healthy lives and promote well-being (3.3, 3d)
TARGET 4	Ensure inclusive and equitable quality education opportunities for all (4.1, 4.7, 4.a)
TARGET 6	Ensure availability and sustainable management of water and sanitation for all (6.2, 6.4, 6.a, 6.b)
TARGET 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (9.1, 9.4, 9.a)
TARGET 10	Reduce inequality within and among countries. (10.3, 10.7)
TARGET 11	Make cities and human settlements inclusive, safe, resilient and sustainable. (11.5, 11.6, 11.b. 11.c)
TARGET 12	Ensure sustainable consumption and production patterns (12.5, 12.8)
TARGET 13	Take urgent action to combat climate change and its impacts. (13.1, 13.3, 13.b)
TARGET 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. (16.1, 16.7)
TARGET 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development (17l.16, 17.17, 17.18, 17.19)

Interpreting the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030:

The 'Sendai Seven' targets for the education sector

The "Sendai Seven" Targets	Global Targets for the Education Sector
1. Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015.	Minimise the number of deaths and injuries due to hazard impacts on schools.
2. Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015.	Substantially reduce the number of school children affected by disaster impacts of all sizes.
3. Reduce direct disaster economic loss in relation to global Gross Domestic Product (GDP) by 2030.	Reduce education sector investment losses due to hazard impacts.
4. Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including developing their resilience by 2030.	Minimize school days lost due to hazard impacts.
5. Substantially increase the number of countries with national and local Disaster Risk Reduction strategies by 2020.	Countries have education sector risk reduction strategies.
6. Substantially enhance international co-operation to developing countries through adequate and sustainable support to complement their national actions for implementing this framework by 2030.	Countries work together to achieve Comprehensive School Safety.
7. Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.	Schools have access to, and use early warning systems.

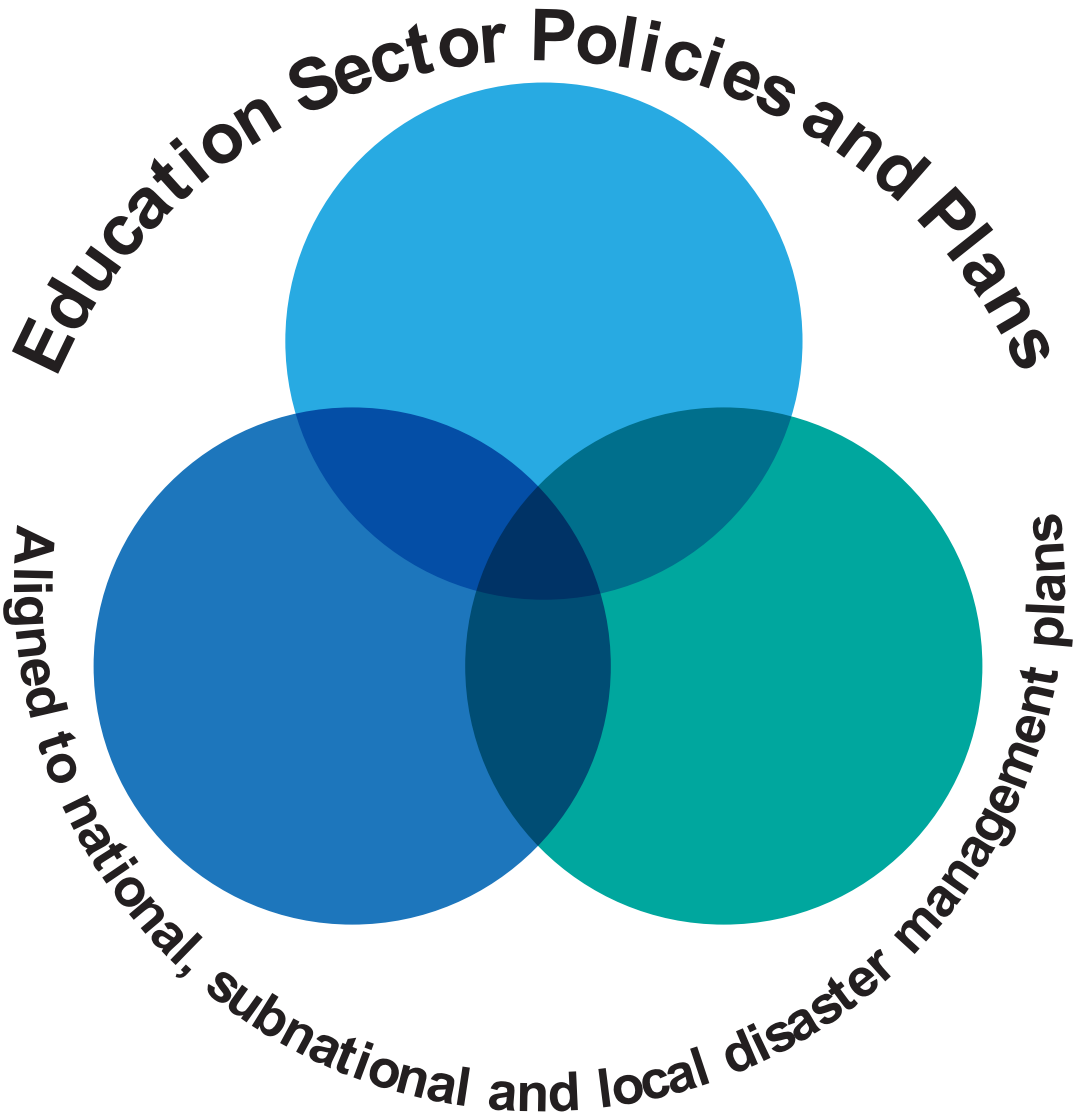
The Sendai Framework Priorities for the education sector

SFDRR Priorities	Priorities for the education sector
PRIORITY 1: **Understanding disaster risk**	• A comprehensive and inclusive approach to school safety is the foundation for integrating risk reduction and resilience into education sector strategies, policies and plans. • Child-centered risk assessment is in place at all levels in the education sector. • Multi-hazard risk assessment has been conducted to analyse and prioritise risks affecting the education sector. • A systematic plan for assessing and prioritising retrofitting and replacing unsafe schools has been developed and is being implemented. • The National Disaster Management Authority and Education authority has nationally adopted consensus- and evidence-based, action-oriented key messages as a foundation for formal and non-formal education. • The education authority has infused Risk Reduction and Resilience (RRR) Education into regular curriculum, including (but not limited to) climate education, Disaster Risk Reduction education, and conflict-sensitive education. • Schools convey RRR Education via non-formal education. This can include participation in school disaster management and after school clubs, assemblies, and extra-curricular activities.
PRIORITY 2: **Strengthening disaster risk governance to manage disaster risk**	• Enabling policies and legal frameworks are in place at national and/or sub-national levels to address the key elements of Comprehensive School Safety. • Organisational arrangements, leadership, and coordination for RRR Education is established by senior management, and includes designated leaders who are responsible at all levels. • Guidance and regulations for safe school construction are in place. • Safe school site selection, design and construction are monitored for compliance/enforcement by the appropriate authorities. • Schools annually review school Disaster Risk Reduction and management measures. For example, this can be part of school-based management and/or school improvement including (but not limited to) ensuring guidance and plans are in place for preventing and responding to attacks on education, conducting school-based hazard drills, and evacuation.
PRIORITY 3: **Investing in Disaster Risk Reduction for resilience**	• Funding is in place to reduce education sector risks. • Monitoring and evaluation for Comprehensive School Safety is underway. • Funding, monitoring and evaluation is in place for generating hazard-related evidence to increase access to and availability of risk-related data. • A prioritisation plan for upgrading existing unsafe schools is being resourced and implemented. • Education authorities promote routine maintenance and non-structural mitigation for increased safety and protection of investments in public schools. • The education authority has needs assessment, strategy, and an implementation plan to develop staff and student capacity for participation in school-based Disaster Risk Reduction and management at the necessary scale. • The education authority has needs assessment, strategy, and an implementation plan to develop teachers' capacity for teaching RRR Education. • The country has enough quality (RRR) Education materials to implement RRR Education at scale.
PRIORITY 4: **Enhancing disaster preparedness for effective response**	• Planning is undertaken for limited use of schools as temporary shelters or collective centers during the school year. • The education authority has multi-hazard risk assessment based national and sub-national plans for education sector risk reduction and management. The focus is on safety and security, educational continuity and contingency planning, and protection of education sector investments. • The education authority has established and relevant simulation drills that are held annually at all levels to practice response preparedness and to review and adapt response plans as needed.

chapter 4

Key responsibilities

for schools and education sector stakeholders



Progress to date	Level of work done
Education Sector Policies and Plans with alignment to national, subnational and local disaster management plans. The key policies and plans in Pakistan and KP are to:	
* National Education Policy	Low
* School Safety Action Plan	High
* Education Sector Plan KP 2014 -18	Medium
* National Disaster Management Plan	Medium
* NDMP Implementation Road Map 2015 -2030	High
* Pakistan School Safety Framework	High

None		Low		Medium		High		Advanced

None	No action by education department and/or DM stakeholders.
Low	In principle agreement to work by education department and/or DM stakeholders with some ground work undertaken.
Medium	Education department and/or DM stakeholders work currently in process
High	Education department and/or DM stakeholders work approved for institutionalization after a cycle of at scale implementation.
Advanced	Replication and roll out by the education department and/or DM stakeholders

4.1 National Education Policy

The education sector in Pakistan provides the National Education Policy (NEP) 2009[1] as the key policy document for the promotion of education in Pakistan. Subsequent to the 18th constitutional amendment of 2010, all the federating units have adapted this policy document across Pakistan as their provincial/state/area education policy. The NEP provides for the safety of schools and children by proposing the following policy actions.

5.5 Education in Emergencies:

1. *Awareness shall be raised amongst the students regarding emergency situations, natural disasters and school safety so as to enable them to take appropriate preventive measures and informed decisions in emergencies or crisis.*
2. *Curriculum, especially of Social Studies, Geography, Languages, and Literacy shall include themes on emergencies, natural disasters and trauma management based on latest international best practices shall include information about response in an emergency or disaster.*
3. *Teacher education and training curricula shall include provisions to enable the teacher to address education in emergencies.*
4. *A repository of all emergency related materials, manuals, guidelines, minimum standards and research pertaining to education shall be maintained at the teachers training institutions, schools, colleges and universities.*
5. *National Disaster Management Authority shall provide guidelines and code of conduct to the building departments to construct school infrastructure according to the international standards.*
6. *The authorities in planning (at Federal Ministry of Education, Planning Commission and Provincial Planning & Development Departments) shall examine that guidelines & code of conduct for construction of school infrastructure regarding disaster have been followed while recommending the education projects for approval.*
7. *National Disaster Management Authority shall make available the Standard Operating Procedures (SOPs) for the educational institutions to follow pre and post-emergency situations.*
8. *Disaster Management Plans shall include education delivery mechanism for rehabilitation.*

[1] **http://202.83.164.29/mopttm/userfiles1/file/National%20Education%20Policy.pdf**

The National education policy also provides for the integration and infusion of DRR in the curriculum at different grades and levels.

