



SAARC DISASTER MANAGEMENT CENTRE AND
UNICEF REGIONAL OFFICE FOR SOUTH ASIA

CHILD-CENTERED DISASTER RISK REDUCTION IN SOUTH ASIA

BASIC CONCEPTS





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INTRODUCTION

South Asia experiences some of the biggest disasters in the world putting millions of people at risk. This is an outcome not only of its exposure to a wide range of natural hazards, but also a result of poverty, socio-economic transformation, rapid urbanization and political volatility. Climate change aggravates the situation by increasing the intensity, frequency and uncertainty of climate events.

As per SAARC Disaster Management Centre's *South Asia Disaster Report 2011*, the region accounted for 96.5% of the total number of disasters recorded globally in 2011 alone (291 out of 302), killing 2317 people, affecting 23,23,7,989 people and costing an estimated USD 4796 million in terms of economic damages (CRED data in SDMC, 2013, p. 3-7)¹. In the Indian Ocean Tsunami in 2004, Maldives lost more than 60% of its GDP, postponing its emergence from being categorized as a Least Developed Country for five years. In Pakistan, the damage resulting from the 2010 floods was close to USD 10 billion representing 5.8% of the country's 2009/2010 GDP" (Velasquez, 2012, p. xxiii). Yet, these high-profile emergencies are only part of the challenge. Despite significant cumulative impacts on lives and livelihoods, most localized high frequency and low-intensity disasters remain unrecorded.

Although natural hazards and climate change potentially affect all, they do not affect people equally. Marginalized groups - based on age, gender, disability, caste, ethnicity, religion, class and geographical location - are particularly vulnerable to disaster risk. Poverty is a critical factor that makes these groups vulnerable. This is evident from the fact that most excluded groups live and work in fragile environments and hazard-prone areas, their houses and surroundings are of poor quality and insufficiently maintained.

Gender is another contributing factor in disaster vulnerability. In South Asia, women and girls have lower educational levels and higher school drop-out rates than men and boys. They lack mobility outside their homes, do low paid unskilled work, and are responsible for reproduction, care (children, elderly, and disabled members of the family) and domestic work. Low levels of decision-making power within and outside their homes add to their particular vulnerability.

Age is a critical element in disaster vulnerability. Children's specific vulnerabilities come from their requirements for basic survival support including nutrition, health, psycho-social care and protection. Their underdeveloped immune system makes them susceptible to communicable diseases such as diarrhea, pneumonia and malaria. A large proportion of children in South Asia suffer from undernutrition and malnutrition. The main killers of children in the region are highly sensitive to natural hazards and climate change because displacements and higher temperatures exacerbate these diseases and conditions (Lawler, 2011). It is therefore

¹ The criteria used by CRED for a disaster to be entered into the EMDAT database is that it should fulfil at least one of the following: a) Ten or more people reported killed, b) Hundred or more people reported affected, c) Declaration of a state of emergency, or d) Call for international assistance. EMDAT is in other words skewed towards large-scale disasters, which contributes to the dominance of South Asia in the database.

no surprise that children are disproportionately affected by emergencies. Without concerted action, millions of children in South Asia will remain vulnerable to compounding risk factors such as collapsing structures, water scarcity, communicable disease, malnutrition and poor social services.

While populations in South Asia are vulnerable to disaster risks, they also have coping capacities. Governments and civil society in South Asia have pioneered disaster risk reduction (DRR) and climate change adaptation (CCA) approaches that have helped to define community-based DRR and CCA at the global level². Bangladesh's cyclone preparedness programme is a classic example of how concerted efforts have reduced disaster risks for millions of people in low-lying coastal areas. Other South Asian countries have demonstrated how effective early warnings and weather forecasts can reduce the impact of tsunamis and extreme climate events. Similarly, land-use regulations, building codes and school safety have become critical aspects of spatial planning in some parts of the region to effectively counter earthquakes, landslides and avalanches.

Most countries in South Asia have also developed DRR policies, plans and programmes. National Disaster Management Authorities (NDMAs) in the region are in the process of adopting preventive risk management approaches in order to effectively reduce risk before they manifest as emergencies. Countries in the region have participated actively in international DRR processes such as the World Conferences on DRR in Japan, the biennial Global Platforms for DRR in Geneva, and the Asian Ministerial Conferences on DRR.

India is slated to host the Seventh Asian Ministerial Conference on DRR (AMCDRR-7) in 2016. All of these efforts and events show that DRR is regarded as an important agenda for the region and that the region has a vibrant DRR community.

Despite these commendable efforts, recurring disaster events indicate that governments and communities have a long way to go before they are prepared to effectively counter the increasing level of disaster risk in the region. Community-based DRR, mostly implemented by civil society organizations, needs to be scaled up and ownership transferred to local governments and communities to enhance sustainability. Similarly, DRR needs to be streamlined into development plans and programmes and sufficient resources mobilized to address the gaps between the international discourses and the realities on the ground. Social services must reach the most vulnerable population groups and social protection schemes designed in ways that factor in natural hazards and climate change. Humanitarian assistance and development interventions need to be layered, integrated and sequenced effectively across the common goal of building resilience of communities in South Asia³. Perhaps most importantly, government institutions need to systematically collect and analyze population data by age, sex and ability in order to effectively address specific vulnerabilities. The ultimate goal is to ensure humanitarian action pays more attention to vulnerabilities rather than shocks, and that development becomes risk-informed and climate-sensitive.

² In the last decade there has been increased efforts to integrate DRR and CCA in recognition of overlapping agendas. Both approaches aim at reducing vulnerabilities and enhancing resilience. In communities exposed to weather-related hazards and extreme climate events, it is impossible to distinguish between DRR and CCA. Convergence between DRR and CCA was the theme of AMCDRR-4 in 2010. In an attempt to avoid duplication of efforts, Afghanistan's *Strategic National Action Plan for DRR* (2011) pursued a 'no-regrets' approach to DRR and CCA. Similar efforts are underway in child-centred DRR and CCA.

³ This sentence echoes USAID's operational agenda of resilience (USAID, 2012). The **resilience** concept has gained popularity in Asia during the last two-three years. The renewed interest in this old concept was triggered by the food security crisis in the Horn of Africa in 2011. Resilience has framed much of the development debate leading up to the formulation of the post-2015 agenda. While international consensus is yet to emerge, the new resilience concept has helped development agencies refocus from hazards to vulnerabilities, and from vulnerabilities to capacities in order to promote effective coping mechanisms in times of increased uncertainty caused by multiple and often interlinked shocks and stresses.

ILLUSTRATION 1: KEY COMPONENTS OF CHILD-CENTRED DRR

REDUCING VULNERABILITIES	ENHANCING CAPACITIES
Child-centred risk assessment	Participatory action
Safeguarding child infrastructure	Life skills education
Protecting children in emergencies	School safety
Social protection for children	Partnerships

In order to support such efforts in relation to children and child rights, the South Asian Association for Regional Cooperation (SAARC)⁴ and the United Nations Children's Fund (UNICEF) have joined hands. In early 2014, SAARC signed a *Partnership Framework* with UNICEF's Regional Office in South Asia (ROSA)⁵ to advance good programming for children. Strengthening capacities in DRR and CCA was identified as a priority of this new partnership. During 2014 and 2015, emergency and DRR practitioners from SDMC and UNICEF met on several occasions to discuss how best to raise the profile of **DRR programming for and with children**. This paper is part of the collective efforts to develop capacities of stakeholders in the region through a number of learning events that will give practitioners an opportunity to take stock of the situation, identify barriers, flag good practice, discuss operational challenges and enter new alliances. The goal is to contribute to safeguarding the rights of all children in South Asia.

This paper outlines the rationale for exploring children's role in DRR and CCA. It describes



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Child-centred DRR aims at reducing children's vulnerabilities to disaster risk while enhancing children and duty bearers' capacities

key features of child-centred DRR that aims at reducing children's vulnerabilities to disaster risk while enhancing children and duty bearers' capacities. It identifies eight ways of reducing child vulnerabilities and enhancing child capacities. Child-centred risk assessments, safeguarding child infrastructure, protecting children in emergencies, and social protection for children are proposed as means to reduce child vulnerabilities, while participatory action, life skills education, school safety and partnerships are suggested as tools to enhance child capacities. The paper takes stock of challenges and the progress made during recent years and proposes ways to scale up child-centred DRR programming in South Asia.

⁴ SAARC is an intergovernmental body of countries from South Asia working towards the promotion of welfare and improvement in the quality of life of people from the region. Member countries of SAARC are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. In 2005, SAARC developed a *Comprehensive Framework on Disaster Management and Disaster Prevention* and agreed to establish a number of SAARC centers - including SDMC - to implement this framework.

⁵ The Regional Office for South Asia (ROSA) of UNICEF provides support to the eight UNICEF Country Offices in the region. The member countries of ROSA and SAARC are identical.



WHY FOCUS ON CHILDREN?

During the evolution of child-centred DRR in the region, five key arguments emerged that highlight the importance of DRR actions for and with children. The five arguments are summarized below.

Children have the same needs and rights in disasters as in stable situations. Their vulnerabilities are exacerbated by emergencies.

