

Disaster Risk Reduction

This paper describes our policy work on Disaster Risk Reduction. It explains why we are working on this issue, outlines our aims and approaches, and sets out our recommendations.

What is our overall goal?

Practical Action aims to reduce the risk of disasters for marginalised groups and communities by mainstreaming Disaster Risk Reduction (DRR) into all development processes.

Disasters kill and injure people, with the vulnerable, the elderly, the sick, and the poor most affected. Disasters deprive people of their livelihoods, they damage infrastructure, reduce productivity and generate social tensions, they consume resources that would otherwise be directed towards productive activities, and they can wipe out years of development in seconds. Our work in the field has highlighted that it is insufficient to focus only on disaster response; there is an urgent need to shift to risk reduction in which avoidable risk is eliminated and unavoidable risk is factored into the livelihood choices of local people.

Why is this issue urgent?

- The scale, frequency and severity of natural disasters have risen progressively over the last 20 years. In 2011, 206 million people were affected by disasters, with estimated losses in excess of \$366 billion¹. The key drivers of disasters are increasing with the most critical being: climate change; resource scarcity; and migration to urban areas. For example under current trends by 2015, over 375 million people per year are likely to be affected by climate-related disasters, which is over 50% more than the number affected during the ten years to 2010².
- The recent assessment of global delivery of risk reduction efforts³ indicate that the global response to disasters is inadequate with most efforts arriving too late, when livelihoods and lives have already been swept away. There is a need to invest in DRR, to help countries and communities to be better prepared to cope when disasters strike, allowing them to bounce back faster and strengthen learning to build resilience before the next unforeseen disaster strikes. In addition a number of studies are starting to highlight the economy of early action and resilience building programmes, with a recent DFID study indicating that £2.3 in benefits

¹ <http://www.unisdr.org/archive/24692>

² <http://www.oxfam.org/sites/www.oxfam.org/files/forecasting-disasters-2015.pdf>

³ UNISDR, 2013. Global Assessment Report 2013. Geneva, Switzerland UNISDR

were generated for every £1 spent in Niger and up to £55.9 for each £1 in Mozambique. The analysis used very conservative figures, so in practice the savings should be considerably higher⁴.

- It is widely recognised that developing countries are disproportionately affected by disaster impacts⁵, for example the over one billion poor who live below the official poverty line are seriously affected by disasters as they are compelled to live in marginal and/or risky locations. However for developing countries and poor people in particular, when the total economic losses caused by disasters is examined it appears to be low, but when these losses are considered in the context of GDP, the financial impact of disasters is extremely high and is threatening and in some cases already reversing development gains. A recent study on the impacts of Disasters in Africa⁶ highlighted that droughts and flooding alone, cost from 1.7 to 9% of GDP each year. It is therefore imperative to build DRR into development efforts to ensure that investments made today are not washed away by natural or man-made disasters tomorrow.
- The Hyogo Framework for Action 2005-2015 (HFA): Building the Resilience of Nations and Communities to Disasters, provided an assessment of global progress on DRR⁷ which indicated that although delivery on national level preparedness, planning and capacity building has been adequate, delivery at the grassroots level has been inadequate. This has been reiterated by the recent “Views from the Frontline” report⁸ that documents progress on delivery of DRR against different income groups in 57 poor and developing countries around the world. This report found that the poorer you are, the worse it gets, with only the wealthiest group – those who regard themselves as much better off than the national average – reporting any reduction in overall risk.
- Despite the fact that DRR is high on the agenda of developed and developing countries a recent study of donor investment in DRR by the Overseas Development Institute and the Global Facility for Disaster Reduction and Recovery at the World Bank⁹ found that donor support had been highly volatile with less than 40 cents spent on DRR for every 100 dollars spent on aid. The report found that where the economy is at risk, volumes of financing tend to be high; where predominantly populations are at risk; volumes are often low, resulting in a high concentration of funding in a relatively small number of middle-income countries. The top 10 recipients received nearly eight billion dollars, the remaining 144 just 5.6 billion combined with the majority of this support spent on post disaster response and humanitarian relief efforts.

What are our aims?