6.2 Curriculum Reform

5. *Environmental education shall be made an integral part of education.*
9. *Emerging trends and concepts such as School Health, Prevention Education against HIV/AIDS and other infectious diseases, Life Skills Based Education, Environmental Education, Population and Development Education, Human Rights Education, School Safety and Disaster and Risk Management, Peace Education and inter-faith harmony, detection and prevention of child abuse, etc shall be infused in the curricula and awareness and training materials shall be developed for students and teachers in this context, keeping in view cultural values and sensitivities.*
10. *School Health Education and School Safety shall be infused within the curricula and learning materials with focus on improving school environment, enriching health education content, instituting regular mechanisms for health screening and health services of students and nutritional support to needy children in coordination with the Departments of Health, Environment and Population at the Federal, Provincial and District levels.*

Currently, the National Education Policy is undergoing a review process with the wider participation of the national and provincial level stakeholders. The revised policy is expected to be announced within 2017.

4.2 National Plan of Action

The National Plan of Action (NPA) to accelerate education-related MDGs 2013-16[2] was prepared by Ministry of Federal Education and Professional Training, Government of Pakistan in September 2013. The NPA was prepared in collaboration with the education departments of provinces and area governments, Academy for educational planning and management (AEPAM), UNESCO and UNICEF. The plan of action, for the first time recognized the impacts of natural and man-made disasters on the Education for All and Millennium Development Goals indicators for Pakistan.

[2] **http://202.83.164.29/mopttm/userfiles1/file/publications/MDGs%20Book.pdf**

Box 1: Reasons for Slow Progress as per EFA/MDG Indicators in Pakistan

In Pakistan, one of the main factors of this slow progress in education indicators was a series of natural disasters, along with political events, which affected the country during the past 7-8 years.

At the turn of this century, as countries began to understand and prepare for the implementation of the Millennium Development Goals (MDGs), Pakistan too initiated a process of rapid educational reforms. It launched the Education Sector Reforms (ESR) package and in some provinces, by 2002/03, the education sector reforms programmes had been fully designed and even started to be implemented. Unfortunately, soon after,a strong earthquake in the northern part of the country left over 70,000 dead, millions homeless and a widespread destruction of schools, hospitals, roads and other infrastructure. As massive rehabilitation and reconstruction efforts took place, the progress towards MDG targets stalled.

The years 2007 and 2008 witnessed political instability and the transition from a military-led regime to a democratically-elected government also caused disruptions in economic and social development. This was coupled with the on-going militancy and extremism crisis in the north-west where military operations against the Taliban intensified. In July and August 2010, heavy monsoon rainfall caused flooding in the north and north-west, parts of Khyber Pakhtunkhwa (KP), Gilgit- Baltistan, Azad Jammu and Kashmir (AJ&K). As this large body of water made its way to south through the Indus River System, large areas of lands in Punjab and Sindh were inundated. These floods affected 78 districts and 20% of the country's area. A large number of schools were totally or partially damaged; remaining schools served as temporary shelters for the affected families.

In July 2011, the 18th Amendment to the Constitution of Pakistan became effective. This Amendment called for a transformation of government through devolution of power to the provinces. Education, too, was almost completely devolved. The federal Ministry of Education was dissolved and all decision-making powers given to the provinces. Education had always been a provincial subject in Pakistan but this formalized the withdrawal of federal coordination functions. As the bureaucratic systems began to adjust to the requirements of the new amendment, procedural delays in financial and technical issues adversary affected the education sector.

While reconstruction and rehabilitation of the 2010 flood affected areas was still underway, floods again hit some parts of country, particularly in Sindh and Balochistan, in August 2011. Though the destruction was marginally lower than that in the previous year, over 9 million people were affected with huge loss of their assets. Once again schools and educational activities were adversely affected and progress in educational indicators slowed.

The National Plan of Action also recognized the following issues/factors as one of the key challenges to access:

Access	
In-School Factors	Stra tegies/Intervention
Non consideration of Building codes for educational building construction (including Disaster Risk Reduction measures)	Modification/renovation of school designs for DRR measures.
School design are not adopting DRR concept	DRR measures to be introduced to t he degree possible in existing structures
Lack of DRR concept in curriculum	Inclusions of DRR in curriculum

4.3 School Safety Action Plan 2012

National Disaster Management Authority and UNESCO jointly assisted the KP Government in development of Plan of Action for safe schools and educational buildings in KP through a wider stakeholder consultative process. The stakeholder were briefed on issues covering concepts of safety of schools and educational institutions, as well as were presented with relevant information and data on specific disasters related to KP and how these disasters could possibly impact children and school safety.

Extracting broad parameters of school safety and disaster risk reduction from the Hyogo Framework for Action (HFA), school safety, requires a system-based approach of analyzing and responding to school safety issue on a life-cycle application. Therefore, six key inter-linked elements of school safety that encompass safe schools were utilized in developing a comprehensive school safety plan for KP. The six key school safety elements areas are;

- Policy and Institutional Mechanisms for Promoting School Safety,
- Technical Aspects of Seismically Safer Schools,
- Systems/Skills/Resources-Capacity Development Requirements for Safer Construction,
- Integrating Disaster Risk Reduction Information in Formal/Informal Education
- Community Preparedness for Disaster Prevention and Response, and,
- Public-Private Partnerships for Safe Schools.

The Government of KP constituted DRR WORKING GROUP in education department in 2012 to operationalise the School Safety Action Plan 2012. HOPE'87 re-organized the working group as DRR Steering Committee for the leadership role as per SBDRM model approach under the 7th DIPECHO action, revitalized and re-organized this working group into a DRR Steering Committee. The following composition of the Education Department DRR Steering Committee was notified by the Secretary Education KP on December 2013 and has held 7 meetings to date.

- Additional Secretary – Chair
- Chief Planning Officer
- Director ESRU
- Director E&SE
- Director DCTE
- Director PITE
- Senior Planning Officer – II
- Director IMU

4.4 Education Sector Plan

The provinces develop their Education Sector Plans (ESP) setting out their programmatic targets and goals for a period of 5 years. The ESP 2015-20 for KP was prepared and launched in early 2015. Under Policy Group 3, aimed at improving the resilience of the schools sector and the government's ability to provide education services in the wake of natural or manmade emergencies, the ESED will:

- Launch a draw down fund for use in the aftermath of events that threaten to affect the provision of education services. These include earthquake, flood, the impact of militant action, and influxes of displaced people from within the province and neighbouring territory.
- Base the size and design of the fund on an assessment of the scale of resources that would be required to provide emergency cover in the aftermath of an event, as well as to repair damage to the fabric of school buildings, including likely contributions from the federal government, and foreign governments and NGOs.
- Create a set of emergency management plans, outlining the planned response in the event of a range of scenarios.
- Include this provision in the Department's budget for fiscal year 2016/17 onwards on the basis that it will be used only when required.
- Review the use of the fund and efficacy of plans annually, whenever there has been a requirement to use this facility.

Specifically, the Department will deliver the results set out in Table below over the next five years. This policy will have a strong impact on the Department's ability to provide continuity of education services, including emergency provision, in the most vulnerable and therefore educationally deprived areas of the province.

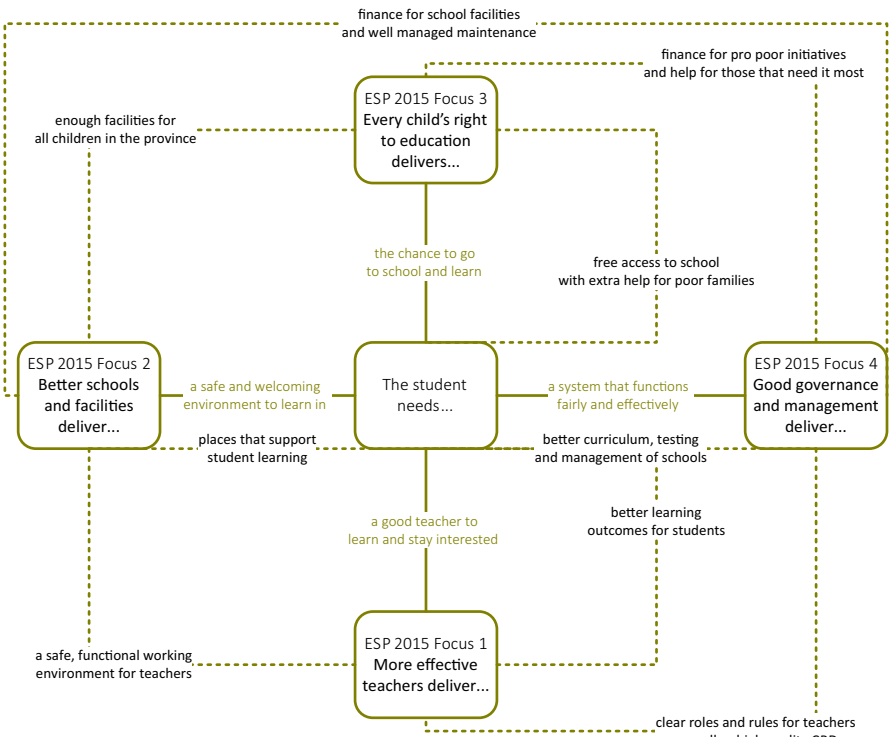
Activities	2015/16	2016/17	2017/18	2018/19	2019/20
Create emergency management fund	Fund designed and agreed and with funds ring-fenced.	Provision included in 2016/17 budget.	Provision included in 2017/18 budget.	Provision included in 2018/19 budget.	Provision included in 2019/20 budget.
Create emergency management plans	Plans created for range of scenarios.	Plans reviewed and updated.	Plans reviewed and updated.	Plans reviewed and updated.	Plans reviewed and updated.
Commission independent reviews in wake of emergencies	NA	Review complete and findings incorporated.	Review complete and findings incorporated.	Review complete and findings incorporated.	Review complete and findings incorporated.

Table below summarises the specific ways in which the development of an emergency preparedness fund and management plans will deliver positive benefits for all stakeholders.

Stakeholders	Outcomes	Outputs
Learners	Reduced disruption in access to school and learning after an emergency, including for displaced students.	Faster, better quality emergency repair of school buildings, ensuring school environments remain safe for students.
Teachers	Reduced disruption to the running of schools in the wake of an emergency, including established protocols for action.	Reduced pressure on other schools to accept displaced students, enabling teachers to manage classes effectively.
PTC/Community	Reduced disruption in access to school and learning, and clear plans of action during an emergency situation.	Fast, predictable disaster management and emergency relief available to affected communities.
ESED	Fiscal flexibility to tackle the impact of emergencies quickly and effectively and minimise disruption to service delivery.	Greater resilience, lessening risk of core programme of reform being delayed or derailed by an emergency.
Partners	Greater resilience, lessening risk of core programme of reform being delayed or derailed by an emergency.	Clear approach to disaster management, enabling partners to align their emergency plans with the government.

At the same time, ESP 2015 identifies four factors that must function properly for children to be able to enrol in school, attend regularly, and learn well; the definition of effective service delivery in education; and the core purpose of the Elementary & Secondary Education Department. These factors and their relationships with one another are summarised as follows:

Figure 1:



The figure is informed by and adapted from GIZ's Whole School Development Model, summarises the framework for ESP 2015 that the Department will use over the next five years and beyond to conceptualise and review its work towards achieving the vision for the schools sector.