1 – Children have special needs and are disproportionately affected by disasters

Children are a vulnerable group primarily because of their age. Their dependency on adults for food, hygiene, care, shelter and protection have bearing on their survival and development. Children's evolving immune systems makes them vulnerable to diseases and malnutrition⁶. In 2005, UNICEF reported that women and children in Afghanistan faced an acute emergency because of exceptionally high maternal and child mortality rates⁷.

In order to make the best use of limited resources, prioritization is critical. Like humanitarian action, DRR targets people most at risk. Children typically represent about half of the total number of disaster casualties in South Asia (number of deaths, injured, displaced and affected) and are often more vulnerable than their proportion of the population warrants⁸. This pattern was generally observed during the past three tsunamis in Japan and in Indonesia and Sri Lanka during the Indian Ocean Tsunami in 2004⁹ (Sawai, 2012, p. 5). During disasters, children are directly affected by death and injuries as well as from diseases related to malnutrition, poor water and sanitation – conditions exacerbated by secondary disasters and climate change (Lawler, 2011, chapter 3). In addition, disasters often disrupt education and cause psychological trauma among the survivors. Disasters also tend to separate children from family members and increase their vulnerability to trafficking, exploitation and other forms of abuse. Although these findings are well documented in post-disaster situational reports, it remains difficult to establish causal links between disasters and child welfare outcomes (Seballos, 2011, p. 30).

⁶ South Asia has a high rate of undernutrition, especially among children bearing about 40 percent of the global burden of child stunting. UNICEF ROSA website accessed on 9 August 2015. Available at: www.unicefrosa-progressreport.org/stopstunting.html.

⁷ UNICEF Afghanistan news note from 4 August 2005. Available at: www.unicef.org/media/media_27853.html.

⁸ Although absence of child segregated data prevents quantification of the exact losses suffered by children in disasters, UNISDR and UNESCAP estimate - with reference to the 2011 South-East Asia floods - that children are disproportionately affected (Velasquez, 2012, p. 37).

⁹ In Sri Lanka, 31.8% of the fatalities during the 2004 Indian Ocean Tsunami were below 5 years and 23.7% between 5-9 years while the mortality rate among the age group 20-29 years was 7.4% (Nishikitori in Sawai, 2011).

TABLE 1: CHILD POPULATION AND U-5 MORTALITY RATES IN SOUTH ASIAN COUNTRIES

COUNTRY	ABSOLUTE CHILD POPULATION IN MILLIONS IN 2013	RELATIVE CHILD POPULATION IN PERCENTAGES IN 2013	U-5 MORTALITY RATES IN 2013 (PER 1,000 LIVE BIRTHS)
Afghanistan	16.536	54.12	97
Bangladesh	56.666	36.18	41
Bhutan	0.256	33.95	36
India	435.384	34.77	53
Maldives	0.120	34.78	10
Nepal	11.526	41.46	40
Pakistan	73.854	40.55	86
Sri Lanka	6.308	29.65	10

Source: *The State of the World's Children*, 2015, table 1 (p. 36-41) and table 6 (p. 66-71). The relative size of the child population is calculated by the consultant.

2 – Children constitute a significant proportion of the population

Numbers matter. Not less than 600 million children live in South Asia. They constitute 27 per cent of the world's child population and 36 per cent of the total population in South Asia¹⁰. Since more than 1/4 of the world's children live in the most populous region in the world, it is critical to step up child-centred DRR in South Asia. Similarly, with more than 1/3 of the population in the region being below 18 years, it is imperative to take their needs and concerns into consideration when defining the overall disaster risk profile of any community. Table 1 below lists the child population in South Asia in absolute and relative numbers as well as the under-five (U-5) mortality rate, which remains the most critical child survival indicator.

3 – Children have inalienable rights in all circumstances – including disasters

Children's rights to survival, clean water, food, health, sanitation, shelter, education and protection are compromised by disaster risk

and climate change. When disaster occurs, schools are frequently used as shelters, depriving children of their learning spaces. The *UN Convention on the Rights of the Child* states that children have inalienable rights in all circumstances – including during disasters when they are most exposed. Children also have the right to participate in decisions that affect them, such as DRR and CCA.

Governments in South Asia have demonstrated their commitment to the survival, development and protection of children by being signatories of the *Convention on the Rights of the Child* in 1989 and its two Optional Protocols in 2000¹¹. They have further adopted the *World Declaration on the Survival, Protection and Development of Children* in 1990. Regionally, the Heads of States and Governments of South Asia signed the *SAARC Convention on Regional Arrangements on the*

¹⁰ Calculated from the demographic tables in the most recent *State of the World's Children*, 2015, p. 71.

¹¹ In year 2000, the United Nations General Assembly adopted two Optional Protocols to the *Convention on the Rights of the Child* to increase the protection of children from involvement in armed conflicts and from sexual exploitation. On 14 April 2014, a third Optional Protocol was adopted, allowing children to bring complaints directly to the Committee on the Rights of the Child.

TABLE 2: POLITICAL DECLARATIONS ON DRR 2005-2015

MONTH & YEAR	TITLE & LINK	ORGANIZATIONS OR EVENT
January 2005	Hyogo Framework for Action Link: www.unisdr.org/we/coordinate/hfa	Second World Conference on Disaster Reduction
January 2007	Ahmedabad Action Agenda for School Safety Link: www.preventionweb.net/files/5146_IN01MH844-Ft.pdf	Gujarat State Disaster Management Authority & SEEDS India
October 2007	Bangkok Action Agenda for School Education and DRR Link: www.preventionweb.net/files/15376_bangkokactionagendafinal.doc	UNISDR, UNESCO, UNICEF, UNESCAP, UNCRD, OCHA, IFRC, ASEAN, ADPC, ADRC and ASB
May 2008	Islamabad Declaration for Safer School Construction Link: www.scribd.com/doc/49393326/Islamabad-Declaration-for-Safer-School-Construction-2008	Not mentioned
October 2010	Incheon Declaration on DRR in Asia and the Pacific 2010 Link: www.unisdr.org/files/16172_finalincheondeclarationdraftingcom1.pdf	AMCDRR-4
November 2010	Beijing Declaration on South-South Cooperation for Child Rights in Asia-Pacific Link: www.unicef.org/media/files/Beijing_Declaration.pdf	UNICEF High-level Meeting
February 2011	SAARC Framework for Care, Protection and Participation of Children in Disasters Link: http://saarc-sdmc.nic.in/pdf/publications/saarc%20framework.pdf	SDMC in collaboration with UNICEF and Save the Children
October 2012	Yogyakarta Declaration on DRR and Statement of Child-centred organizations, Children and Youth Link: www.preventionweb.net/english/professional/policies/v.php?id=29332	AMCDRR-5
June 2014	Bangkok Declaration on DRR and Statement of Child-centred organizations, Children and Youth Link: http://6thamcdrr-thailand.net/6thamcdrr/Outcome-Documents	AMCDRR-6
March 2015	Sendai Declaration on DRR and the Sendai Framework for DRR 2015-2030 Link: www.wcdrr.org/	Third World Conference on DRR

Promotion of Child Welfare in South Asia in 2002 and adopted the *SAARC Social Charter* in 2004, which places strong emphasis on the promotion of the rights and well-being of the child¹².

4 – Increasing policy support for children’s protection and participation

Safeguarding children and women in emergencies has probably always been a priority in disaster management. Similarly, humanitarian action aims at reaching the most vulnerable

groups during crises. While the survival and protection of children has remained a priority in disaster management and humanitarian action for centuries, children have only taken centre stage in DRR and CCA during the last decade. Although the initial efforts related to school safety and education, the agenda has gradually been expanded to cover multiple sectors with a strong emphasis on child rights and child participation. It is therefore important to capitalise on the growing interest and ensure children’s protection and participation remain a priority in DRR and CCA. Table 2 provides a chronological list of global and regional declarations supporting school safety and child-centred DRR in the period 2005-2015. While declaration are not binding documents, they serve as guiding principles in shaping country policies and programmes.

¹² The *SAARC Convention* is available at: www.saarc-sec.org/userfiles/conv-children.pdf. The *Social Charter* is available at: http://saarc-sec.org/areaofcooperation/detail.php?activity_id=7.

5 – Child-centred DRR and programming for children contribute to sustainable development

Child-centred DRR and programming for children have long-term development gains for children and for the society at large. Investments in child health, nutrition, education and child protection not only result in child survival, development and wellbeing but also in poverty reduction and increased resilience of societies to withstand shocks and stresses. Participation, empowerment and equitable development further help stabilizing fragile states and building stable societies.

In 2000, all South Asian governments endorsed the *Millennium Development Goals* with six out of eight goals related directly to children¹³. South Asia governments have also played an active role in formulating the 17 new *Sustainable Development Goals*¹⁴ that are emerging as a result of the post-2015 development debate¹⁵. The following 12 goals are of particular interest for children:

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all at all ages.
4. Ensure inclusive and equitable quality

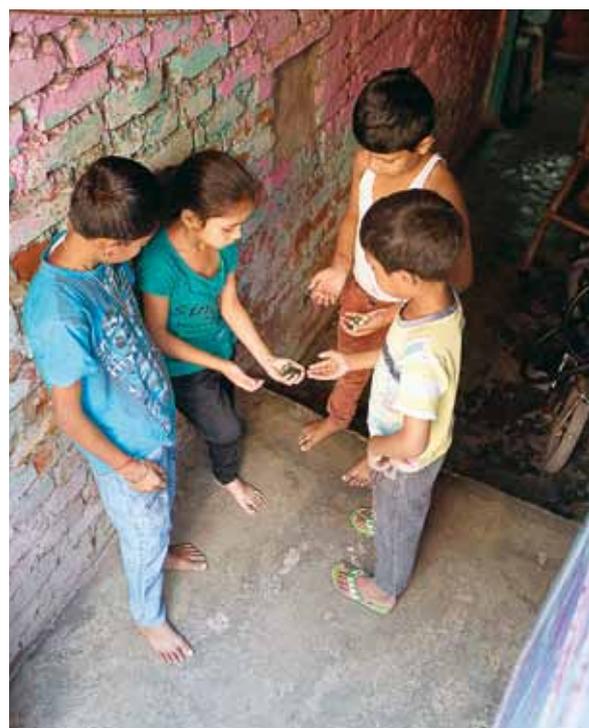
education and promote lifelong learning opportunities for all.

