CHILD-CENTERED DISASTER RISK REDUCTION
Contributing to Resilient Development

MAY 2016
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CHILDREN FACE INCREASING RISK

All too often, years of hard-earned progress achieved by communities, governments, and development partners are set back by disasters, conflict, and other shocks. Climate change and environmental degradation further magnify the risks. Moreover, in an era of rapid and often unplanned urbanization, increasing numbers of people and assets are located in high exposure areas, such as coastal mega-cities and flood plains.

Some startling facts: During the last decade of the 20th century, disasters affected an estimated 66 million children around the world each year. This number is projected to more than triple over the coming decades. With 2.3 billion children currently living throughout the world, over half a billion live in extremely high flood occurrence zones and nearly 160 million live in drought or extremely high drought severity zones. Moreover, it is estimated that climate change will contribute to raising temperatures and changing rainfall patterns which, in turn, are likely to exacerbate the spread of vector-borne diseases such as malaria and dengue. Against this backdrop, experience and research show that the most vulnerable groups are disproportionately affected, including children, women, individuals with disabilities, and the most impoverished. Not only do poor and marginalized people tend to live in hazard-prone areas, but they are the least able to withstand, cope, and respond to shocks and stress, and recover in the long term. In this way, inequity plays a central role in shaping vulnerability and resilience — reflected, for instance, in the degree of early warning information a child or woman is able to access, and their ability to influence, make, and act on decisions shaping their lives (such as the choice to stay in school, to permanently move the household home to a safer location, or to evacuate in advance of a storm).

In this context, children face a range of risks, from death, injuries, and diseases related to malnutrition, to poor water and sanitation, and psychological trauma and its debilitating effects. Displacement and separation from guardians and support networks, and the increased impoverishment of already poor households further expose children to abuse, exploitation, and trafficking. Further adding to the long-term effects of disasters is the disruption of education during critical development years.

To help safeguard development gains from the impact of natural hazards, UNICEF supports children, communities and governments to prevent, reduce, and manage disaster risk, including measures to adapt to climate change.

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WHAT IS DISASTER RISK REDUCTION (DRR)?

When faced with a hazard, whether a storm, earthquake, drought, severe flood, or epidemic, communities are affected in many different ways and to varying degrees. **Disaster risk** is the potential for a community or society to experience severe damage, loss, and suffering in such circumstances, which exceeds the capacity to cope and respond. **Disaster Risk Reduction (DRR)** is a systematic approach to identifying, assessing, and reducing that risk, and is achieved by preventing new and reducing existing risks, while managing for possible residual risk through preparedness.
RESILIENT DEVELOPMENT: THE NEED TO ADDRESS UNDERLYING DRIVERS OF MULTIPLE RISKS

UNICEF recognizes that while disaster risk poses a significant threat to a child’s rights and her development, a holistic approach to support the capacities of children, communities and governments to deal with multiple shocks and stresses is required. UNICEF is therefore promoting risk informed programming which includes development of nationally led common risk assessments, DRR, climate change adaptation, conflict prevention and peacebuilding. To support this UNICEF is also further integrating its humanitarian and development work.

In practice this means (a) strengthening the capacity of UNICEF and partners in child sensitive risk assessment, such as spatial mapping of disaster and climate risk; (b) addressing underlying drivers of risks through adapted social services, such as education programmes that promote social cohesion in areas of violence or conflict; (c) supporting social safety nets to help the most vulnerable and excluded to deal with economic and other shocks; and (d) an explicit focus on preparedness. Findings from a 2014 study in Chad, Madagascar, and Pakistan show that of the US$5.6 million invested in preparedness, US$12 million was saved, more than double the investment6 (for country examples see page 8).

UNICEF supports programming to strengthen resilience informed by an analysis of multi-hazard risk that takes into consideration vulnerable groups, disaggregating data by age, sex and disability. UNICEF also promotes the active participation of children and youth in both policy development (e.g. participation in regional DRR platforms) and programming (e.g. post disaster needs assessments).