Figure 1 identifies four things every student needs in order to be able to access a good education from the provincial government. First, it is important to have a teacher who is present and who teaches well. Every child needs someone who is both well qualified and talented to help him or her learn effectively. This means not only that teachers must be well prepared to work with their classes, but also that they must be reliably present, every day. For students from low-income families in particular, where the decision to send children to school is often a marginal one in economic terms, this is especially important in improving completion rates. The first policy area for ESP 2015 is therefore to ensure the province's teachers become more effective.

Second, it is important that children go to school in a safe and welcoming environment, and indeed that teachers have a workplace that is fit for purpose. Every child needs to feel safe in his or her school, which means buildings must be well designed and constructed with good facilities. This is especially important for girls, where families are particularly reluctant to send their daughters to buildings that may lack walls, running water, and sanitation. It is also critical for children with special needs. This also includes less tangible issues that overlap with teaching, such as the ethos of the school and the way in which head teachers in particular manage the institution. The second policy area for ESP 2015 is therefore to ensure improvement of the province's schools and facilities.

Third, the provincial government has a moral, as well as a constitutional duty to ensure that every child in Khyber Pakhtunkhwa, regardless of their personal circumstances, has the opportunity to go to school and learn. This is a complex area, requiring a more precise understanding of where provision is currently lacking, and working with the private sector and other partners to create temporary and alternative solutions where these are needed. In addition, it is important to consider effective ways of providing additional help for the poorest families who may find sending their children to school is a difficult economic decision to make. The third policy area for ESP 2015 is therefore to ensure that every child in the province has the chance to go to school and learn.
The fourth area is one that children and their families should be able to take for granted from government, and which, if it is working well, should go unnoticed and unremarked upon. A school system that functions fairly and effectively relies on good governance and management of the Department, its human and financial resources, and its working relationship with the rest of government. This area also includes disaster preparedness, to ensure that in the event of natural or manmade emergencies children are still able to go to school and learn. The fourth policy area for ESP 2015, which in turn drives delivery in all three of the others, is therefore to ensure the school system is characterised by good governance and management.[3]

[3] Education sector plan 2015/16 – 2019/20 page 33, Vision.

4.5 The National Disaster Management Plan (NDMP)

National Disaster Management Plan is developed by NDMA with the help of JICA for the period ranging from 2012 to 2021. To manage the complete spectrum of disasters by development of disaster risk reduction policies, strategies, measures and actions of all stakeholders, especially at the national level; and to enhance institutional capacities, and human and material resources for mitigation, prevention and preparedness, response and recovery in disasters. The NDMP in line with Hyogo Framework for Action (HFA) envisages ten (10) disaster management interventions to establish an efficient and effective disaster management system in Pakistan through forty-one (41) strategies and one hundred eighteen (118) proposed priority actions/programs

Box-1 Education Sector in NDMP

The major activity for education for the next ten years shall be the incorporation of disaster education into school subjects (from primary to secondary education) and into the curriculum of governmental staff academies and promotion of disaster education at the higher education level. Disaster education has already been incorporated into the national curriculum. However, it is not taught at the school level yet as the new curriculum has not yet been fully implemented by provincial governments yet. In order to promote implementation of disaster education, NIDM will coordinate with relevant organizations such as provincial education departments and support them to develop detailed contents of disaster education to be taught in schools.

In addition, disaster education is rarely taught at government staff academies at present and NIDM will support these academies to develop subjects of disaster education to be taught there for the next ten years so that every government staff member will have a chance to learn about disasters and disaster management. Promotion of disaster education

3 Education sector plan 2015/16 – 2019/20 page 33, Vision.

at the higher education level is also conducted. University students are supposed to work in various sectors in Pakistan after they graduate and they could consider DRR in their daily work if they have knowledge of disaster management. Additionally, universities play a key role to conduct research regarding disasters and disaster management in Pakistan and therefore, it is important to sensitize them as well. Furthermore, a diploma course on disaster management shall be introduced in NIDM to enhance the local capacity of human resources on disaster management.

Intervention	Activities	Page
Intervention-1: Establish the institutional and legal system for disaster management.		
Intervention-2: Prepare disaster management plans at various levels.		
Intervention-3: Establish national hazard and vulnerability assessment.		
Intervention-4: Establish multi-hazard early warning systems.		
Intervention-5: Promotion of training, education and awareness in relation to disaster management.	• Promotion of disaster education at schools • Promotion of disaster education in higher education	Page 66 (Main volume)
Intervention-6: Strengthen the awareness Program on disaster risk reduction at the local level.	Conducting awareness campaigns for the general public utilizing various media such as radio, TV, the Internet, posters, mosques, and schools	Page 69 (Main Volume)

Intervention-7: Infrastructure development for	Structural vulnerability evaluation for schools and hospitals against earthquakes, tsunamis and floods in Pakistan	Page ES-12 (Main Volume)
Intervention-8: Mainstreaming disaster risk reduction into development.		
Intervention-9: Establish a national emergency		
Intervention-10: Capacity development for post-disaster recovery		

4.6 The National Disaster Management Plan (NDMP) Implementation Strategy 2015 - 2030

Future plans for implementation of NDMP focusing on Multi Hazard Vulnerability Risk Assessments (MHVRA), Community Based Disaster Risk Management (CBDRM), Capacity Building interventions including Emergency Responses Exercises for government officials and volunteers, and public awareness has been developed through a comprehensive consultation process. Where NDMA also shared in detail standard guidelines for execution of above-mentioned interventions with a view to maintain uniformity in execution and quality assurances at all levels of governance.

A detailed implementation road map and way forward has been formulated by NDMA in order to ensure that execution/implementation of interventions by all stakeholders are well in conformity to NDMP. The road map is envisaged to be implemented in a phased manner during 2016-2030 timeframe, according to which in Phase-I, 39 most vulnerable districts will be covered in next three years 2016-2018, in the second phase 55 highly vulnerable districts will be covered from 2019-2022, and in the final phase the rest 63 districts including Federal Administrative Tribal Areas (Fata) will be covered from 2023-2030. School safety is covered under CBDRM implementation of of NDMP besides that Mobilization of Volunteers Emergency Response Exercise (MOVERE) and Government Officials Emergency Response Exercise (GOERE) programs can also be used to build skills and capacitates in disaster response

4.7 Pakistan School Safety Framework

The National Disaster Management Authority (NDMA) has developed a draft Pakistan School Safety Framework (PSSF) in 2016. A broad based consultative process was adopted by NDMA for the development of PSSF. The education departments, disaster management authorities, law enforcement agencies, private schools and private schools association from all federating units of AJ&K, Balochistan, FATA, Gilgit Baltistan, Khyber Pukhtunkhwa, Punjab and Sindh were consulted. In addition different civil society organisations (national and international NGOs) including HOPE'87, Plan International, FOCUS Humanitarian, academia, donors and key UN agencies (including UNICEF, UNESCO, WFP) were part of the consultation process as well.

The PSSF is a first of its kind document, providing the operational guidelines to operationalize the Comprehensive School Safety Framework approach developed by GADRRES together with other partners. PSSF serves as a comprehensive guide for public and private schools and authorities to work towards school safety.

Subsequent to the development of the draft framework document, NDMA (together with British Council, School of Leadership and Focus Humanitarian), developed 3 manuals/booklets. These include the Training Guide (for master trainers and core group), teacher manual (comprising 6 chapters coversing 6 steps) and a student handbook.

The piloting of the PSSF and the supporting tools has been completed in 65 schools. A total of 209 teachers were trained through School of Leadership and FOCUS Humanitarian in Quetta, Lahore, Karachi, Islamabad, Peshawar, Muzaffarabad, Gilgit and Islamabad. NDMA is currently evaluating the work done and subsequently all the trained teachers and evaluators will review the draft PSSF document. The findings are expected to be consolidated by the end of March 2017.

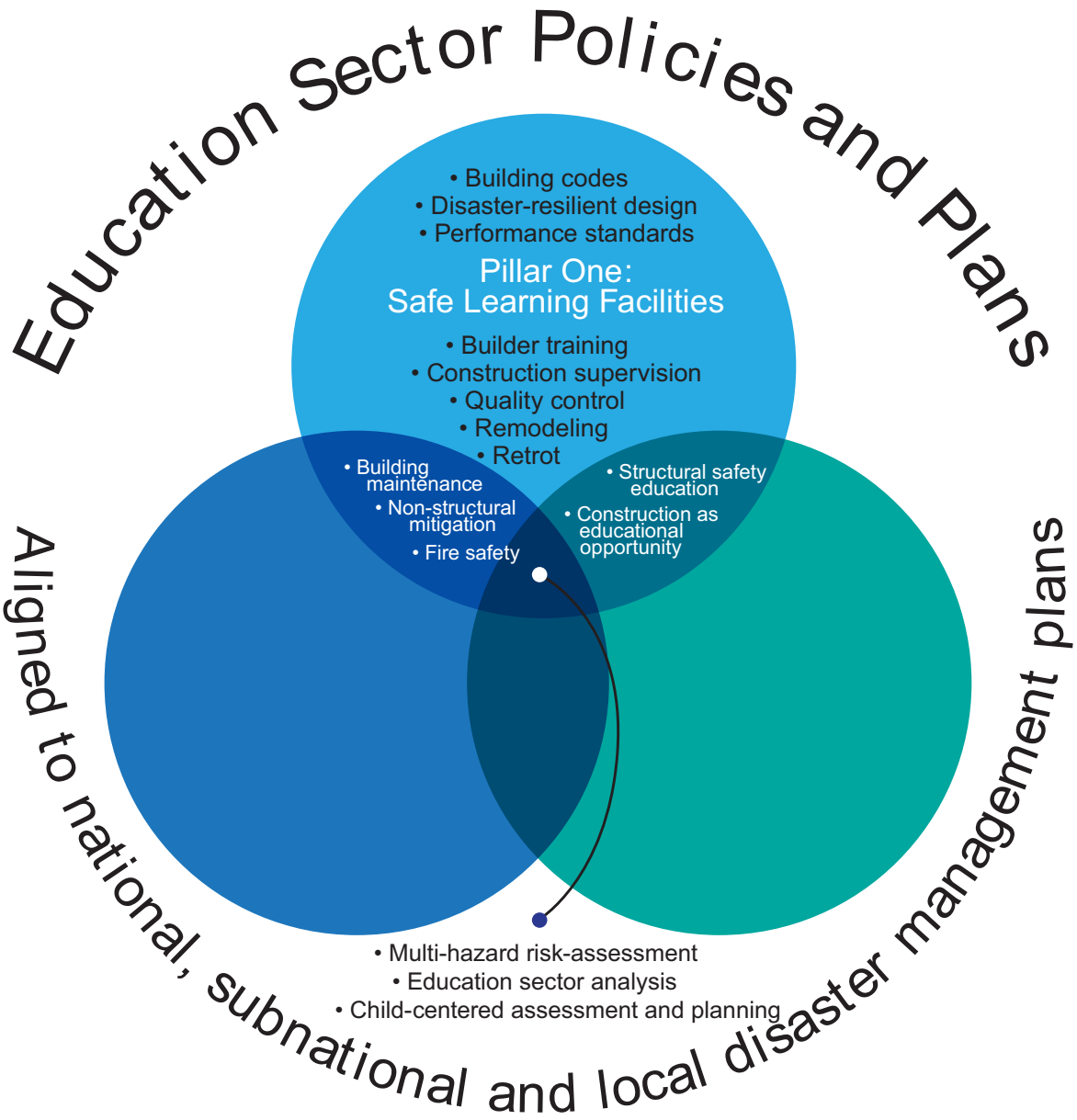
The working on the legislation for the PSSF document rests with the Chairman NDMA (targeted for end of March 2017) and a national level consultation is planned to run the scale up model across the country.