5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
13. Take urgent action to combat climate change and its impacts.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
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.

¹³ The *World Declaration* is available at: www.unicef.org/wsc/declare.htm. The Millennium Goals are available at: www.un.org/millenniumgoals/.

¹⁴ The Sustainable Development Goals are available at: www.sustainabledevelopment2015.org/

¹⁵ The *post-2015 development debate* refers to three mutually supportive intergovernmental processes critical for development, DRR and climate change initiatives globally. In March 2015, a new *Sendai Framework for DRR 2015-2030* was launched to replace the *Hyogo Framework of Action 2000-2015*. In September 2015, the *Millennium Development Goals* will be replaced with a new set of universal goals – the *Sustainable Development Goals*; and the Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 11th session of the Meeting of the Parties (CMP 11) to the Kyoto Protocol will be held in December 2015 to come up with a binding universal agreement on climate change among all countries.



WHAT IS CHILD-CENTRED DRR?

Child-centred DRR is an evolving concept that has seen a rapid growth in interest during recent years. It is linked to community-based DRR through participation and can broadly be defined as DRR for and with children (Plan UK, 2010, p. 3). Whereas community-based DRR originated among development practitioners, child-centred DRR is distinctly rights-based. It embraces the four principles of the *Convention on the Rights of the Child* including (i) non-discrimination, (ii) the best interests of the child, (iii) the right to life, survival and development, and (iv) the view of the child (Plan UK, 2010, p. 4)¹⁶.

Child-centred DRR is DRR for and with children. It addresses rights-holders and duty bearers to safeguard children's rights

Child-centred DRR both addresses rights-holders (children) and duty bearers (parents, communities, service providers and

governments). It aims at strengthening accountability mechanisms between rights-holders and duty bearers by improving information flows, enhancing transparency and developing capacities at various levels. The ultimate goal of child-centred DRR is to safeguard children's rights in relation to disaster risk and – when incorporating CCA - climate change.

Child-centred DRR calls for inter- and intra-generational justice to realize the rights of all children¹⁷. This often entails a shift in perception and practice among disaster managers, DRR practitioners, teachers and other professionals, who may not have the required dedication, skills and knowledge to facilitate meaningful participation of children and youth through long-term engagement, child-friendly discussions and tailored programme interventions.

Balancing action for and with children is critical for child-centred DRR. According to a *Children in a Changing Climate Research* report from 2011, child-centred DRR needs to cover both child-sensitive and participatory policy and programming:

1. Child-sensitive policy and programming responds to the needs of children as recipients or beneficiaries. This may be

¹⁶ Despite efforts to relate DRR to the *Convention on the Rights of the Child*, there is little mentioning of disasters – let alone DRR – in the monitoring mechanisms (Bild & Ibrahim, 2013, p. 25). At UNICEF's High-Level Meeting on International Cooperation for Child Rights in the Asia Pacific Region in 2010, the Bangladesh delegation proposed to integrate child-centred DRR in the reporting guidelines from the Committee on the Rights of the Child within the purview of the *Convention on the Rights of the Child* (Bangladesh Ministry of Women and Children Affairs, *Children and DRR in the Asia Pacific*, 2010).

¹⁷ *Inter-generational justice* is critical in relation to climate change. Today's children and future generations will live longer than today's adults to experience the consequences of climate change. This argument is presented in *Climate Change and Children: A Human Security Challenge* (UNICEF Innocenti, 2008).

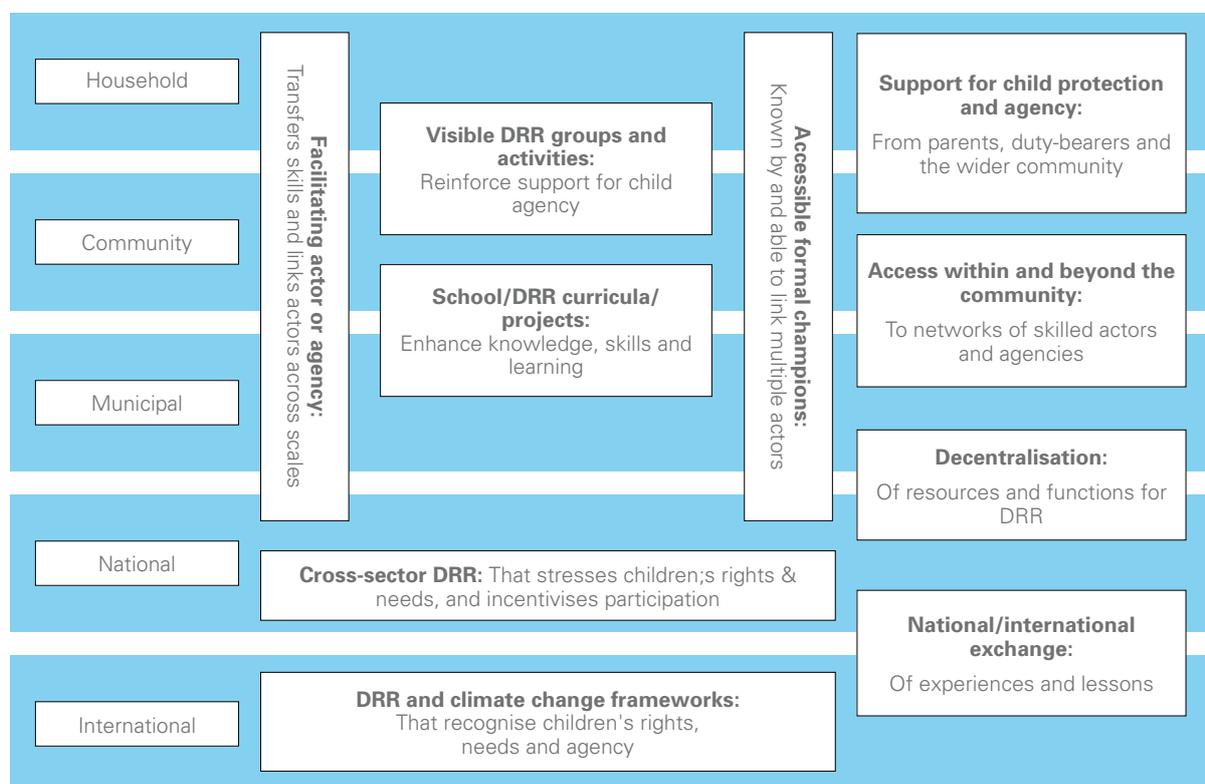
achieved through measures such as school feeding programmes, social protection/ cash transfer programmes for families to reduce existing vulnerabilities, structural strengthening of school buildings, contingency planning for education and service provision, or preparedness planning for disaster events that explicitly caters for child protection or psychological trauma.

2. Participatory policy and programming where children are actively engaged in decision-making, planning and accountability processes for prevention, preparedness and response. This includes child-led DRR where children are supported to be lead agents of change in their spheres of influence – household, school, community and beyond. (Seballos et al., 2011, p. 13).

Whereas some child-centred DRR activities target international and national legislative processes, others are firmly based within families and communities. Illustration 2 presents Seballos et al.'s schematic model of the scope of child-centred DRR across different scales.

A number of global DRR campaigns have highlighted the importance of child-centred DRR during recent years. These include two world disaster reduction campaigns, an additional campaign on 'One Million Safe Schools and Hospitals' and annual campaigns linked to the International Day of Disaster Reduction (IDDR) in 2011 and 2012. Table 3 below provides a chronological overview of the titles of global DRR campaigns and the links to additional information.

ILLUSTRATION 2: CHILD-CENTERED DRR ACROSS DIFFERENT SCALES



Source: Seballos et al., 2011, p. 50.

TABLE 3: GLOBAL CAMPAIGNS FOR DRR 2005-2015

YEAR(S)	CAMPAIGN TITLE & LINK
2006-2007	Disaster Risk Reduction Begins at School Link: www.unisdr.org/2007/campaign/wdrc-2006-2007.htm
2008-2009	Hospitals safe from Disasters: Reduce Risk, Protect Health Facilities, Save Lives! Link: www.unisdr.org/2009/campaign/wdrc-2008-2009.html
2010-2011	Making Cities Resilient: My city is getting ready! Link: www.unisdr.org/english/campaigns/campaign2010-2015/
	One Million Safe Schools and Hospitals Link: www.safe-schools-hospitals.net/en/Home.aspx
Oct 2011	Making Children and Young People Partners for DRR Link: www.unisdr.org/2011/iddr/
Oct 2012	Women & Girls – The Invisible Force of Resilience Link: www.unisdr.org/2012/iddr/
Oct 2013	Living with Disability & Disasters Link: www.unisdr.org/2013/iddr/
Oct 2014	Resilience is for Life Link: www.unisdr.org/2014/iddr/





HOW TO REDUCE CHILD VULNERABILITIES?