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The need to frame humanitarian and development approaches within a broader context of multi-hazard risk and resilience are emphasized throughout the 2030 Agenda.

The Sendai Framework for DRR highlights the importance of taking into account multiple hazards while addressing the underlying drivers of risk and vulnerability. The Sustainable Development Goals (SDGs) include goals on combating climate change and its impacts and promoting peaceful and inclusive societies, and DRR is a key element of several goals.

The Paris Agreement on Climate Change recognizes the need to conduct comprehensive risk assessments to address the adverse effects of climate change, including extreme weather events and slow onset events. The outcome document of the Financing for Development (FfD) conference further notes the role of DRR, climate change mitigation and adaptation, and peacebuilding to achieve sustainable development.
UNICEF’S DRR GOALS

DISASTERS AND CHILDREN’S RIGHTS

unite for children

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UNICEF’S DRR GOALS

**1.** DRR FOR CHILDREN AND WOMEN, INCLUDING THOSE WITH DISABILITY, IS A NATIONAL AND LOCAL PRIORITY

**2.** DIFFERENT RISKS FACED BY GIRLS, BOYS, AND WOMEN ARE IDENTIFIED AND ADDRESSED

**3.** SAFER AND MORE RESILIENT CONDITIONS FOR GIRLS, BOYS, AND WOMEN ARE PROMOTED

**4.** HUMANITARIAN PREPAREDNESS, RESPONSE, & RECOVERY IS STRENGTHENED THROUGH THE CAPACITY DEVELOPMENT OF STAKEHOLDERS AT ALL LEVELS

DISASTERS AND CHILDREN’S RIGHTS

Under the UN Convention on the Rights of the Child (CRC), children have inalienable rights in all circumstances – including during disasters, when they are most at risk – and the right to participate in decisions that affect their lives. The CRC and disaster risk reduction are, as such, mutually reinforcing. For example, educating a child about disaster risk and empowering the child to use that knowledge supports Article 6 (life, survival, and development), while ensuring the participation and agency of a child in DRR activities upholds Article 12 (respect of the child’s views).

UNICEF furthermore recognizes the importance of gender in reducing disaster risk. Ignoring the different capacities, roles, and needs of girls and boys can result in missed opportunities, design flaws in interventions and policies, and undermines the capacity of communities to minimize disaster risk.

CHILDREN IN A CHANGING CLIMATE (CCC) COALITION AND THE CHILDREN’S CHARTER FOR DRR

UNICEF is a member of the Children in a Changing Climate (CCC) coalition, in partnership with ChildFund Alliance, Plan International, Save the Children and World Vision International. Established in 2007, the CCC advocates for the inclusion of children’s unique experiences of climate change impacts and disasters into policy and practice, and advocates for and conducts research on child-centered DRR, and climate change mitigation and adaptation for future generations.

The Children’s Charter for DRR was launched by the CCC at the Global Platform for DRR in 2011, developed in consultation with over 600 children in 21 countries. It highlights five priority areas for DRR, as identified by children.
UNICEF AND THE SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION

SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION 2015 - 2030

HOW IS UNICEF SUPPORTING THE IMPLEMENTATION OF THE SENDAI FRAMEWORK?

UNICEF IS SUPPORTING GOVERNMENTS TO IMPLEMENT THE SENDAI FRAMEWORK BY:

- Highlighting both the particular vulnerabilities of children, as well as their critical role as agents of change.
- Prioritizing the disaggregation of data by age, sex and disability including in risk assessment and damage and loss records and data sets.
- Promoting social services as opportunities to reduce vulnerability and risk. For example, this includes robust health and education systems that continue to provide essential services during and following a hazard.
- Emphasizing the importance of safe schools and DRR education. DRR and CCA education plays an important role in preparing children and their communities for possible disasters and reducing their impact. Safe school structures help make possible the continuation of schooling during critical developmental years.
- Strengthening national and sub-national capacities in multi-hazard risk assessment and analysis.