Key gaps and needs identified

- Continue to work with and support NDMA to notify the PSSF as a policy document.
- Engage the MoFE&PT to align the revisions of the National Education Policy with the CSSF and PSSF. The ongoing revision of NEP is an opportunity that needs to be capitalized to incorporate school safety and SBDRM model at policy level.
- Include the school safety as a standing agenda point at the annual meetings of Inter Provincial Education Ministers Conference (IPEMC)
- Several donors have showed keen interest to engage with NDMA for further work on PSSF scale up. Advocacy and awareness raising with the donors is also required to ensure that the education departments and authorities are equal stakeholders during the implementation stages.
- Several key donors (including DFID, EU, World Bank, Government of Germany) are working on medium to large-scale education sector programs with the provincial governments. Most of these programs are at a bilateral basis with the provincial governments or the Government of Pakistan. School Safety actions need to be mainstreamed in these actions and programs. This may not be an easy task as these programs at different stages of implementation.
- Engagement of a wide range of stakeholders is required to discuss, debate and evolve consensus for the structural safety of schools. These include the Planning Commission, Engineering bodies (such as Pakistan Engineering Council, Institute of Architects, Institute of Engineers, engineering firms), MoFE&PT, Public Works Departments, Municipal and Town Committees, Academia and research institutions (especially engineering universities).
- The Education in Emergencies in Pakistan remains reactive due to lack of locally contextualized EiE guidelines and education continuity plans.
- Knowledge management and information sharing of work done in the sector to avoid duplication and facilitate replication and scale up. This can also help share and learn across the region such as SAARC and ASEAN.
- Political and bureaucratic high level engagement for prioritization of school safety and subsequent funds allocation from Government budgets.

chapter 5

PILLAR 1
Safe Learning Facilities



5.1 Key responsibilities for public and private schools

- Select safe school sites and implement inclusive disaster-resilient design and construction to make every new school a safe school.
- Implement assessment and prioritisation plans for retrofitting or replacing unsafe schools (including relocation).
- Minimise structural, non-structural, and infrastructural risks to make buildings and facilities safe for survival and evacuation.
- Incorporate access and safety for people with disabilities when designing and constructing school facilities.
- Design schools to meet temporary shelter needs if they are planned as temporary community shelters, and be sure to plan for suitable alternate facilities for educational continuity.
- Engage communities in safe school construction and retrofit.
- Ensure children's access to schools is free from physical risks (for example, pedestrian paths or road and river crossings).
- Adapt water and sanitation facilities to potential risks (for example, rain-fed and lined latrines).
- Implement climate-smart interventions to enhance water, energy and food security (for example, rainwater harvesting, solar panels, renewable energy, school gardens).
- Plan for continuous monitoring, financing, and oversight for ongoing facilities maintenance and safety.
- Prevent and respond to attacks on education, including use of schools by parties to armed conflict.

Safe Place GHS Ayun (Before)

Safe Place GHS Ayun (After)

5.2 Progress

Progress to date	Level of work done
Safe Learning Facilities involves education authorities, architects, engineers, builders and school community members in safe site selection, design, construction and maintenance (including safe and continuous access to the facility). The key responsibilities for both public and private schools are to:	
• Select safe school sites and implement disaster-resilient design and construction to make every new school a safe school.	Low
• Implement prioritization schema for retrofit and replacement (including relocation) of unsafe schools.	None
• Minimize building and facilities non-structural and infrastructural risks from all sources, including design as well as interior layout and furnishings safe for survival and evacuation.	Low
• Incorporate access and safety for people with disabilities in design and construction of school facilities.	Low
• If schools are planned as temporary community shelters, design them to meet these needs. And be sure to plan for suitable alternate facilities for educational continuity.	None
• Ensure that children's access to schools is free from physical risks (pedestrian paths, road and river crossings)	Low
• Water and sanitation facilities adapted to potential risks (rain-fed and lined latrines)	Medium
• Implement climate-smart interventions such as rainwater harvesting, solar panels, renewable energy, school gardens	None
• Plan for continuous monitoring, financing and oversight for ongoing facilities maintenance and safety.	Medium

None		Low		Medium		High		Advanced

None	No action by education department and/or DM stakeholders.
Low	In principle agreement to work by education department and/or DM stakeholders with some ground work undertaken.
Medium	Education department and/or DM stakeholders work currently in process
High	Education department and/or DM stakeholders work approved for institutionalization after a cycle of at scale implementation.
Advanced	Replication and roll out by the education department and/or DM stakeholders

Safe School Facilities involves education authorities, architects, geologist, engineers, builders and school community members in safe site selection, design, construction and maintenance (including safe and continuous access to the facility).

Recognizing that school age children spend majority of their waking hours at school, there is always a high possibility that a natural hazard struck while they are at school. Therefore, school facilities need to be protected from disasters as they save life of children and they can also help to work as shelter in post disaster scenario. Safer schools are necessary to prevent lives of children during natural hazards events. The concept of school safety, however, is not limited to preventing the collapse of school buildings in disasters, and safety of teachers and students, but rather extends to meet the broader goal "disaster risk management".

Moreover, resilient schools are effective medium for disseminating disaster risk reduction awareness in the communities, can act as center of learning, can be instrumental in transfer of technology to the communities and have significant role to build disaster resilient communities. The activities like retrofitting of school and new construction with safety measures can spread message to the community of the importance of resilient buildings to reduce disaster impact.

Public administrations are facing a complex problem and they often need to answer the following questions: what school must be adequate first? Why? What typologies of intervention are necessary? What level of safety is it possible to reach? How much is the cost of retrofitting? How many interventions can be managed with the available resources? How to manage/treat the most critical cases? How to communicate the level of risk to people? These questions point out that the definition of a rational and effective strategy for the mitigation of natural hazards risk implies the necessity to know the level of risk and the criticalities together with the required countermeasures and their costs. All this knowledge permits to carry out an evaluation of the needed economical effort in terms of necessary global financial amount and, consequently, the definition of the practicable strategies for risk mitigation.

Ever since the Kashmir earthquake of 2005, progress has been made for the structural safety of infrastructure buildings (including schools) that are newly built. The designs are prepared keeping in line with the zoning regulations[4]. A DRR checklist introduced by the Planning Commission of Pakistan is now an integral part of the PC-1 and PC-2 documents[5]. The checklist provides comprehensive guidelines for incorporating DRR in infrastructure projects.

The education department KP DRR steering committee has also approved the checklist for inclusion in all PC1s with direction to the Education Sector Reform Unit of MoE&SE to ensure the inclusion of the same.

The schools report on the missing facilities on an annual basis through the School Improvement Plans (SIP). The SIP data is subsequently available through the Education Management Information System (EMIS). This data and information on missing facilities is available on an annual basis.

The Government of KP, through the MoE&SE has embarked on an ambitious plan for the provision of missing facilities (especially water and sanitation) in the public schools. The Independent Monitoring Unit of MoE&SE KP also collects information and progress on missing facilities on a regular monthly basis.

[4] http://www.pmd.gov.pk/seismicreport_pmd.pdf
[5] http://www.ndma.gov.pk/plans/Checklist-of-Planning-Commission2010.pdf

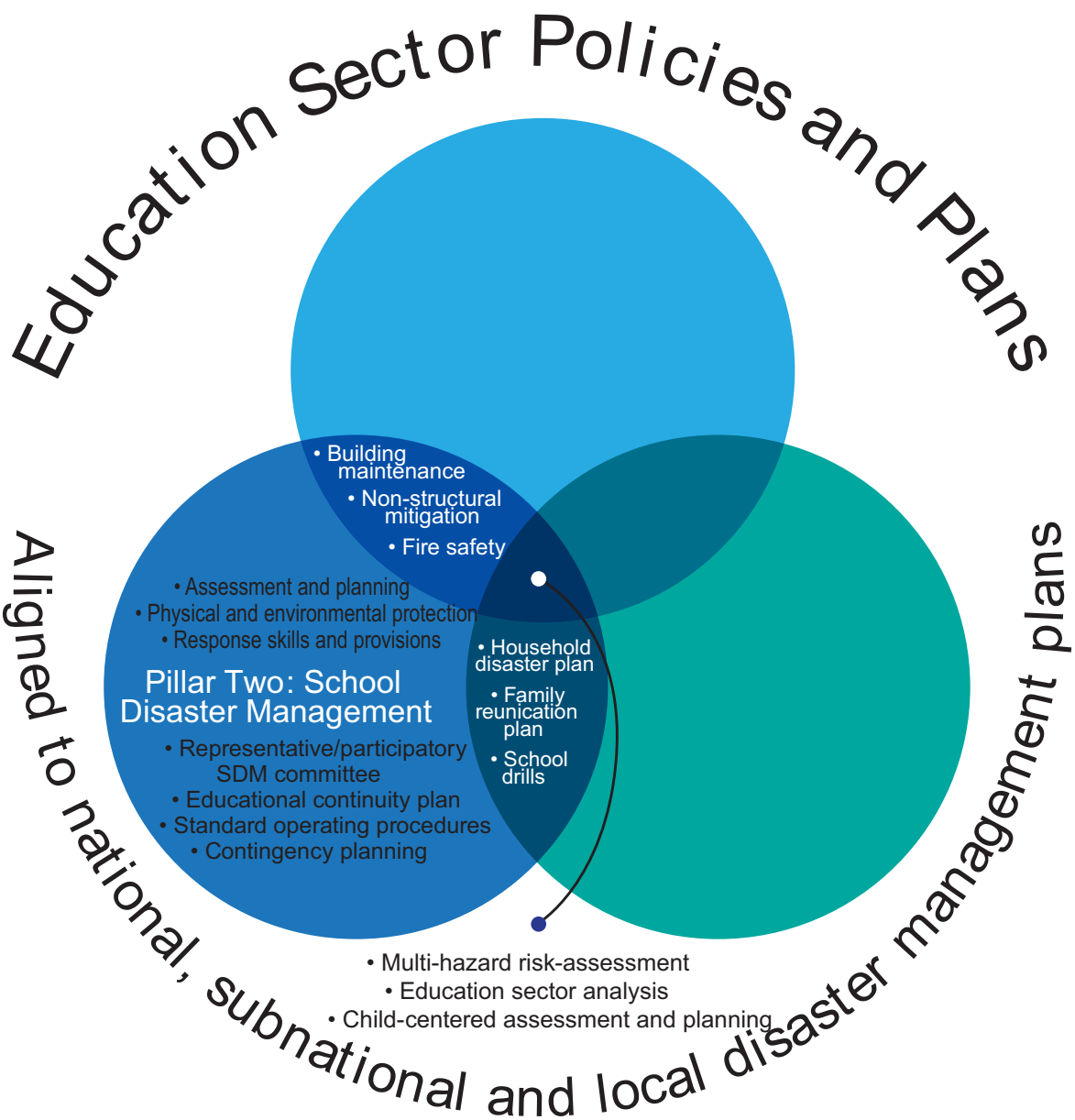
5.3 Key gaps and needs identified

- Selection of sites for construction and/or re-location of schools should be risk informed.
- Promote disaster resilient design of school and explore the possibility of introducing disaster resilience through repair and maintenance measures as well
- Prepare simple and easy to follow guidelines for use by end users (teachers, principals and workers executing construction activities)
- Carry out assessments of structural safety of schools
- Prioritise the retrofitting and/or replacement of unsafe schools (including relocation)
- Minimise, structural, non-structural and infrastructural risks to make buildings and facilities safe for survival and relocation
- Design and implement access and safety measures for people with special needs
- Engage teachers and communities in monitoring and supervision of repair, maintenance and retrofit works
- Ensure availability of water and sanitation facilities, that can also meet the requirements of communities during emergencies