Children of South Asia are among the most vulnerable in the world. Almost one of every three under-5 deaths globally occurs in this region¹⁸. Undernutrition is a serious concern and among the leading causes of death, whether directly or indirectly. Wasting in South Asia is higher than in any other region and twice the world average¹⁹. Despite progress in the reduction of stunting during the last 20 years, the absolute numbers of stunted children remains high. Infants, young children, and pregnant and lactating women are particularly vulnerable to malnutrition, since their nutritional requirements are high, while they are often less able to negotiate their fair share of food within families.

Disaster risk exacerbates children's vulnerabilities. Slow onset disasters, such as droughts, regularly impact a large part of South Asia, disrupting the production of cereals, vegetables, fruits and other important food items. Decreased supply of cattle feed also reduces the production of milk. In many parts of South Asia, annual floods and frequent storms hamper agricultural production by damaging standing crops and increasing the salinity of the soil (*SAARC Framework for Care, Protection and Participation of Children in Disasters*, 2011, Priority 3). In sudden onset disasters, children are frequently separated from their caregivers and suffer from psychosocial distress. Sexual and gender-based violence - including early and/or forced marriages - physical

harm, trafficking and child labour are regularly observed during all types of disasters.

Common risk management strategies of poor households include reducing food intake and health expenditures, withdrawing children from school, sending children to work, placing them in foster families or orphanages and taking on debt. Disasters contribute to a vicious cycle of poverty, which compromises children's rights and the development potential of families and communities. This is particularly true for unequal societies where poor families shoulder the greatest burden.

Projections of future developments in South Asia point to increased vulnerability due to well-known development challenges. The combination of migration, urbanization and climate change add to the vulnerability of children. Without concerted action, millions of children will remain at risk from diseases, malnutrition, water scarcity, lack of public services and collapse of critical infrastructure.

The following sections highlight four types of interventions that contribute to reducing child vulnerabilities in relation to disaster risk and climate change. (1) Child-centred risk assessments help us measure, visualize and understand child risks in order to factor them into risk-informed planning. (2) Safeguarding critical infrastructure for children and (3) protecting children in emergencies aim at reducing the exposure and vulnerability of buildings, lifelines, families and children. (4) Social protection contributes to transferring disaster risk away from the most vulnerable groups in society, including the families of poor children. Each of the four sections begin by a brief presentation of the rationale for the intervention followed by good practice and, whenever available, examples from South Asia.

¹⁸ 1,991,000 out of 6,285,000 according to *The State of the World's Children*, 2015, table 1, p. 41.

¹⁹ 16 percent relative to 8 percent according to *South Asia Regional Action Framework for Nutrition*, 2015, p. 8.

WHAT IS DRR?

DRR focuses on reducing disaster risks triggered by natural hazards. It aims at reducing hazards, vulnerabilities and exposure on the one hand while enhancing capacities on the other. With its distinct focus on prevention and mitigation, DRR differs from traditional disaster management focusing on preparedness and response. DRR needs to become an integral part of development planning and praxis.

Disaster risk is a function of hazards, vulnerability, exposure and capacities.

It is often illustrated by the risk formula: $R = H \times V \times E$

C

Disaster risks are dynamic and need to be considered in a specific time, area and context to effectively risk-inform development.

4.1 – Child-Centred Risk Assessment

Vulnerability assessment is a critical task for governments working for the survival, wellbeing and protection of their citizens. Children's vulnerability and exposure to disaster risk are to a large extent shaped by their birthplace and the period in which they are born. The socio-economic status and educational level of family members also matter and so do their own physical and mental condition.

This paper presents a new risk assessment methodology that was developed by UNICEF and government counterparts in Asia in the period 2011-2015²⁰. A child-centred risk assessment is a quantitative and spatial methodology that identifies the relative level of risk to children in specific geographical areas. It draws on both emergency (hazard) and development (vulnerability) approaches and provides essential information to target child-centred DRR. In addition, a child-centred risk assessment contributes to safeguarding development investments by allowing 'smart' programming and enhancing resilience towards natural hazards and climate change.

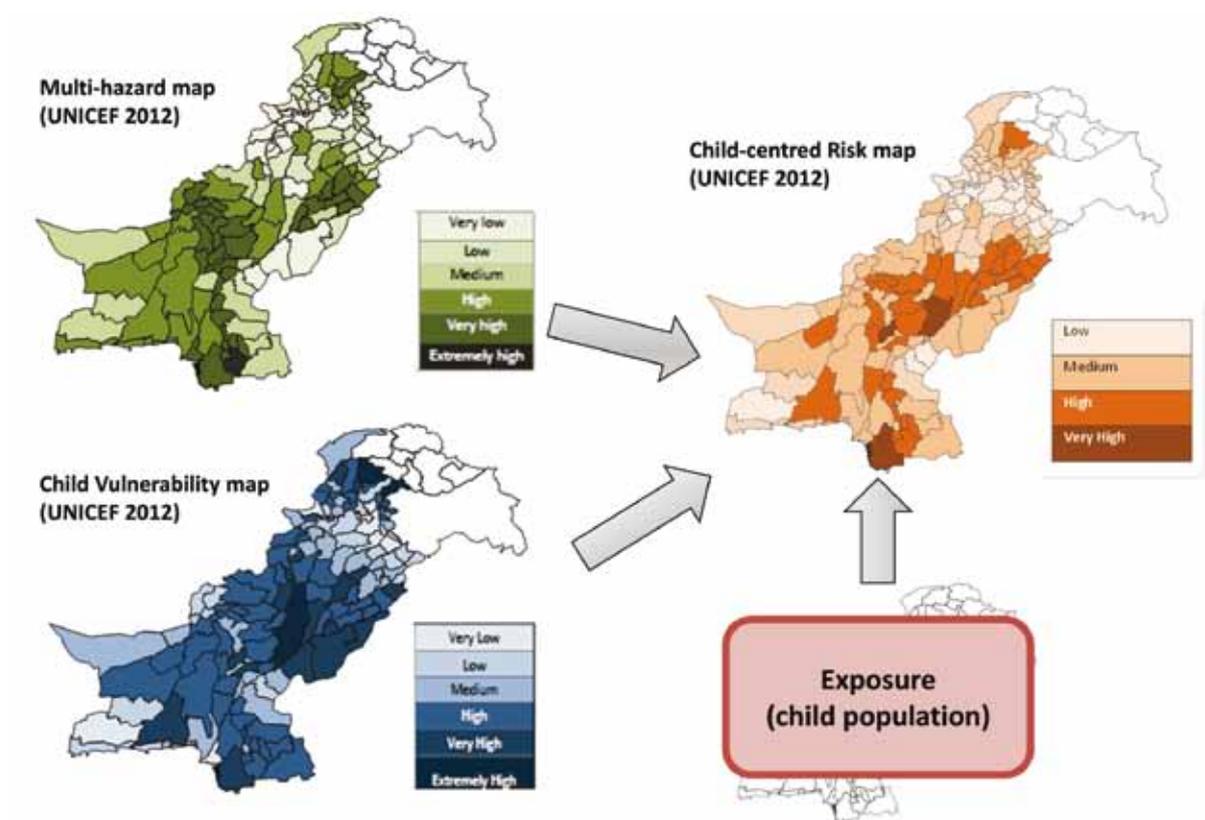
The assessment process consists of the following six steps:

1. Collect and analyze **hazard data**, while taking climate change into consideration. If unavailable, develop a multi-hazard map based on past disaster records, current hazard zoning and future climate change scenarios.
2. Collect and analyze **child vulnerability data**, based on a range of child deprivation indicators and an assessment of the reliability of the available data²¹.
3. Collect and analyze **demographic data** of the child population with breakdown in age- and gender groups.
4. Collect and analyze **capacities** based on a range of welfare indicators and an assessment of the reliability of the available data.
5. Calculate **risk levels** by merging the available data sets and assigning weights to individual indicators and components.
6. Draw **risk maps** illustrating the findings of the assessment.

²⁰ UNICEF's child-centred risk assessments in Nepal, India, Pakistan, Lao PDR, Indonesia and Solomon Islands are described in *Child-centred Risk Assessment: Regional Synthesis of UNICEF Assessments in Asia* (UNICEF ROSA, 2014). This publication provides detailed information of the indicators used and the maps generated. Available at: www.preventionweb.net/english/professional/publications/v.php?id=36688.

²¹ SDMC has developed the South Asian Disaster Knowledge Network that allows for information sharing on hazards, vulnerabilities, risks and disaster events. The online platform has links to a Digital Vulnerability Atlas. This atlas provides layers of digitized visual information on administrative boundaries, physiographic features, housing, and critical infrastructure. Although the atlas doesn't focus on child vulnerabilities, the hundreds of map layers of SAARC countries contain important socio-economic information.