At the time of the writing, an Open-ended Intergovernmental Expert Working Group is developing a set of indicators (aligned with indicators in the SDGs) to measure progress in the implementation of the Sendai Framework.
UNICEF AT WORK

Disaster risk reduction has long been a priority for UNICEF, in light of the organization’s dual humanitarian and development mandate. In the 1990s, UNICEF supported the International Decade for Natural Disaster Reduction and in 2005 endorsed the Hyogo Framework for Action 2005-2015. UNICEF supports the implementation of the Sendai Framework for DRR (2015-2030) as well as the 2015 Paris Climate Agreement and the Sustainable Development Goals (SDGs).

UNICEF is working to integrate DRR into its programming across all sectors and to support governments in the implementation of the Sendai Framework. Capacities to implement child-centered disaster risk assessments have been strengthened in a number of regions. Progress has been made in strengthening the capacity of health and nutrition systems to deal with major causes of mortality and morbidity at local level; water systems have been protected and adapted to continue to function during different types of disasters; school safety has been strengthened and evacuation plans confirmed; and child protection reinforced to deal with displacement, separation and violence against vulnerable children in regions of high vulnerability and chronic crises.

UNICEF has integrated DRR into the Core Commitments for Children in Humanitarian Action, the agency’s central policy on upholding the rights of children affected by humanitarian crises. As part of this commitment, UNICEF is increasing its investment in preparedness, and in reducing risk through its response and early recovery work.

The strengthening of partnerships with governments and civil society also plays a central role. Examples include the global advocacy work with Children in a Changing Climate (CCC) coalition to promote children as agents of change in climate change and DRR, and advancing work on school safety through the Global Alliance for Disaster Reduction and Resilience in the Education Sector (GADRRES). At the country level, UNICEF works with partners to include DRR into national development plans, as well as into the overarching UN Development Assistance Framework (UNDAF) and UNICEF Country Programmes.

“EARLY RECOVERY is an approach that applies long-term development principles of sustainability and local ownership during humanitarian action, whereby humanitarian programmes can catalyse sustainable development opportunities, including DRR.

This definition is adapted from the Early Recovery Guidance Note, Cluster Working Group on Early Recovery, April 2008.
SHOWCASE: UNICEF’S DRR INITIATIVES

WATER, SANITATION AND HYGIENE (WASH) VANUATU

UNICEF is supporting governments worldwide to achieve sustainability of resources through water, sanitation, and hygiene (WASH) programmes, in addition to increasing the access of communities to safe drinking water and basic sanitation. The Pacific region has the lowest sanitation and clean water coverage rates in the world, at 53 per cent. Progress to improve these conditions has been slow, hindered by the frequency and impact of natural hazards and the ongoing pressures of climate change (including sea level rise). To support children and their communities and strengthen community management of water supply and sanitation, UNICEF Pacific is supporting communities, through participatory tools, to develop drinking water safety and security plans. In cyclone and flood-prone areas, communities now have regular water committee meetings, have improved toilet facilities and regularly clean water tanks.

NUTRITION ETHIOPIA

An estimated 80 per cent of the world’s 165 million stunted children live in just 14 countries, most of which are fragile and disaster-prone. This can result in long-lasting consequences for cognitive ability, school performance, health outcomes, and future earnings. Addressing childhood stunting can help break the cycle of poverty and increase a country’s GDP by at least two to three per cent annually. To enhance early detection and management of malnutrition in drought-prone areas, UNICEF Ethiopia supported the establishment of community nutrition surveillance sites through the training of health extension workers. Since 2011, through joint investment in health system capacity focusing on expansion and decentralization, the number of treatment points has increased, covering 98.5 per cent of food insecure villages. Mobile health units are able to reach pastoralist communities, including in drought-prone areas, families who previously would often have had to travel great distances to receive care. As a result, children with severe acute malnutrition can now be identified earlier and receive life-saving treatment closer to home. The mortality rate among children under five has dropped to 0.4 per cent whereas the norm under similar circumstances is 10 per cent.