Door Modifications in 20 Schools - Chitral

chapter 6

PILLAR 2
School Disaster Management



6.1 Key responsibilities

- Establish national and/or sub-national level committees and full-time focal-points to lead comprehensive school safety efforts.
- Identify sub-national and school-based risk reduction and resilience focal-points to be trained as leaders and champions of school safety.
- Provide policies and guidance at sub-national and school-site levels for ongoing site-based multi-hazard assessment and planning, risk reduction, and response preparedness. Integrate these into normal school management and improvement planning.
- Develop, train, institutionalise, monitor, and evaluate school committees. These committees should be empowered to lead identification and mapping of all hazards of schools and local community, and action-planning for ongoing risk reduction and preparedness activities. Encourage staff, students, parents, and community stakeholders to participate in this work.
- Establish national and sub-national contingency plans to support educational continuity, based on the Interagency Network for Education in Emergencies (INEE) Minimum Standards. This should include plans and criteria to limit the use of schools as temporary shelters.
- Plan for educational continuity (for example, identify locations for temporary learning spaces and alternate modes of instruction).
- Include the needs of pre-school and out-of-school children, children with disabilities, and both girls and boys.
- Link education and disaster management sectors, and public safety policies and plans at each level of social organisation (national, sub-national levels, and local and school site level). Establish communication and coordination linkages across sectors.
- Adopt standard operating procedures as needed for hazards with and without warnings. These include building evacuation, safe assembly, evacuation to safe haven, shelter-in-place, lockdown, and safe family reunification. Adapt standard operating procedures to the specific context of each school.
- Learn safety rules for specific hazards faced.
- Engage schools in making early warning and early action systems meaningful and effective. Engage schools in building social cohesion and peace-building.
- Conduct regular school-wide and community-linked simulation drills to practice, critically evaluate, and improve on response preparedness.

First Aid Practice at Schools

6.2 Progress

Progress to date	Level of work done
School Disaster Management is established via national and sub-national education authorities and local school communities (including children and parents), working in collaboration with their disaster management counterparts at each jurisdiction, in order to maintain safe learning environments and plan for educational continuity, conforming to international standards. The key responsibilities are to:	
Provide policies, guidance at sub-national and school-site levels for ongoing site-based assessment and planning, risk reduction, and response preparedness as part of normal school management and improvement.	High
Develop, train, institutionalize, monitor and evaluate school-site committees. These should be empowered to lead identification and mapping of hazards inside and outside school and community and action-planning for ongoing disaster risk reduction and preparedness activities. Encourage participation of staff, students, parents and community stakeholders in this work.	Medium
Adapt standard operating procedures as needed, for hazards with and without warnings, including: drop cover and hold, building evacuation, evacuation to safe haven, shelter-in-place and lockdown, and safe family reunification.	Advanced
Engage schools in making early warning and early action systems meaningful and effective.	Low
Establish national and sub-national contingency plans, based on Interagency Network for Education in Emergencies (INEE) Minimum Standards (2010), to support educational continuity, including plans and criteria to limit the use of schools as temporary shelters.	None
Identify alternate locations for temporary schools and alternate modes of instruction	Low
Incorporate the needs of pre-school and out-of-school children, children with disabilities, and both girls and boys.	Medium
Link education sector and disaster management sector policies and plans at each level of social organization (national, subnational levels, and local and school-site level) and establish communication and coordination linkages across sectors.	Medium
Practice, critically evaluate, and improve on response preparedness, with regular school-wide and community linked simulation drills. Adapt standard operating procedures to specific context of each school.	Medium

None		Low		Medium		High		Advanced

None	No action by education department and/or DM stakeholders.
Low	In principle agreement to work by education department and/or DM stakeholders with some ground work undertaken.
Medium	Education department and/or DM stakeholders work currently in process
High	Education department and/or DM stakeholders work approved for institutionalization after a cycle of at scale implementation.
Advanced	Replication and roll out by the education department and/or DM stakeholders

The Education Department DRRSC approved for adoption the SBDRM model approach (based on CSSF) in June 2014. Based on the model approach the cascade training approach was formalized by the MoE&SE KP. The cascade training approach envisages training of provincial master trainers at Provincial Institute of Teacher Education (PITE) KP. The provincial master trainers train the District Master Trainers (DMTs). The pool of DMTs is drawn from the cluster lead schools at the district level. The DMTs train the school teachers and provide guidance to the Parent Teacher Committees (PTCs).

In addition, the training cycle for the Education managers at district level has been designed to be executed by PITE. This helps provide the requisite capacity at the district education departments for roll out of teachers training, subsequent school level activities and planning.

Some of the tools developed, tested and approved by the MoE&SE to support these activities include:

- Provincial Master trainers training manual and associated training materials (5 days)
- District Master trainers training manual and associated training materials (5 days)
- Teachers training manual and associated training materials (2 days)

The role of PTC to act as the School disaster Management Committee (SDMC) – as also recommended by the PSSF – has been notified by the ED DRRSC in September 2014 . The PTC guide book has been revised to include the additional role of the PTCs as SDMC. The empowerment of the PTC to effectively play the leadership role in the schools and act as the lead disaster management body at the grass root level is ongoing through synergies with the KP Education Sector Program II (KESP II) funded by DFID.

The PTC are being empowered to lead all the school level activities including repair and maintenance, addition of missing facilities etc. The revised guidebook of PTCs includes a complete annexure for DRR activities and mainstreaming. The financial allocation (on need basis) allowed to the PTC annually for the school was increased to up to PKR 1,000,000 (one million rupees) and is being further enhanced to up to PKR 3,000,000 (three million rupees) annually.

The working paper for the trainings of education managers and teachers through the cascade training approach was prepared by the DCTE for execution by PITE. Based on the working paper the PC1 for the training of one teacher per school across KP province (total 28,000 teachers and 400 education managers in 25 districts) was prepared by DCTE with part contribution from the previous DP/DRR action STDP3.

Simultaneously, the following planning tools were also developed and approved by the MoE&SE.

- School Disaster Management Plan (SDMP)
- District Education Sector Disaster Management Plan (DESDMP)
- Provincial Education Sector Disaster Management Plan (PESDMP)

In order to assess the cascade approach and verify the workings for the PC1 the ED DRRSC approved the roll out of the cascade training in districts Chitral, Malakand and Nowshera. A total of 59 education managers (22 female), 81 DMTs (41 female) and 1892 teachers (771 female) were trained.

Based on the learning's, the PC1 was rationalized by the DCTE and has been approved by the departmental planning committee of E&S Department for putting it on the agenda of Provincial Development Working Party and included in the shortlisted schemes of ADP scheme for 2017-18.

The trained teachers in the 3 districts jointly with the participation of staff, students and parents (PTC members) identified and mapped the hazards affecting the schools. The SDMPs were prepared by the trained teachers & submitted to the district education offices.

The SDMPs were analyzed using an MIS tool developed for the purpose. It has been observed that the quality of the SDMPs is widely varying from good to very poor. The random monitoring has revealed that the understanding, awareness and willingness of the teachers has played an important role in the learning's retained and put into action by the teachers. The inherent loss of knowledge in cascade training approach was evident from the quality of the SDMPs. At the same time several examples are available where the teachers and other staff and students have taken keen interest in the process reflected in the better quality of the school disaster management plans. It was also noted that the information and awareness was passed on to other staff and students in several schools. Whereas in other schools the trained teachers showed apathy towards the subject typical of inefficient government sector teachers.

The MIS data of the SDMPs helped prepare and formulate the district education sector disaster management plans jointly with the district disaster management authorities. The exercise was widely appreciated in improving and developing coordination and cooperation linkages between the different DRM stakeholders at the district levels. It is also a learning of the previous action that to be able to translate the information contained in the SDMPs to strategic decision-making information necessary of DRR sensitive decision-making, the information must be available in a management information system. The information should also be subjective for ease of analysis. Therefore a need to revise the SDMPs as well as to link the same to the existing Education Management Information System (EMIS) has been identified. It is also critical to link the availability of capacity for the preparation of the SDMP (teacher and education managers training should also be executed in a manner to meet the different timings for these tasks).

The standard operating procedures (SOPs) for the schools were prepared and adapted by the MoE&SE KP. The SOPs have been printed and disseminated to all the 28,178 schools across the 25 districts of KP province. The SOPs include information on hazards with and without warnings, including: drop cover and hold, building evacuation, evacuation to safe haven, shelter-in-place and lockdown, and safe family reunification. A training session on the SOPs has been integrated in the Early Childhood Education and Development (ECED) trainings held at PITE. In this manner all the teachers receiving the regular ECED trainings are also trained on SOPs.

As a result of the trainings the evacuation drills have been started at the schools only towards the end of the previous ECHO funded DP/DRR action. The drills and response preparedness needs to be evaluated and linked to the community simulation drills.

The communication and coordination linkages identified during the preparation of DESDRM plans serve as an important starting point for the communication and coordination linkages across sectors. These communication and coordination linkages need be further explored and evaluated, especially in urban contexts.

The link of education sector and disaster management policy at the national level has been discussed in Chapter 4 above. These links at the other levels of social organisations (provincial, district, tehsil/town, municipal committee, village/mohalla and neighborhood levels) that involve multiple stakeholders (especially in urban contexts such as PHED, Health Department, Child Protection Bureau, Transport authorities, traffic police, law enforcement, Rescue 1122, WASA etc.) need to be elaborated and need strengthening and scope needs to be widened.

The contingency plans for the continuity of the education in the face of disasters (and temporary disruption to education) need to be drawn up as per the INEE 2010 standards (contextualized to Pakistan and provincial contexts) both at the provincial as well as district levels. The preparedness activities identified, as part of these education continuity plans will also require significant advocacy efforts to get funding from the government budget especially in the face of competing priorities.