ILLUSTRATION 3: COMPONENTS OF UNICEF’S CHILD-CENTRED RISK ASSESSMENT IN PAKISTAN



A well-designed risk map has the capacity to summarize complex information in a concise manner. If based on reliable sources, it is an evidence-based advocacy and planning tool with the potential to convince busy programme managers and policy makers in a matter of minutes. Illustration 3 shows how hazard, vulnerability and exposure analysis was combined in UNICEF Pakistan’s child-centred risk assessment from 2012²².

A child-centred risk assessment brings children onto the national DRR and CCA agendas by making use of child vulnerability data from

sectors such as health, nutrition, WASH, education and child protection. The point is that child vulnerabilities often serve as a better proxy for community vulnerabilities than monetary values used by insurance companies and development banks. This is particularly true for South Asia, a region with a high proportion of children and youth.

Although a child-centred risk assessment provides useful snapshots of child risks in specific areas, it is only a prelude to more complex vulnerability analyses. Such vulnerability analyses need to elaborate on causal relations in order to understand ‘risk drivers’ and identify duty bearers for specific tasks. In order to capture the dynamic nature of risk, repeated assessments are required. India has developed a complex analytical tool that monitors changes over time and helps to uncover causal links between hazards and a wide range of socio-economic indicators.

²² Pakistan’s *National Disaster Management Plan (2012)* contains detailed hazard maps that allows re-calibration of the findings from UNICEF’s initial multi-hazard assessment.



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India's Multi-hazard Vulnerability Mapping system

was developed by UNICEF and DevInfo²³ in collaboration with NDMA. It permits detailed hazard analysis as well as real-time monitoring of demographic, economic and child development indicators. The Multi-Hazard Vulnerability Mapping system piloted in Bihar and Rajasthan collected data on 51 indicators from seven sectors to facilitate individual sector analysis and vulnerability mapping. In order to monitor changes over time, data was collected on a monthly basis. In this way it was possible to capture seasonal variations and correlations between e.g. floods and communicable diseases and drought and school attendance. Such time series showed the potential of risk analysis to better understand child behaviour and assess the violation of child rights caused by disaster risk. When the Secretary of the Indian Disaster Management Authority of the Ministry of Home Affairs presented the Multi-Hazard Vulnerability Mapping system at a South-South Forum at the Fourth Global Platform for DRR in Geneva in May 2013, it was well received by government officials from around the world.

4.2 – Safeguarding Child Infrastructure

Earthquakes have had dramatic consequences for the public infrastructure in South Asia including schools, hospitals, health posts, cold chains, caring and feeding centres, government institutions, electricity grids, and water and gas pipelines. Thousands of schools collapsed or were damaged during the Gujarat earthquake in 2001, the Kashmir earthquake in 2005, the Taplejung earthquake in 2012 and the Gorkha earthquake in 2015. In the Pakistan earthquake in 2005, 7,670 government and privately owned

²³ DevInfo is a powerful database that is used to compile and disseminate data on human development. It is an integrated desktop and web-enabled tool that supports both standard and user-defined indicators. The DevInfo project is an interagency initiative managed by UNICEF on behalf of the UN System. For more information please see: www.devinform.org/

schools were affected, of which 5,690 were primary and middle schools. About half of the damaged schools collapsed or were beyond repair and the education sector accounted for 14 per cent of the country's total damage and losses, estimated at USD 405 million (Velasquez, 2012, p. 42). Although this issue has received a lot of attention in safe schools campaigns, it remains largely unresolved (Bild & Ibrahim, 2013, p. 18). Other natural hazards also frequently damage public infrastructure that are critical for the provision of social services to children.

Migration, urbanization, slum settlements and rapid growth contribute to the risk profile of South Asia. Population movements from rural to urban areas remain unplanned. People from rural areas often end up living in slums and squatters in cities due to lack of affordable and safe shelters. The region has nine mega-cities with a population of more than 10 million including Delhi, Mumbai, Karachi, Dhaka, Kolkata, Lahore, Bengaluru, Chennai and Hyderabad²⁴. While most countries have adopted national land-use policies and implemented area-based development plans in priority areas, no countries have enforced comprehensive spatial planning. Although natural hazard maps are available, seismic, landslide and flood assessments have rarely been incorporated into development plans. In most South Asian countries building codes are seen as complex and costly, and building standards rarely enforced.

Good practice in the region includes the construction of hundreds of safe schools in the earthquake affected areas in Pakistan, India's National Programme on School Safety (described in section 5.3) and assessment and retrofitting of selected schools in the Kathmandu Valley under the Nepal Risk Reduction Consortium (described in section 5.4). Such types of interventions need to cover all private and public schools in all earthquake zones in South Asia. New schools should be located in hazard-free zones or constructed according to improved building standards in order to ensure they remain operational in future disasters. Protecting critical infrastructure is not only a

cost-effective investment but also a social, moral and ethical imperative.

In 2009, SDMC developed a template for rapid visual screening of school and hospital buildings in SAARC countries. These efforts resulted in a publication entitled *Rapid Structural and Non-structural Assessment of School and Hospital Buildings in SAARC Countries* (SDMC, 2011). In collaboration with UN-Habitat and UNISDR, SDMC also contributed to four standardized toolkits to assist national officials in their assessment of the safety of school and hospital buildings in the region. These four publications have the title *Tools for the Assessment of School and Hospital Safety for Multi-hazards in South Asia* (UN-Habitat and UNISDR, 2012).

4.3 – Protecting Children In Emergencies

Although there is a long-standing tradition in South Asia for paying special attention to women and children in disasters, most disaster managers have limited knowledge of how to enhance emergency preparedness and recovery for children before and after disasters. Very few government institutions disaggregate population data by sex, age and ability. Even fewer agencies have developed protocols on how to address the special physical, health and psychosocial needs or capacities of women, boys or girls (Harris & Hawrylyshyn, 2012). While social departments and ministries possess such knowledge, they are often consulted too little or too late to have significant influence on the design and implementation of preparedness, response and recovery measures.

Children in emergencies have special requirements as a result of the combined effects of specific hazards and changes in the environment. Child protection in emergencies is a serious challenge that requires specialized protection knowledge. Children's needs can most effectively be identified and addressed by the concerted efforts of child protection experts, social workers, NDMA and local authorities well in advance of disasters. In locations with recurring slow-onset hazards (e.g. drought and heat waves), awareness raising campaigns should focus on dehydration,

²⁴ For additional information please see Wikipedia 'Megacity'. Available at: <http://en.wikipedia.org/wiki/Megacity>.

heatstroke, child labour and/or trafficking. In settings with sudden onset hazards (e.g. flash floods and earthquakes), it is critical to avoid family separation by ensuring that children know how to locate their caregivers, equipping children with means of identification, and safeguarding birth certificates. Rather than standardized approaches, specific hazards and socio-economic changes call for tailored measures.

Good practice in the region includes psychosocial support to children in high-risk environments. If well designed and implemented, such care has the potential to address the immediate and long-term effects of disaster risk on children's development and contributing to their resilience. *Child Friendly Spaces* in emergencies have played an important role in protecting children in South Asia and given them a sense of normality in post-disaster scenarios. In collaboration with the Child Protection Cluster and UNICEF, the Government of Bangladesh established 240 Child Friendly Spaces after Cyclone Sidr in 2007 and additionally 140 after Cyclone Aila in 2009. In recognition of the unique risk and climate scenarios in Bangladesh, the Government decided to make such spaces permanent in areas with high disaster risk. These centres are used for imparting life skills trainings, contributing to addressing future disaster risk (Ministry of Women and Children Affairs, 2010).

After the 2011 floods in Sindh, UNICEF Pakistan introduced 'Protective Learning and Community Emergency Services' (*PLaCES*). PLaCES aims at offering children in emergencies comprehensive social support by creating an environment that will improve the safety, health and wellbeing of children and women. While activities vary according to location and context, they often include emergency services in health, nutrition, water, sanitation and hygiene. PLaCES promotes the co-location and close collaboration between service providers in health, nutrition, water, sanitation and hygiene. All of these services are mutually reinforcing in addressing the needs of children and building their resilience. Like Child Friendly Spaces in Bangladesh, PLaCES are not only expected to contribute to the recovery phase but also to form part of a long-term community-based protective system (UNICEF Pakistan, 2012).

4.4 – Social Protection For Children

Social Protection can be defined as a set of public and private policies and programmes aimed at preventing, reducing and eliminating economic and social vulnerabilities to poverty and deprivation²⁵. It plays an increasingly important role in South Asia by offering affordable measures to reducing vulnerabilities (Velasquez, 2012, preface)²⁶. This is particularly the case when combined with quality social services, microcredit schemes and other forms of livelihood support to families at the risk of falling into the poverty trap²⁷.

Social protection, DRR and CCA share a number of similarities. The three approaches have recently gained popularity in the region and are being expanded across South Asia. All of them aim at reducing vulnerabilities to external shocks and stresses while building resilience for poor families. While social protection has an advanced understanding of poverty and social deprivations at the household level, DRR has a superior understanding of the spatial dimension of risk at community-level and CCA of future climate change scenarios at macro-level. Basing socio-economic analysis on all three disciplines enables governments to obtain a thorough understanding of the distribution and dynamics of vulnerabilities and additional risk factors for poor families.