CHILD PROTECTION PHILIPPINES

In the Philippines, the Government is working with UNICEF and partners to improve child protection emergency preparedness and response at national, regional, and local levels, in particular at the community level through Barangay Councils – numbering over 42,000 throughout the country. Among other roles, Barangay Councils work to strengthen community level action for child protection, and have established processes and local networks to support children, youth and families. Capacity building activities have been undertaken, legislations adopted, and mechanisms such as referral pathways have been reviewed to prepare for and respond to emergency situations. Youth leaders have also been actively engaged and their networks mobilized in the long term.
HEALTH MYANMAR

In Myanmar, Cyclone Nargis struck in May 2008, killing more than 140,000 people and damaging infrastructure and property worth billions of dollars, including over 600 health facilities. UNICEF’s immediate priority was to reinstate education infrastructure and health care networks. Twenty-four rural and sub-rural health centers were designed and built between 2008 and 2010, in some of the most affected areas. Some of the health facilities were reconstructed using lightweight technology suitable for soft (mangrove) soil conditions with low loadbearing capacity, while others were constructed with reinforced concrete. Both types of structures were built with the capacity to withstand strong winds and earthquakes. Lightning protection was also installed, and 102 fiberglass boats provided to health workers in 12 townships affected by the cyclone to support the organization of outreach activities in future flood situations.

CHILD CENTERED RISK ASSESSMENTS NEPAL

Despite the disproportionate impact of disasters on children, the decision-making and risk management process rarely includes space for the meaningful participation of children. In response, UNICEF Nepal has developed a training manual guiding local partners and staff on Child Centered Risk Assessments at the district and community levels. The training equips children with a greater understanding of climate change and DRR, and the skills to develop climate and disaster risk maps for their communities and schools. In some districts this has led to the establishment of risk informed development plans within schools and Village Development Committees.
Malagasy is among the poorest countries in the world and is prone to natural hazards, including cyclones – the effects of which are further exacerbated by climate change. To better analyze and prepare for risks in this context, WFP and UNICEF jointly conducted a study on the Return of Investment (ROI) from preparedness (January 2015), which included the case of Madagascar. The study suggests that increased investment in early preparedness could reduce the costs of humanitarian response by more than 50 per cent, and save more lives by facilitating swifter and more efficient humanitarian response to emergencies. The measures identified included training on early warning for community leaders, use of early warning systems for rapid communication and coordination between affected villages and national authorities, pre-positioning of supplies, and the use of sea transport rather than sole dependence on airlifting.

UNICEF is working in disaster-prone areas across the world to ensure that school buildings are safe, teachers and students are prepared in the event of a disaster, and DRR and Climate Change Adaptation are included in school curricula. In 2015, the Kyrgyzstan Government initiated the retrofitting and reconstruction of schools throughout the country based on a safety assessment of almost all of their educational institutions (2,222 schools and 806 preschools). UNICEF is also working with government counterparts to develop a school-based DRR Guide, to systematize DRR initiatives that have been proven to work – risk assessments, risk mapping, preparedness and risk reduction interventions, carried out with child and youth participation. Furthermore, DRR and Principles of Everyday Safety have been incorporated into the formal curriculum for primary school grades one to five, and secondary school grades six to eleven.