6.3 Key gaps and needs identified

- Work with the education department, planning and development department and Ministry of Finance for inclusion of the full PC1 amount/funds with minimal cuts (if any) in the annual development budget 2017-18. After the approval of the PC1, work with and support the MoE&SE for the preparation of PCII – PCIII in a timely manner. Continue to work with and support the DRR Focal person in the MoE&SE for effective roll out, replication and scale up of SBDRM model.
- Revise and simplify some of the planning tools (especially the SDMP) and integrate in the EMIS system of MoE&SE KP. Develop audio-visual 'how-to-do' tutorials for the ease of teachers, students and parent teacher committees.
- Improve and enhance coordination with the other donor funded programs in education sector, especially with KESP II for the empowerment of PTCs. Work with department to ensure the enhanced financial allocation to PTCs is also used for DP/DRR measures.
- A clear link between community early warning system and school early warning system needs to be defined. The system must be an end-to-end solution (which is already in place (theoretically), developed by PDMAs). Education manager along with school principle should be the lead authority to initiate early warning system. Things to do after receiving early warning is already clearly mention in SOP.
- Child protection to be mainstreamed with linkages to other programs (ban on corporal punishment, child protection bill, women protection bill etc.). Family reunification plans need to be strengthened and tested particularly in urban centers. Establish student release procedures that are approved by parents/guardians. Advocate for safe school transportation in urban centers and provide training in appropriate safety skills for students and staff.
- Further work on practical manifestations of the DESDRM and PESDRM integration in to the DRM plans at district and provincial levels. Inclusion of DESDRM in contingency plans of PDMA can be a starting point.
- Contingency plans based on INEE standards for better response preparedness need to be developed by the MoE&SE. Simplified solutions for alternate modes of instruction needs to be identified, tested and adopted. Local made solution in this context shall be valued highly. This can be linked with home based workers through CFW, so that if transportation is an issue, local home based school can be an option against CFW till schools are able to reopen. Alternative locations need to be identified by district education officers along with district administration while following minimum standard outlined in INEE. To enable education mangers, a capacity building program may be required so that they are able to exercise it in a true spirit. DCTE and PITE are focal points for alternative modes of instruction.
- Encourage practice of evacuation drills across all schools and link to the community simulation drills where possible. Establish and strengthen linkages to community emergency response teams (ERTs) and specialized agencies such as Rescue 1122. Strengthen linkages to police and LEA, especially in urban centers for early warning, SOS messaging.
- Lack of structured monitoring by the education department. Integration in to regular monitoring and evaluation structures of provinces can be the starting point.
- Evolve a strategy for school disaster management at private schools.

DP-DRR Session

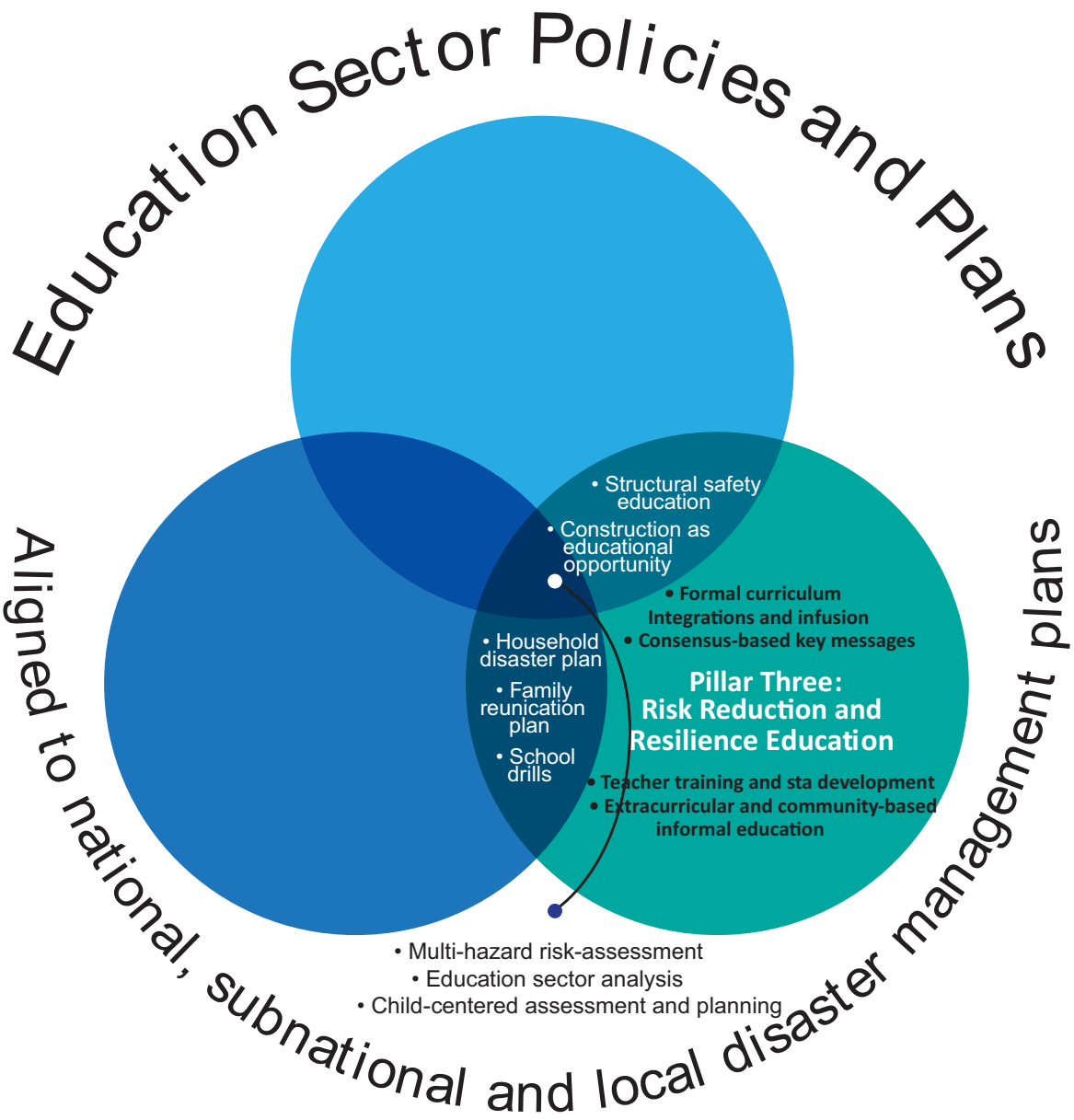
River Crossing

Community Awareness Session on DRR & use of fire extinguisher

chapter 7

PILLAR 3

Risk Reduction & Resilience Education



7.1 Key responsibilities

- Develop national evidence and consensus-based, action-oriented key messages for household risk reduction and resilience. These will provide a foundation for formal and non-formal education as well as public awareness campaigns and messaging.
- Engage students and staff in real-life school and community disaster management activities, including mapping hazards, developing school-based contingency plans, and implementing regular school drills for relevant hazards.
- Develop 'scope and sequence' to detail learning outcomes and competencies to integrate risk reduction and resilience into regular curriculum, at all levels.
- IInfuse risk reduction throughout the curriculum and provide guidelines for integrating risk reduction and resilience into carrier subjects.
- Develop quality teaching and learning materials for students and teachers. Address all dimensions of risk reduction education: conducting multi-hazard risk analysis (including those with natural and human causes, and violence and conflict); understanding risk drivers and risk mitigation measures; identifying and disseminating key messages for safety and preparedness; building community risk reduction capacity; and developing social cohesion, and a culture of safety and resilience.
- Provide pre-service and in-service teacher training on risk reduction curriculum materials and methods.
- Develop strategies to encourage teachers to integrate these topics into formal curriculum, as well as non-formal and extracurricular approaches with local communities.

Training of Provincial & District Master Trainers on SBDRM

7.2 Progress

Progress to date	Level of work done
Risk Reduction and Resilience Education should be designed to develop a culture of safety and resilient communities. Key responsibilities are to:	
Develop consensus-based key messages for reducing household and community vulnerabilities, and for preparing for and responding to hazard impacts as a foundation for formal and non-formal education.	Low
Engage students in real-life school and community disaster management activities, including school drills for fire (and other hazards, where applicable).	Medium
Develop scope and sequence for teaching about critical thinking for expected and unexpected, man-made and natural hazards, climate change impacts, conflict-prevention and problem-solving for risk reduction.	None
Develop quality teaching and learning materials for students and teachers. Address all dimensions of climate-smart DRR education: disaster mechanisms, key messages for safety and preparedness, understanding risk drivers and mitigating the consequences of disasters, building community risk reduction capacity and a culture of safety and resilience.	Low
Infuse risk reduction throughout the curriculum and provide guidelines for integration of DRR into carrier subjects.	None
Provide teacher training for both teachers and teacher trainees on risk reduction curriculum materials and methodologies.	None
Develop strategies to scale-up teacher involvement for effective integration of these topics into formal curriculum as well as non-formal and extra-curricular approaches with local communities.	Low

None		Low		Medium		High		Advanced

None	No action by education department and/or DM stakeholders.
Low	In principle agreement to work by education department and/or DM stakeholders with some ground work undertaken.
Medium	Education department and/or DM stakeholders work currently in process
High	Education department and/or DM stakeholders work approved for institutionalization after a cycle of at scale implementation.
Advanced	Replication and roll out by the education department and/or DM stakeholders

DRR advocates are increasingly asked by government and local partners what the exact scope and content of their subject is, and to explain, beyond generalities, the 'actionable risk reduction messages.' Key messages comprise the core, common and comprehensive information about safety and resilience that are needed to promote consistent and sustained DRR. If these actionable messages were universally practiced, the effects and impacts of disaster could be substantially reduced.

There is a need to focus on harmonizing these messages. This means working to ensure that the key points are conveyed consistently even when different stakeholders convey them to different audiences. This is different from standardizing messages, which involves working to achieve consensus around a single set of uniform messages for a particular audience.

By setting out a common reference source, it is hoped that practitioners will make voluntary efforts to harmonize their messages. The goal is common understanding and consistency in the application of common themes, across a particular province at least in the Pakistan context.

The lack of these common messages agreed and endorsed by diverse public and private sector stakeholders and DRR practitioner's results in non-standard information being delivered to the end users. Different partners and agencies tend to promote varying information that may be related to the assessment and planning, physical or environmental risk mitigation, developing skills for preparedness, and/or storing provisions. The non-structured information dissemination – often only in line with the organizational and/or project approaches – results in lack of prioritization and results in creating confusion among the end users.

For messages to have credibility, legitimacy and strong impact in a particular national or local context, they need to be standard and consistent, backed by a consensus of key stakeholders and based on the best knowledge available at the time. Ideally, these messages should be developed as part of a multi-stakeholder effort, supported by a national platform on disaster risk reduction and/or sanctioned by the national disaster management agency.

Research indicates that effective public education for DRR requires sustained repetition of the same messages. If messages are contradictory, inconsistent or unclear, the result is confusion, apathy, mistrust and inaction. We also know that people look for messages to be confirmed by a wide variety of authorities.

So, we need to outline and articulate a broad base of key messages, and to harmonize these messages universally, while expecting and allowing for variations for different contexts, languages, cultures and means.

Safety and resilience requires dramatic behaviour changes – these only become possible when the public can see that 'everyone is doing it.' For behavioural change messages to catch hold, people need to understand the reasons for carrying out specific measures and feel not only convinced of their effectiveness but capable of implementing them.

DRR curriculum is one of three important pillars of safe schools, the two other pillars being safe learning facilities and school disaster management. The comprehensive school safety framework integrates DRR learning activities with the other pillars and engages students', teachers' and parents' involvement in wider school safety issues.

A holistic form of DRR education also integrates four C's, curriculum, campus (the physical environment of the school and its grounds) and community - encircled by a fourth sphere, that of (institutional) culture. Implementing comprehensive school safety, which embraces the interconnectedness of the four C's, leads to a shift from seeing the school as a DRR teaching organization to a DRR learning organization (or learning community). Such a shift requires that all members of the school community see themselves as potential learners open to learning from every facet of school culture and life, including its engagement on multiple fronts with DRR.