If natural hazards and climate change are factored into the design of social protection programmes, they have the potential to act as a permanent buffer against all types of risks

²⁵ With its strong development and welfare toning, social protection has no resemblance with child protection. For more information on UNICEF's approach to social protection please see: www.unicef.org/socialpolicy/index_socialprotection.html

²⁶ **Risk insurance** is a market-based supplement to social protection that contributes to risk pooling. Risk insurance acts as an incentive for DRR by pricing risks, encouraging higher return activities, buffering losses and transferring risks to a wider group of stakeholders. For this approach to be successful in South Asia, a much higher insurance coverage is required than currently the case.

²⁷ **Cash transfers** and **cash for work** have proven to be effective forms of humanitarian assistance. They offer many advantages including the ability to scale up quickly, empowerment of beneficiaries and optimal allocation of scarce resources. Cash-based assistance can also serve as a bridge to recovery and established social protection system.



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– including disaster and climate risks. Existing social protection programmes have the additional advantage of covering millions of risk-prone households and communities in South Asia. They can easily be adapted, often at a relatively low cost, in order to reach out to millions of vulnerable children in poor households. Despite the strong rationale for integration, there are currently only few cases of successful integration on the ground²⁸. However, development agencies increasingly pursue integration while academic institutions seek a better understanding of how best to approach the integration²⁹.

In 2014, UNICEF organized a symposium in Bangkok among social protection, DRR and climate change practitioners to discuss integration of the three approaches with a focus on children. The symposium resulted in a publication entitled *Protecting Children from Poverty, Disaster and Climate Risks* that explored an integrated approach to vulnerability analysis. The publication identified the following four steps for governments and development partners to strengthen the linkages between the technical areas: (i) Identify households that are most at risk of disaster and climate change impacts, (ii) assess the sensitivity of current social protection programmes to disaster and climate change, (iii) adopt existing and develop new social protection programmes and systems that integrate disaster and climate risk, and (iv) improve the coordination of institutions, strategies and programmes (UNICEF EAPRO, 2014).

²⁸ An analysis of 124 agricultural programmes in South Asia showed that full integration of social protection, CCA and DRR is relatively limited, although combining social protection with DRR has become more common in the last ten years. For more information please refer to Mark Davies et al., 2013.

²⁹ In recognition of the similarities between social protection and CCA, adaptive social protection has emerged as a new field of investigation. For more information on **adaptive social protection** please refer to the following eldis/CDKN website: http://www.eldis.org/go/topics/resource-guides/climate-change/key-issues/adaptive-social-protection#.VXBKHv_GPIU.



HOW TO ENHANCE CHILD CAPACITIES?

The understanding that children and young people can evolve from vulnerable individuals to empowered citizens lies at the heart of child-centred DRR. Whereas the previous sections focused on children's vulnerabilities and approaches to overcome them, the following sections zoom in on children's capacities and ways to enhance them. These approaches include participatory action, life skills, school safety and new partnerships. Unless such capacity development approaches are integrated into DRR and CCA, children's capacities are likely to remain dormant or under-utilized.

5.1 – Participatory Action

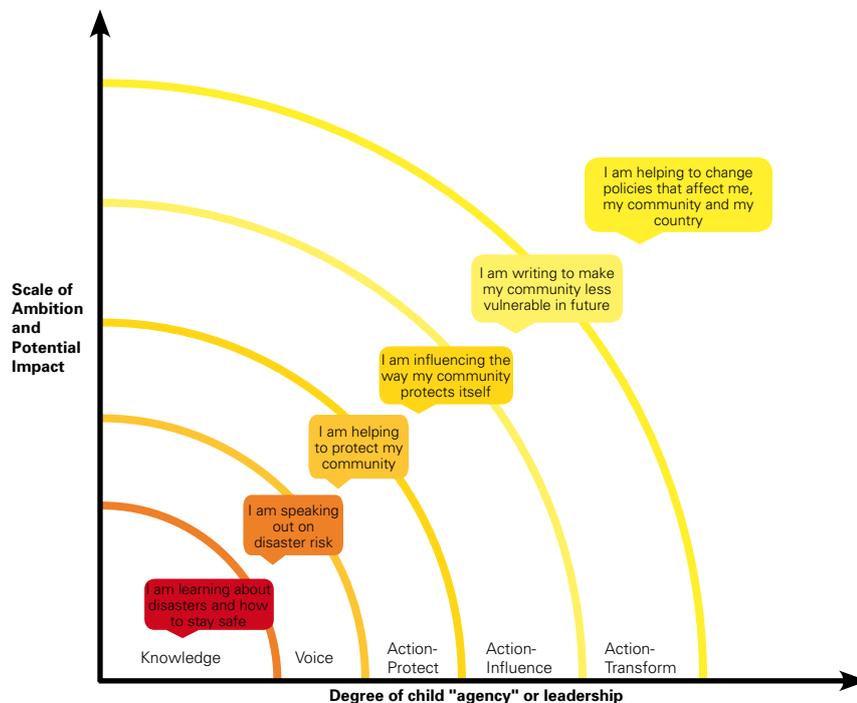
While child-centred DRR acknowledges that adults have a responsibility to protect children and address their needs, it also fosters the agency of children and recognizes the role of children as powerful 'agents of change' in their communities and beyond. Child participation is the process of engaging children in issues that affect their lives and the development of the communities in which they live. Barriers to participation in South Asia include cultural norms and social exclusion. Creating scope for children to take part in interventions that relate to them, such as DRR and CCA, is the responsibility of parents, adults and duty-bearers. Once children become active participants, it becomes the responsibility of adults and duty-bearers to support them in executing child-centred DRR and CCA. Child-centred organizations in Asia have developed minimum standards for how to consult and engage children (Inter-Agency Working Group on Children's Participation, 2007). SAARC's 2011 Framework for the

Care, Protection and Participation of Children in Disasters recognizes the value of involving children in DRR by embracing participation as one of its ten priorities for action.

It is important to understand that children are not a homogenous group. Age, gender and (dis)abilities are key features that determine their vulnerabilities and capacities. Whereas vulnerabilities dominate in the early stages of a child's life, capacities become prominent during adolescence. Age-sensitive planning and a life-cycle approach, proposed in the new Human Development Report (Malik, K., 2014), would go a long way to address the needs of specific sub-groups of children, including new-born, young children, adolescents and youth.

At the community level, child rights organizations have involved people with disabilities in child-centred DRR by giving them a role in raising awareness and by seeking their advice when designing risk assessments, early warning systems, shelter management and livelihood support. Such activities aim at 1) Sensitizing DRR stakeholders to the capacities of children with disabilities, 2) Providing specialized services, such as counselling and rehabilitation support, to ensure the participation of differently abled people, and 3) Guaranteeing that people with disabilities have access to health, education and employment opportunities. Not only during evacuation, but also when accessing social services and taking part in DRR and CCA, people with disabilities might require special assistance. Inclusive DRR must give all children – irrespective of age, sex, ethnicity, language and abilities – equal opportunities to participate in community

ILLUSTRATION 4: LEVELS OF CHILD AGENCY AND POTENTIAL IMPACTS



Source: Back et al., 2009, p. 39.

action according to their capacity. The point is to ensure children reach their full potential according to their developmental stage.

Children and youth have often played a key role in identifying risk, communicating risk, mobilizing resources and addressing key challenges in creative ways (Back et al., 2009). The strength of child-centred DRR is that it addresses perceived problems, capitalizes on local knowledge and resources, and empowers children and youth to take action³⁰. Participation

is exactly what has allowed South Asia to play a critical role in advancing child-centred DRR. In Bangladesh, children were granted the right to participate in Union Disaster Management Committees based on their valuable contribution at local level (Plan UK, 2010, p. 20). Collective learning and empowerment through focus group discussions, community mapping, participatory videos, drawing competitions, educational songs, social theatre and public debates have characterized child-centred DRR interventions in the region (see for instance UNISDR & Plan, 2012). While some actions focus on protecting children and their communities, other actions aim at influencing peers, parents and duty-bearers and ultimately transforming their environment. Illustration 4 below presents various levels of child agency and potential impacts.

The most positive experiences from community-based and child-centred DRR include participatory hazard-vulnerability-capacity assessments and risk management action plans. Exploring the linkages between Child Friendly Cities and UNISDR's global

³⁰ One of the most powerful examples of the potential of child-centred DRR took place in Santa Paz, a community in Southern Leyte province in the Philippines. Here children successfully lobbied for the relocation of their school from a landslide-prone area, despite opposition from some sections of their society. The new school was designed to be flood and earthquake resistant and students planted trees in the perimeter to minimise the danger of landslide. A rainwater-harvesting system was installed as well as toilets for every classroom so it could be used as shelter during emergencies. Following the relocation of the school, there was an increase in the overall academic performance of the pupils (Plan UK, 2010, p. 24-25).

campaign 'Making Cities Resilient – My City is Getting Ready' to enhance child-friendly and resilient cities seems straight forward. Whereas Child Friendly Cities aim at promoting the realization of child rights through participatory structures and activities, the 'Making Cities Resilient' campaign seeks government commitment to ten essential actions to reduce disaster risk. These actions include investing more in DRR, preparing and sharing risk assessments, ensuring early warning systems are in place, and protecting ecosystems to reduce floods, cyclones and storm surges. Combining these approaches would allow governments to shift attention from rural to urban settings while simultaneously reducing risks for children³¹.

The spread of cellphones, internet and social media to practically every village, town and community in South Asia has created new opportunities to pursue participatory action and exchanges at a hitherto unseen scale. Participatory action is no longer bound by time and space and new approaches and alliances can be shaped in cyberspace with peers from other countries and regions.