In recognition of the importance of a context-specific and local approach to reducing disaster risk, the Civil Defence Commission (CDC) in Guyana launched a Community-Based Disaster Risk Management (CBDRM) Project, in partnership with UNICEF. The project was born out of a recognition of the differences between communities in how they are vulnerable and exposed to hazards. Community members and stakeholders were engaged, including through the development and vetting of emergency disaster plans, to generate a greater understanding of the local hazard and vulnerability landscape and existing risk management systems. Particular attention was paid to the vulnerabilities of households with young children and individuals with disabilities, and the importance of incorporating indigenous and local knowledge to reduce risks. Participatory approaches were used to collect community knowledge and views. Community members were empowered to lead the process themselves, making up the entirety of the CBDRM Management Team and Community Emergency Response Team (CERT), of which a significant number were youth. Team members were also given trainings in first aid, leadership and financial management, and emergency response. Building on these activities, Community Disaster Risk Management Plans will be developed through simulations testing the established preparedness and response systems. Equipment and resources to maintain the function of CBDRM will also be provided, to help the communities maintain and strengthen local capacities and systems now in place.
## SECTORAL PILLARS AND EXAMPLES OF DRR INTERVENTIONS

### HEALTH

#### 3 Pillars of DRR & Health

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<tr>
<th>Example of Key DRR and Health Actions</th>
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| PREVENTION / MITIGATION | Include risks to health and health systems, such as epidemics and pandemics, as potential hazards to prevent and prepare for in national and local risk assessments.  
  Based on multi-hazard risk assessments, target health programs in order to improve baseline health status (including accelerating and expanding community-based programs) to high risk areas and make existing health services flexible and adaptable to local risks. |
| PREPAREDNESS | Link health programs to existing (national, sub-national, and community) early warning systems.  
  Prepare UNICEF health programs based on risk assessments to increase risk awareness and provide health education to communities, and put in place emergency preparedness and response measures for health systems, communities and households. |
| RESPONSE / EARLY RECOVERY | Provide adequate resources and supplies to continue the delivery of priority health services in the most vulnerable locations, while re-establishing health systems.  
  Carry out analyses of why health facilities and services were damaged or interrupted, and find suitable ways to modify existing / future systems against recurring damage. |

### WATER, SANITATION, AND HYGIENE (WASH)

#### 3 Pillars of DRR & Wash

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<th>Example of Key DRR and Wash Actions</th>
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| PREVENTION / MITIGATION | Carry out vulnerability and capacity assessments of water and sanitation systems and practices to assess the ability to meet essential needs in the event of a disaster, incorporating climate change adaptation and conflict sensitivity where relevant and feasible.  
  Design, build, locate, and maintain water and sanitation systems to include modifications to mitigate risks. |
| PREPAREDNESS | Develop and communicate messaging on water usage, sanitation, and hygiene in disaster situations  
  Identify and assess hazards and risks; Develop emergency measures to mitigate impacts of hazards; Prepare systems to switch into ‘emergency mode’ in order to re-establish a minimum of services in the shortest time possible following a hazard. |
| RESPONSE / EARLY RECOVERY | Ensure that recovery efforts focus on ‘building back better’, incorporate previous development and emergency hygiene programs, and build the resilience of communities to potential future hazards.  
  Analyze the causes leading to failed WASH-related behavior and adapt and design programs accordingly. |
## 3 Pillars of DRR & Nutrition

### Examples of Key DRR and Nutrition Actions

**Prevention / Mitigation**
- Incorporate disaster risk assessments, climate change projections, and conflict sensitivity into existing nutrition assessments and monitoring, while ensuring input by the nutrition sector into national and community level disaster risk assessments.
- Strengthen community health systems for early diagnosis, referrals, and follow-up of children and women with acute malnutrition.

**Preparedness**
- Pre-position stocks (regional and national hubs) for identified ‘at risk’ populations.
- Scale up communication for behavior change in vulnerable communities.

**Response / Early Recovery**
- Establish and strengthen ongoing nutrition assessment / surveillance mechanisms.
- Implement interventions at scale (e.g. infant and young child feeding, treatment of acute malnutrition and micronutrient deficiency control) as part of the response, while building on existing national networks.