7.3 The Five Essential Dimensions of DRR Learning

A systematic, coherent and implementable conception of DRR education is laid out below described through five essential dimensions of DRR learning[6]. These five dimensions are essential in that, collectively, they scope out what the full and systematic treatment of DRR involves while enriching the potential for DRR learning in both school and community.

7.3.1 Dimension 1 Understanding the Science and Mechanisms of 'Natural' Disasters

The first dimension concerns developing understanding of the science and mechanisms of natural hazards such as cyclones, tsunamis and volcanic eruptions: why they happen; how they develop; where they occur; their frequency and power; their physical impacts; trends and patterns in their occurrence. The recent global mapping of DRR curriculum found that, in many instances, disaster-related learning was more or less confined to parts of the curriculum, such as physical and natural science and geography, where there has been traditional and longstanding textbook coverage of natural weather and geo-seismic hazard[7]. But just as science dominated early disaster-related international discourse before the social and economic consequences of disaster became the focal point of attention[8], so disaster-related education spearheaded by science is giving way to a broader, multi-disciplinary, socially oriented approach. Understanding the science of natural hazards nonetheless remains an important dimension of DRR education. Cultivating rich understanding of mechanisms involves moving beyond the textbook and/or workbook toward engaging students in active enquiry, experimentation, project work, analysis and discussion of stimulus learning material and active engagement with DRR professionals, meteorologists, climate change researchers, community DRR activists and those with indigenous insight.

[6] For more in-depth details refer to: Towards A Learning Culture of Safety and Resilience – Technical Guidance for Integrating Disaster Risk Reduction in the School Curriculum. UNESCO and UNICEF 2014

[7] The dimensions are extracted from a comprehensive mapping and analysis of DRR curricula globally. See: UNESCO/UNICEF. 2012. Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries.

[8] UNCSD Secretariat. Disaster Risk Reduction and Resilience Building, Rio 2012 Issues Briefs, no. 8. http://www.preventionweb.net/english/professional/publications/v.php?id=24076&pid:0

7.3.2 Dimension 2

Learning and Practicing Safety Measures and Procedures

Instruction and practice in safety measures and procedures in the event of hazard, at school, at home or out in the community or local environment form the second dimension of DRR education. This includes familiarization with hazard early warning signs and signals, instruction in evacuation or sheltering procedures, drills and exercises, familiarization with basic first aid and the contents of a first aid kit, health and safety measures, and guidance on how to stay safe after a hazard has subsided. Safety awareness has so far tended to find a place in the student learning experience as a co- or extra-curricular element or as an addition to the textbook study of hazard in science lessons[9]. A cross-curricular approach is needed in which safety behaviors are internalized and continually improved through reinforced practice. Occasional learning that is inactive in nature, limited in its practical, action and decision-making scope, and unreflective is not best suited to fostering safety knowledge and practice.

7.3.3 Dimension 3

Understanding Risk Drivers and How Hazards Can Become Disasters

By focusing on the science of natural or manmade hazards and/or on safety procedures in the face of hazard, learning programmes can inadvertently give learners the impression that little that can be done to combat against disaster.

The third dimension of DRR learning seeks to encourage learners to act and be proactive in mitigating risk through a thorough examination of the elements at work in the fundamental disaster risk formula:

$$\text{Disaster Risk} = \frac{\text{Natural Hazard x Vulnerability}}{\text{Capacity of Societal System}}$$[10]

Hazards and disasters are different. A hazard is an event with the potential to cause harm. A disaster happens when the hazard exceeds people's capacity to cope, to devastating effect.

Clearly, the more intense is the hazard, the greater the likelihood of disaster. But the level of disaster risk is also fundamentally influenced by prevailing conditions of vulnerability. Forms of vulnerability that drive up the likelihood of disaster risk in any context – risk drivers – can be social (e.g. illiteracy and lack of knowledge and education) or economic (e.g. poverty and inequality) or environmental (e.g. deforestation and other forms of ecosystem degradation).

A key question to regularly review with learners is whether at any level, local through global, there is such a thing as an exclusively 'natural' disaster.

Having learners actively examine local conditions, drivers and processes of vulnerability through participation, even leadership, in community enquiry projects, is an essential, but as yet insufficiently addressed aspect of DRR education.

[9] UNESCO/UNICEF. 2012. Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries. Paris/Geneva: UNESCO/UNICEF.

[10] UNESCO/UNEP. 2011. Climate Change Starter's Guidebook. Paris: UNESCO. p. 63.

7.3.4 Dimension 4

Building Community Risk Reduction Capacity

The formula noted under Dimension 3 demonstrates that increasing the capacity of a society to protect itself against hazard can reduce disaster risk. The fourth dimension of DRR education learning engages learners in processes of resilience building in their own community through grassroots level initiatives such as undertaking local vulnerability assessment and mapping initiatives, identifying hazards, developing resilience action plans, and implementing those plans. The action-oriented learning dimension of DRR education offers hands-on experience of participatory citizenship education.

Resilience building embraces both mitigation and adaptation. Mitigation, at one level, is about reducing or limiting the potential threat from hazard. At this level, it overlaps considerably with adaptation, (i.e., adjusting human or natural processes to modify the effects of hazard, for example, changing an agricultural method to cope with drought). At a deeper level, mitigation concerns examining how and to what extent human activities may contribute to increasing frequency and severity of hazard, and how to effect fundamental changes in human behavior (e.g., encouraging consumer behavior changes toward sustainable consumption). In practice most DRR education has stopped short of this deeper level, limiting itself to mitigating the effects of hazard[11].

7.3.5 Dimension 5

Building an Institutional Culture of Safety and Resilience

DRR in education is understood to have both structural components, such as school buildings and facilities, and non-structural elements, such as school disaster management, school policy development, disaster drills and procedures and formal, non-formal and informal learning[12]. The latter covers 'any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts[13]. The fifth and final dimension places an emphasis on blending the structural and non-structural elements so that the school becomes a DRR learning community or organization oriented towards building a culture of safety and resilience. It involves principals and teachers in looking for possibilities to give a voice to students in the curriculum, in their daily lives and in the processes of the school regarding both structural and non-structural aspects of safety and resilience building. In such a blending the school becomes a DRR learning laboratory – the campus becomes part of the curriculum.

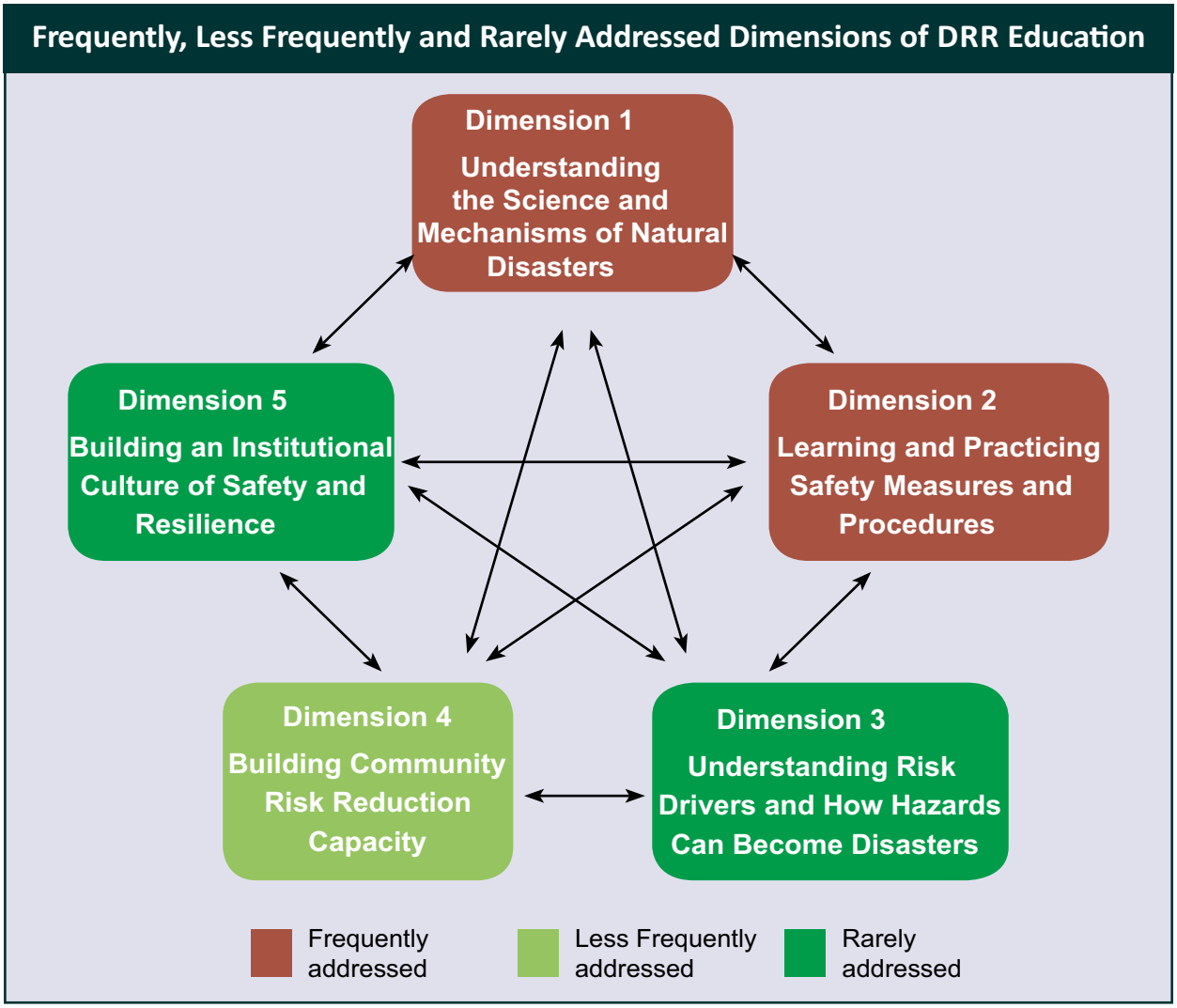
Possible elements/activities include learner involvement in school DRR policy development, learner engagement with technical personnel on structural safety aspects of the school, learner management of school hazard bulletin boards, student run vulnerability assessments of the school as practice for their resilience building projects in the community, student presentations of in-class or in-community DRR work at school assemblies, and establishment of a school and community DRR council with student membership.

11 Kagawa, F. & Selby, D. 2012. 'Ready for the Storm: Education for Disaster Risk Reduction and Climate Change Adaptation and Mitigation', Journal of Education for Sustainable Development, 6 (2)

12 UNISDR/ECHO/UNICEF. Undated. Safe Schools in Safe Territories: Reflections on the Role of the Educational Community in Risk Management. http://www.unisdr.org/we/inform/publications/8962

13 http://www.unisdr.org/we/inform/terminology See also: Wisner, B. 2006. Let Our Children Teach Us! A Review of the Role of Education and Knowledge in Disaster Risk Reduction. Bangalore: Books for Change. pp. 32, 44.

Figure 2



7.4 The Curriculum development process

The DRR curriculum development process can be divided into four stages. This enables a clear description of the process in an easy to follow format and can be adapted into a checklist for the different actors involved.