Apart from the immediate benefits in children's lives and communities at risk, children are likely to take the acquired knowledge and skills with them into later life. In other words, child-centred DRR is a long-term investment in the adults of tomorrow.

5.2 – Life skills education

Behaviour change is an important aspect of DRR and CCA. While participatory action addresses the process of learning, life skills education deals with the contents. Teaching children practical life skills has stimulated human development and helped children cope with disasters³². This is particularly true for life-saving

skills such as first aid, tree climbing, hygiene promotion and disease prevention.

The **environment** has often mobilized children to take action – also in relation to climate change. Children and youth are, generally speaking, keen to protect the natural habitat and reduce greenhouse gas emissions, including their own carbon footprint. In communities in South Asia, tree planting and sustainable farming have countered deforestation, soil erosion, overgrazing and desertification; mangrove protection has reduced flood risk; recycling and community clean-up campaigns have reduced littering; and sustainable energy has reduced air and water pollution.

Swimming is an example of an important life skill that is being promoted in the region. Even with the limited data available, drowning is a leading cause of death among children in low- and middle-income countries in Asia (Michael Linnan et al., 2012). One programme in Bangladesh showed a remarkable 80 per cent reduction in drowning deaths among children attending 'swim for life' lessons in day care centres, reinforcing the many benefits of early childhood education. Another programme found that drowning death rates were reduced by more than 90 per cent among children 4 years and older who learned survival swimming skills.³³ Although we still need to better understand the effectiveness of swimming in disaster situations, it is a 'no-regret' intervention that has life-saving potential in future flooding events and tropical storms.³⁴

programme of needs- and outcomes-based participatory learning that aims to increase positive and adaptive behaviour by assisting individuals to develop and practise psycho-social skills that minimize risk factors and maximize protective factors. For more information please see: http://www.unicef.org/lifeskills/index_7308.html.

33 UNICEF website accessed on 10 June 2015. Available at: http://www.unicef.org/protection/vietnam_62495.html.

34 Wide-spread (over)reporting of drowning deaths during tsunamis, cyclones, flooding or ferry accidents has shaped the common (mis)conception that disasters are a leading cause of drowning in Asia. Although disasters have resulted in mass drowning of thousands of children – notably in Aceh in Indonesia during the Indian Ocean Tsunami in 2004 – such cases are rare and their share of the total number of drowning deaths insignificant (Michael Linnan et al., 2012, p. 40).

31 For more information on Child-friendly Cities please see: www.childfriendlycities.org/. For more information on Making Cities Resilient please see: www.unisdr.org/campaign/resilientcities/.

32 UNICEF defines '**life skills**' as psychosocial abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. '**Life skills education**' is a structured

5.3 – School Safety

While our understanding of drowning in disasters is incomplete, there is no doubt that unsafe schools have fatal consequences. Thousands of pupils and teachers have lost their lives in collapsing school buildings during earthquakes in the region. Schools that do withstand natural hazards have often been used as emergency shelters and education suspended during the initial phase of an emergency. Whereas education provides a sense of normalcy for children in emergencies, disrupted education exposes school goers to increased risk of violence, abuse, exploitation and neglect. So the opportunity costs of unsafe schools go far beyond the value of the destroyed buildings.

The importance of schools in emergencies is not the only reason why school safety figures prominently in child-centred DRR. Other reasons include: a) School children spend a substantial part of their lives in school buildings for which reason protective action is essential, b) Participatory action and life-skills education frequently take place in classrooms, including child-centred DRR and CCA, c) Schools often serve as community centers and are convenient places for advocacy and public education, and d) Schools are sometimes the only public place where girls congregate and an important location for outreach.³⁵ All of the above reasons explain why the education sector continues to play a lead role in the evolution of the theory and practice of child-centred DRR.

At the global level, the World Disaster Campaign 2006-2007 with the slogan 'Disaster Risk Reduction Begins at School' says it all. The Inter-Agency Network for Education in Emergencies (INEE) has also played an important role in integrating DRR in emergency preparedness and response. Education in Emergency programmes and INEE's *Minimum Standards for Education Preparedness, Response and Recovery* (2010) have advanced DRR, while large-scale earthquake disasters in Pakistan, China and

Haiti with thousands of school students killed increased the urgency of doing so.³⁶ Education sector approaches such as Education for All, Education for Sustainable Development and Child-Friendly Schools have proven equally adaptive to child-centred DRR and CCA.³⁷

The **Comprehensive School Safety framework** was developed by child-centred organizations in Asia – notably UNICEF, UNESCO, Save the Children and Plan International - and introduced at AMCDRR-5 in Indonesia in 2012 and at the Global Platform for DRR in 2013. In 2014, the Comprehensive School Safety framework was endorsed by ministers attending AMCDRR-6 in Thailand and elevated to the global level. The goals of the framework are to protect learners and education workers from death, injury and harm in schools, to plan for educational continuity in the face of all expected hazards and threats, to safeguard education sector investments and to strengthen risk reduction and resilience through education. The three pillars of the framework and their interrelations are presented in illustration 5 below.

The Government of India is implementing a **National School Safety Programme** targeting 8,600 schools. The demonstration project is implemented by NDMA in partnership with the Ministry of Human Resource Development, State/Union Territory Governments and national and International agencies in 43 districts of 22 states/Union Territories of the country falling in seismic zone IV & V. Activities include drafting a national school safety policy, implementing structural retrofitting and non-structural mitigation measures in selected schools, developing school disaster risk management plans, training engineers and teachers, and conducting mock drills and awareness raising activities.³⁸

35 Non-formal and out-of-school education should also be given priority in order to reach the millions of children in Asia who receive little or no schooling.

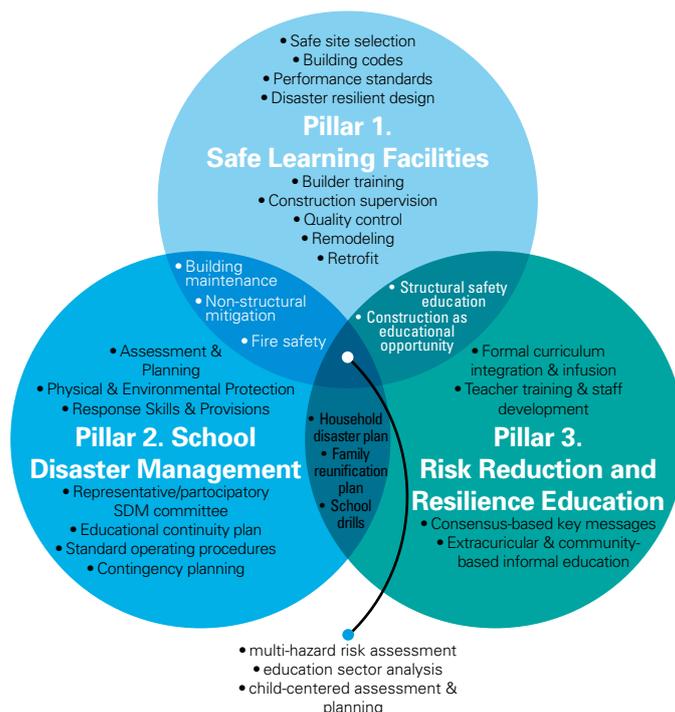
36 For more information on INEE please see: www.ineesite.org.

37 For more information on Education for Sustainable Development please see: <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/>. For more information on Child Friendly Schools please see: http://www.unicef.org/cfs/index_19.htm.

38 For more information on India's National School Safety Programme please see: www.ndma.gov.in/en/ongoing-programmes/school-safety-project.html.

ILLUSTRATION 5: THE THREE PILLARS OF THE COMPREHENSIVE SCHOOL SAFETY FRAMEWORK

Education Sector Policies and Plans



Aligned to national, subnational and local disaster management plans

Source: UNISDR and Global Alliance for DRR & Resilience, 2014.

In SAARC’s post-2015 DRR roadmap for the region, the organization adopts the notion of **‘home-to-home safety’**, going beyond safety within the school premises. The notion suggests incorporating the protection of children from not only natural hazards but also of other threats they are exposed to in their journey to and from school such as road accidents, fire accidents, health risks and physical exploitation (SAARC, 2014 p. 15).

The decisive goal of all education sector initiatives is to ensure that national education policies, plans and programmes become risk-informed and that educational departments and schools pay adequate attention to natural and man-made hazards in view of local peculiarities.

5.4 – Partnerships

The complexity of DRR and climate change is too large for any one organization to tackle alone. Preventing disasters requires public and private agencies to work together across traditional boundaries. Only in this way will it be possible to conduct comprehensive risk assessments, establish people-oriented early warning systems, run inclusive National Platforms for DRR, implement awareness raising campaigns, address urban risk management and effectively pursue resource mobilization. New partnerships have become a defining feature of DRR and CCA.

The following examples present two types of DRR partnerships that have demonstrated their value in the region. The Children in a Changing Climate Coalition was initially a global alliance of child-centred organizations working on DRR and climate change that has mushroomed to regional and national levels in a number of South Asian countries. The Nepal Risk Reduction Consortium

is a country-specific partnership backed by international agencies that seeks to overcome the challenges in reducing disaster risk in Nepal. While the Children in a Changing Climate Coalition focuses specifically on child-centred DRR and CCA, the Nepal Risk Reduction has integrated school safety into a broader DRR agenda. Both partnerships have the potential to be replicated at the regional level and in towns, sub-national regions and the national level in individual countries.