## 3 Pillars of DRR & Education

### Examples of Key DRR and Education Actions

**Safe Learning Facilities**
- Carry out safety inspections and assessments of education facilities, ensuring their location and construction comply with minimum standards and align with international school safety best practices.
- Secure and provide temporary schooling facilities and alternative sites when hazards are anticipated.

**School Disaster Management**
- Support school level vulnerability and capacity assessments, which include the participation of children, parents, and teachers.
- Establish early warning systems, evacuation drills, including training for teachers to identify and act on early warning signs.

**Risk Reduction & Resilience Education**
- Integrate DRR and climate change mitigation and adaptation into the formal and non-formal education curricula, from pre-school to secondary levels.
- Provide disaster preparedness training to teachers (both in-service and pre-service), school management committees, and where applicable, student councils.
### CHILD PROTECTION

#### EXAMPLES OF KEY DRR AND CHILD PROTECTION ACTIONS

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<th>PREVENTION / MITIGATION</th>
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<td>With data from disaster risk assessments, identify key geographic areas and the most vulnerable children and women for targeted interventions (e.g. to strengthen systems and community networks).</td>
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<td>Engage local authorities to strengthen the capacity of communities and households to care for their children, and identify and encourage existing positive coping mechanisms.</td>
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<td>PREPAREDNESS</td>
<td>Establish permanent ‘safe spaces’ for women and children in disaster-prone areas as part of the community-based child protection network.</td>
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<td>Promote community awareness on the protection of children’s rights through measures such as prepositioning emergency supplies (e.g. tents, family and information kits), safeguarding identification documents for tracing, and teaching life skills (e.g. first aid, swimming).</td>
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<td>RESPONSE / EARLY RECOVERY</td>
<td>Disseminate and ensure access to information by affected populations, including on the availability and location of services (e.g. through mobile safe spaces).</td>
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<td>Increase the safety of camps and evacuation centers (e.g. by installing sufficient lighting and establishing community warden systems).</td>
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### SOCIAL INCLUSION

#### EXAMPLES OF KEY DRR AND SOCIAL INCLUSION ACTIONS

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<th>PREVENTION / MITIGATION</th>
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<td>Support local government capacity to plan consultatively, organize the delivery of DRR measures effectively, budget equitably and monitor the impact of DRR on child outcomes;</td>
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<td>Help build the resilience and adaptive capacities of households and communities to anticipate, manage and overcome disaster risk by addressing the social and economic barriers that keep children and their families from accessing and by helping families avoid risk coping strategies that may deepen their future vulnerabilities</td>
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<td>Transform the social relations that cause some families to remain highly vulnerable to shocks;</td>
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<td>Strengthen social and physical, community assets in a way that increases community resilience to shocks;</td>
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<td>Support viable livelihood for families to ensure long-term sustainability.</td>
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<td>PREPAREDNESS</td>
<td>UNICEF supports government partners to:</td>
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<td>Include emergency preparedness in their social protection systems;</td>
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<td>Strengthen the human resource capacity in social protection – including social welfare workers - that can be used to respond to disasters, crises and emergencies</td>
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<td>Develop/ Reinforce social protection mechanisms (payment systems, management information systems, etc.), on which the humanitarian can piggy back during an emergency;</td>
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<td>Support the development of registries of vulnerable households that can include households that are most at risk of disaster impacts;</td>
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<td>Make programmes flexible and scalable to respond to crises.</td>
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<td>RESPONSE / EARLY RECOVERY</td>
<td>Scale up existing social assistance programmes to provide greater assistance (e.g. larger amounts for cash transfers) or reach new populations beyond their normal target groups, including the children and families that are newly impoverished or displaced people. This includes cash and in-kind programmes, and responses that ensure continued access to services, e.g. through fee waivers or subsidizing indirect costs (e.g. medicines or school supplies)</td>
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<td>Establish new in-cash or in-kind programmes based on the assessment of needs and contextual situations (e.g. malnourished children, security concerns, economy crises trigged by crises/emergencies).</td>
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