Curriculum development is not a straightforward process. Given the range and number of stakeholders involved and their respective levels of engagement, following four stages in sequence may be difficult in reality. For example, a small number of dynamic champions of change may push ahead with curriculum development leaving those tasked with preparing the ground and legitimizing the development to catch up; enthusiasts may take the first tentative implementation steps before learning outcomes are fully determined; field pilot tests may bring to the surface learning outcomes not anticipated by the curriculum developers in their planning and preparation.

In situations where decentralization or even localization of control and responsibility for curriculum is taking place, but where central government retains a monitoring and potential interventionist role, the process can become even more complicated.

A Detailed Breakdown of the Four Stages

7.4.1 (Stage 1): Initial planning and ground preparation

• Determining the need for curriculum development and building broad-based general consensus around the need
• Unifying stakeholders around the general need
• Conducting a 'state of the art' investigation of the existing curriculum, its operation and delivery through a curriculum review, baseline study or needs assessment
• Building consensus around specific needs revealed through the 'state of the art' investigation
• Determining the focus (curriculum and grade location) for curriculum development
• Establishing a schedule, with milestones and deadlines, for the curriculum development process
• Setting up a curriculum development team, determining the roles and responsibilities of team members, and establishing the modus operandi for collaboration, teamwork and meetings

7.4.2 (Stage 2): Preparing the curriculum

• Determining learning outcomes (knowledge, skills, attitudes and behaviors) to be realized through the new curriculum
• Selecting and sequencing curriculum content that will help realize the outcomes determined
• Translating the selected content into age-appropriate learning materials.
• Developing learning activities with supporting stimulus materials designed to realize the outcomes determined
• Reviewing and analyzing existing curriculum materials and activities and evaluating them for possible inclusion in the curriculum programme (i.e., to avoid 'reinventing the wheel')
• Soliciting feedback from stakeholders, including panels of experienced teachers on the curriculum materials, and redrafting where appropriate

7.4.3 (Stage 3): Implementing the curriculum

• Identifying schools and teachers for pilot delivery of the new curriculum
• Training the pilot teachers to teach the new curriculum
• Undertaking, monitoring and evaluating the pilot implementation
• Revising the curriculum materials and activities and training programme in the light of the pilot evaluation
• Undertaking further rounds of teacher training and pilot testing (with a widening population of schools and teachers)
• Conducting widespread training of teachers (following their participation in 'training of trainers' events)
• Incorporating the new materials and activities into pre-service teacher training
• Securing formal acceptance of the curriculum by national, regional or local jurisdictions

7.4.4 (Stage 4): Monitoring evaluating and refreshing the curriculum

- Developing data collection strategies for periodic evaluation of the impact and quality of the new curriculum, its effectiveness in realizing anticipated learning outcomes, and to identify any unanticipated effects and impacts (positive or negative)
- Writing monitoring and evaluation reports
- Establishing mechanisms for evaluation-informed periodic curriculum revision

7.5 Curriculum Review in KP (E&SE)

The Elementary and Secondary Education Department (E&SE) has decided to review and standardise textbooks being taught in the public sector schools with the objective to incorporate quality material therein. The decision has been taken as part of the initiative to maintain minimum standards in textbooks from grade-I to the intermediate level (12th grade).

The textbooks of mathematics, science, english, chemistry, physics and biology from grade-I to intermediate level will be reviewed and standardized in different phases. For this purpose, the education department has made a comprehensive plan. The plan of reviewing textbooks and incorporation of quality content consists of several phases to be completed by June 2018. The target for 2017 is the revisions of textbooks of science, mathematics and English at middle (class 6 to 8) level by end of June 2017 while the textbooks for secondary and higher secondary (9 to 12 grades) class would be improved in the next phase. The textbooks of physics, chemistry, biology, English, mathematics and science will be revised in this phase.

In this connection, the education department has already initiated imparting training to the officials of Directorate of Curricula and Teachers Education, Khyber Pakhtunkhwa Textbook Board, authors, publishers and reviewers about how to review and standardize the books (with support of GIZ).

School Safety Manuals and Materials for ED Manager, Provincial and District Master Trainers and Teachers
Developed by Education Department, PITE, DCTE, PDMA, HOPE'87

7.6 Key Gaps & Needs Identified

1. Reviewing and analyzing existing curriculum materials and activities and evaluating them for possible inclusion in the curriculum programme (i.e., to avoid 'reinventing the wheel')
2. Cross-curricular infusion of disaster prevention and risk reduction education into formal school curricula as per the five essential dimensions of DRR learning.
3. Consensus-based key learning focus for reducing household and community vulnerabilities, and for preparing for and responding to hazard impacts needs to be developed jointly by the education sector and disaster management stakeholders at national and provincial level. The consensus-based key learning focus will serve as a foundation for formal and non-formal education.
4. Following the key-learning focus development, the scope and sequence for teaching about critical thinking for expected and un-expected, man-made and natural disasters, climate change impacts and problem-solving for risk reduction need to be developed. This scoping and sequencing exercise has to be led by the curriculum wing of provincial education department (DCTE in KP).
5. Determining learning outcomes (knowledge, skills, attitudes and behaviors) to be realized through the new curriculum followed by selecting and sequencing curriculum content that will help realize the outcomes determined.
6. Learning activities with supporting stimulus materials designed to realize the outcomes determined need to be developed. These can be put together as a learning handbook for the teachers
7. Expansion of regular extra-curricular DRR activities to increase school and local community resilience.
8. Establish and strengthen engagement with the provincial curriculum review committee and the text book boards for the inclusion and publication of text books in the next editions due to be printed and available in 2018.

chapter 8

Conclusion

The consolidation of the SBDRM model in a coordinated approach with the partners working on CBDRM model should be a priority. Focus must be on strengthening the quality aspects of model approach, including training/capacity building of teachers through government funds, improved protection of children and linking SBDRM actions to other development interventions, such as DFID, DEVCO and EU MIP to reduce the vulnerability of children in the face of natural and man-made disasters and support authorities to adapt and implement already tested models by building the capacities of concerned line departments. The priorities should be institutionalization of SBDRM in workflow of education and DRM departments to anchor emergency response and integration of DP/DRR in annual development plans in line with the national/provincial policies and plans.

The problems identified demand response through five interwoven strands:

- Strengthen close working relationship at the top tiers of education and disaster management (DM) authorities (national/provincial) to proactively address issues of policy integration, planning and budget supports
- Ensuring that learning spaces are sound, sufficiently equipped and resourced, and provide the key safe infrastructure to protect student and teachers lives (links to action proposed by UNHABITAT
- Training and supporting education managers and teachers through government budget support, linking to early warning systems (in action proposed by CARE) and supporting preparedness for saving lives and education continuity
- Ensuring that DRR and resilience education is integrated and infused in curriculum and text books systematically enabling active engagement of communities
- Collaborating with government, other civil society organizations (CSOs) and donors to advocate and build momentum for budgetary supports at both national/provincial levels for future sustainability.

The response may be designed, as outlined below, organised to be seen as part of PSSF, KP Education Sector Plan 2015/16-19/20, should work jointly with the national/provincial ministries and departments (education, DM) and other key stakeholders to establish, operate and sustain an integrated set of interventions as follows:

For legal and officially authorized/permitted policy and guiding principles at national and provincial level with sustained budgetary support; project may be designed to work with NDMA, MoFE&PT (national) and PDMA, MoE&SE KP (provincial) as primary stakeholders and other agencies in urban centres through these primary stakeholders. The learning's of testing of draft PSSF need to be incorporated in the document followed by a validation exercise jointly and in consultation with the stakeholders. The NEP 2009 is also under review by MoFEnPT, that provides a once in a decade opportunity for integration of SBDRM model approach in the key policy document. NDMA must be supported to lead the integration process. In order to transform the current reactive approach for Education in Emergencies (EiE) to proactive, joint activities must be initiated providing technical support to NDMA and its provincial functionaries for the development and implementation of country specific guidelines for education continuity/EiE (as per INEE 2010 standards) supporting preparedness in education sector.

For structural safety of school buildings (pillar 1 of SBDRM model), refer to coordinated approach with the UNHABITAT.
For school disaster management (pillar 2 of SBDRM model), the achievements of PC1 approval for inclusion in ADP scheme in the previous action should be built upon and shaped further for consolidation. MoEnSE KP must be supported for the roll out and replication of training/capacity building of teachers and education managers. Through technical support to DRR focal person EnSE, the PCII (survey and feasibility study) followed by approval of budget disbursal and PCIII (annual targets and progress reporting) must be prepared. The project must work with Directorate EMIS to integrate the rationalized SDMP form in the meanwhile, to enable the structured data collection that will lead to availability of district wide consolidated information.

activities must be initiated providing technical support to NDMA and its provincial functionaries for the development and implementation of country specific guidelines for education continuity/EiE (as per INEE 2010 standards) supporting preparedness in education sector.

For structural safety of school buildings (pillar 1 of SBDRM model), refer to coordinated approach with the UNHABITAT.
For school disaster management (pillar 2 of SBDRM model), the achievements of PC1 approval for inclusion in ADP scheme in the previous action should be built upon and shaped further for consolidation. MoEnSE KP must be supported for the roll out and replication of training/capacity building of teachers and education managers. Through technical support to DRR focal person EnSE, the PCII (survey and feasibility study) followed by approval of budget disbursal and PCIII (annual targets and progress reporting) must be prepared. The project must work with Directorate EMIS to integrate the rationalized SDMP form in the meanwhile, to enable the structured data collection that will lead to availability of district wide consolidated information. The education managers must be mentored and coached to prepare the DRM plans based on this information. Close collaboration must be established with the DFID funded KESP II program to strengthen the PTC to lead the school level assessment and planning and meaningful use of enhanced financial allocation to PTCs for DRR measures. Working jointly with the CBDRM partners the end-to-end solution for early warning systems (EWS) with defined roles for teachers and principals can be tested. Simulation drills at schools must also be held and coordinated closely and jointly with community drills as critical life saving response capacity. Child protection measures – in particular family reunification/child release procedures must be developed jointly with the parents and communities. In urban centers EWS, drills and child protection can also involve other stakeholders (Rescue 1122, Child Protection Bureau, Law Enforcement Agencies (LEAs) and transport authorities). Contingency plans for education continuity and response preparedness must be prepared and tested in the field.

A systematic, coherent and implementable conception of risk reduction and resilience education (pillar 3 of SBDRM model) must be promoted. The 5 essential dimensions of DRR learning approach (Ref pp XX of annex X) can collectively scope out full and systematic treatment of DRR while enriching the potential for DRR learning in both school and community. The key learning focus about safety and resilience – needed to promote consistent and sustained DRR must be developed jointly with NDMA/PDMA. Thus working to ensure that the key points are conveyed consistently even when different stakeholders convey them to different audiences. DCTE must be supported to develop the scope and sequence for teaching about critical thinking for expected/un-expected, man-made and natural disasters, climate change impacts and problem solving for risk reduction. The infusion and integration of DRR can be focused on understanding the science and mechanisms of 'Natural' disasters (dimension 1) and learning and practicing safety measures and procedures (dimension 2). Infusion across the entire range of subjects to understand risk drivers and how hazards can become disasters (dimension 3) will promote to build an institutional culture of safety and resilience (dimension 5). Where possible, building community risk reduction capacity (dimension 4) can be included. DRM and local and international curriculum experts, provincial curriculum review committee and textbook boards must be brought together for this work. Textbooks of 6–10 grades under review by MoEnSE during project life can be targeted for DRR inclusion.

chapter 9

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