Since 2007, the **Children in a Changing Climate Coalition** has hosted events, disseminated research and highlighted the importance of child-centred DRR and CCA. The coalition comprises one UN agency (UNICEF), one research institution (Institute of Development Studies at the University of Sussex) and three NGOs (Plan International, Save the Children and World Vision). Since the Fourteenth Annual Conference of the Parties (COP-14) in 2008 and the Third Global Conference on DRR in 2011, the coalition has been present at international climate change and DRR events. Key advocacy tools include the *Children's Charter for DRR* (2011) and more recently a brochure on *Children in a Post 2015 DRR Framework*.³⁹

In Asia, the coalition worked together in preparation for the International Day for Disaster Reduction in 2011, followed by AMCDRR-5 in 2012, AMCDRR-6 in 2014 and the Third World Conference on DRR in 2015 by pursuing joint advocacy and streamlining programmatic approaches. At Asian Ministerial Conferences on DRR, the coalition coordinated input to the *Yogyakarta and Bangkok Declarations* and produced separate annexes on behalf of child-centred organizations, children and youth. These statements have proven to be effective advocacy tools towards governments in the region.

The **Nepal Risk Reduction Consortium** is a unique partnership between humanitarian agencies, development agencies and international financial institutions that seeks to reduce Nepal's vulnerability to natural hazards. The consortium was formed in 2009 to support the Government in developing a long-term DRR action plan based on the *National Strategy for Disaster Risk Management*. The founding members of the Consortium were ADB, IFRC, UNDP, OCHA, UNISDR and the World Bank. In 2010, the US Government and ECHO joined the consortium followed by DFID in 2011. Based on Government priorities and multi-stakeholder consultations, the Consortium identified the following five flagship areas of immediate action for DRR in Nepal:

FLAGSHIP 1: School and hospital safety in the Kathmandu Valley.

FLAGSHIP 2: Emergency preparedness and response capacity.

FLAGSHIP 3: Flood management in the Koshi River basin.

FLAGSHIP 4: Integrated community-based DRR/management.

FLAGSHIP 5: Policy/institutional support for disaster risk management.

The Consortium has been successful in establishing a common framework for DRR in the country and has successfully mobilized millions of dollars for risk reduction. Nepal has become known as a global leader in DRR. And yet, the Gorkha earthquake in April 2015 revealed that the country still has a long way to go before it is 'earthquake-proof'. Despite school safety being a priority in the first flagship programme, less than 300 out of more than 33,000 schools have been retrofitted to date.⁴⁰

³⁹ Additional papers are listed in the list of references.

⁴⁰ For more information on the NRRC please see: <http://un.org.np/coordinationmechanism/nrrc>.

CONCLUSION

At the Third World Conference on DRR in March 2015, the **Sendai framework for DRR 2015-2030** was adopted as a successor to the *Hyogo Framework of Action*. This new global policy framework for DRR incorporates key features of child-centred DRR. Not only does it favour participation of all of society, it also sees children and youth as agents of change. The *Sendai Framework* proposes integration of a gender, age, disability and cultural perspective into policies and practices and calls for disaggregated data, including by sex, age and disability (UN, 2015, p. 10). It supports inclusive social protection systems and accessible social services, including child health, nutrition and education:

“Children and youth are agents of change and should be given the space and modalities to contribute to DRR, in accordance with legislation, national practice and educational curricula”
(UN, 2015, p. 20).

Since the *Sendai Framework for DRR 2015-2030* is likely to guide global DRR efforts in the next 15 years, it is important to analyze how the eight approaches of child-centred DRR proposed in this paper is aligned to the *Sendai Framework*. Table 4 shows how well the eight approaches of child-centred DRR contribute to the four priority actions of the *Sendai Framework* and vice versa. In order to visually depict the degree of correlation between various combinations, a dark shade of green indicates a high level of

“To strengthen the design and implementation of inclusive policies and social safety-net mechanisms, including through community involvement, integrated with livelihood enhancement programmes, and access to basic health-care services, including maternal, newborn and child health, sexual and reproductive health, food security and nutrition, housing and education, towards the eradication of poverty, to find durable solutions in the post-disaster phase and to empower and assist people disproportionately affected by disasters (UN, 2015, p. 16).

correlation, a medium shade of green medium level correlation, and a light shade of green low level of correlation.

Although the assessment of the degree of correlation is debatable, the matrix suggests that the eight approaches of child-centred DRR is in line with the *Sendai Framework for DRR*: A child-centred risk assessment clearly contributes to understanding disaster risk, while social protection for children contributes to strengthening risk governance, and safeguarding child infrastructure and protecting children in emergencies are critical to enhance disaster preparedness. The matrix also shows that child-centred DRR needs a better understanding of disaster risk and of investing in DRR in order to effectively strengthen disaster risk governance and enhance disaster preparedness. In other words: Apart from being desirable on its own, child-centred DRR has the capacity to advance global DRR priorities with a focus on the youngest segments of the populations.

TABLE 4: CHILD-CENTRED DRR AND THE SENDAI FRAMEWORK FOR DRR

	UNDERSTANDING DISASTER RISK	STRENGTHENING DISASTER RISK GOVERNANCE	INVESTING IN DRR	ENHANCING DISASTER PREPAREDNESS
Vulnerability Reduction				
Child-centred Risk Assessment	XXX	XX	(x)	XX
Safeguarding Child Infrastructure	X	XX	(x)	XXX
Protecting Children in Emergencies	X	XX	(x)	XXX
Social Protection for Children	(x)	XXX	XX	(x)
Capacity Development				
Participatory Action	(x)	XX	(x)	(x)
Life Skills Education	(x)	XX	(x)	XX
School Safety	X	XX	(x)	XX
Partnerships	X	XX	XX	XX

The following three concluding statements summarize and reiterates why child-centred DRR in South Asia needs to be scaled up.

1) Children and child rights must be factored into DRR and CCA in South Asia in order to take population figures, special needs, legal obligations and policy support into consideration.

600 million children in South Asia cannot be ignored. The fact that children typically represent about half of the disasters casualties in the region highlights their special vulnerabilities. Children are directly affected by deaths and injuries, and indirectly affected by child development issues exacerbated by secondary disasters and climate change. Without concerted action, millions of children will remain vulnerable to compounding risk factors such as collapsing critical infrastructure, water scarcity, communicable diseases, malnutrition, and poor social services.

The *UN Convention on the Rights of the Child* binds governments in South Asia to uphold children's rights to survival, clean water, food, health, sanitation, shelter, education

and protection at all times – including during disasters. Regionally, the *SAARC Convention on Regional Arrangements on the Promotion of Child Welfare in South Asia* and the *SAARC Social Charter* also place strong emphasis on the promotion of the rights and wellbeing of children. Apart from legal requirements, school safety and child-centred DRR enjoy wide-spread political support from governments in South Asia who pilot new DRR and CCA approaches, invest in safe schools, improve access to quality social services and promote life skills education.

2) Child-centred DRR is an evolving concept that offers a good starting point for governments and communities in South Asia to effectively scale up DRR and CCA.

Child-centred DRR is a new concept that has gained popularity during the last decade. DRR in education was instrumental to highlighting children's role in disaster prevention and mitigation and continues to play a leading role in child-centred DRR. One recent example is the formulation of the Comprehensive School Safety framework that was adopted by ministers in Asia at AMCDRR-6 and elevated to global level. It provides a common framework for school safety across the region.

At the community level, child-centred DRR covers multiple sectors with a strong emphasis on child participation. The strength of child-centred DRR is precisely that it addresses perceived problems, capitalizes on local knowledge and resources, and empowers children and youth to take action. Numerous examples exist of children acting as agents of change by identifying risk, communicating risk, mobilizing resources and addressing key challenges in creative ways. Apart from the immediate benefits in children's lives and communities at risk, children are likely to take the acquired knowledge and skills with them into later life. Child-centred DRR is in other words a long-term investment in the adults of tomorrow.

Inclusive DRR must give all children – irrespective of age, sex, ethnicity, language and abilities – equal opportunities to participate in community action according to their capacities. Balancing participation with protection is critical for successful child-centred DRR. Adults play an important role in facilitating or supervising children and by providing incentives, resources and political commitment to scaling up child-centred DRR.

3) Coping with disaster and climate risks in South Asia calls for new partnerships at all levels to successfully counter the challenge.

Recurring disasters show that governments and communities in South Asia have a long way to go before they have full capacity to deal with the increasing level of disaster and climate risks. These risks impact millions of children every day in innumerable ways and present real challenges to the realization of child rights across the region. In isolation, children, schools, communities and governments will not be able to effectively counter the challenge.

New partnerships have become a defining feature of DRR and CCA. Alliances across traditional boundaries are critical to better combine humanitarian action and development, DRR and CCA, and community-based and child-centred approaches. These partnerships are visible at all levels and play an essential role in enhancing resilience in communities in South Asia. Since natural hazards and climate change don't respect political borders, DRR and CCA have a regional dimension. The new partnership between SAARC and UNICEF aims at strengthening the collaboration between national and regional stakeholders concerned with children and child rights.

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