Practical Action aims to achieve a “Reduced risk of disasters for marginalised groups and communities”¹⁰. We cannot prevent hazards but we can stop them turning into disasters. Our DRR programmes work to help the poor, indigenous communities and the most vulnerable, prepare for

⁴ <https://www.gov.uk/government/policies/helping-developing-countries-deal-with-humanitarian-emergencies/supporting-pages/helping-countries-protect-themselves-against-future-disasters>

⁵ The World Bank and UN, 2010. Natural hazards, unnatural disasters: the economics of effective prevention. The International Bank for Reconstruction and Development, Washington DC, USA

⁶ The World Bank, November 2012, Disaster Risk Financing and Insurance in Sub-Saharan Africa

⁷ UNISDR, 2013. Global Assessment Report 2013. Geneva, Switzerland UNISDR

⁸ Global Network for Disaster Risk Reduction 2013. Views from the Frontline report 2013. London, UK: GNDR

⁹ <http://www.odi.org.uk/publications/7452-climate-finance-disaster-risk-reduction>

¹⁰ Practical Action Strategy 2012-2017

hazards; so they can survive and maintain their livelihoods, get their lives back on track as quickly as possible and plan for a better future as part of the global society:

- We want to strengthen the ways that people living in fragile environments cope with natural hazards. This requires building a sound evidence base of the role that healthy environments play in reducing risk, understanding how climate change and other critical drivers are changing this relationship, and exploring ways that local people, especially the poorest who are most dependent on natural resources, can reduce their exposure to risk, today and in the future. The generation of evidence based on practice will be crucial to advocate for policy environments that support effective multi-sectoral risk reduction.
- Disaster Risk Reduction is also a question of justice and we need to build on the understanding of 'shared but differentiated responsibilities' to channel much needed resources to those who are most vulnerable. Both directly through an improved HFA, but also indirectly through adaptation financing promised under the global climate change agreement. Until adequate resources are mobilised to reach the poorest and most vulnerable to help them tackle underlying risk factors many development efforts will remain ineffective.
- We want to ensure local and national governments deliver on their commitments to the HFA and ensure this is focused at the grassroots level so that DRR efforts are delivered for those people who are most vulnerable and with the least capacity to cope.
- We want to explore the role that technologies and markets play, both in alleviating but also exacerbating risk. We need to reform the drivers for innovation in the DRR sector and explore how markets can support this transition, to herald a shift away from technologies designed solely around the capacity to pay, towards holistic systems that deliver on reducing risk.

How are we doing this?

- **Evidence-based policy analysis:** Through our global programme work we are able to identify many of the key factors that contribute to peoples' vulnerability, namely, hazards and stresses, fragile livelihoods, future uncertainty and weak governance. This work helps us understand the linkages between these factors as well as identify ideas for action to strengthen resilience. This work has resulted in the development of the 'from Vulnerability to Resilience' (V2R) framework, a framework that addresses the need to work in a more integrated people centric way to tackle the causes and consequences of disasters.
- **Capacity Building and Training:** Across our programmes we are working at all levels to build understanding and raise awareness of the challenge of how natural and manmade hazards can become disasters and building relevant capacity to minimise the impact on people's lives and livelihoods. We work in alliance with partners and like-minded organisations as well as with agencies that still need to be convinced to build momentum for risk reduction. This generates demand for disaster prevention, preparedness and response training to build the capacity of communities and local government to be prepared and government commitment to invest in capacity building as part of national policy.

- **Planning platforms:** We are working with people, communities, local and national governments, NGOs and the private sector to integrate risk reduction across the development spectrum. The V2R¹¹ framework provides an approach to engage key actors and identify the key processes that need to be considered to deliver resilience on the ground. This inclusive planning approach is being piloted in Bangladesh and Nepal, in communities that are exposed to recurrent and longer term disasters. We are also working on enhanced vulnerability mapping including simple Geographic Information Systems (GIS) tools to enhance vulnerability mapping in Sri Lanka.
- **Networking:** In Latin America and South Asia we are coordinating regional networks of civil society organisations to document the impact of disasters on poor people's lives. These regional networks under Practical Action in Latin America and through Duryog Nivaran in South Asia have national and local contact with disaster prone communities, women, children and indigenous people. These networks are able to understand the local dimension of vulnerability and support efforts to reduce disaster risk. This community level empowerment is particularly powerful as a source of evidence to strengthen policy formulation to deliver risk reduction to those who need it most.

In the UK we are taking a leading role in the DFID PPA (Partnership Programme Arrangement) Interagency resilience learning group, to call for strengthened focus on resilience in DFID and our partners work. This learning group offers the potential to explore resilience practice and document lessons learned. This group made up of INGO's and DFID aims to influence DFID's humanitarian and development strategies to focus on pro-poor resilience building.

- **Seeking partnerships with the private sector:** We have developed a global partnership with Zurich Insurance Group to pilot flood resilience in three countries¹². Zurich is a global leader in the insurance industry and this programme offers the opportunity to deliver community level flood resilience based on our complementary strengths. Zurich in partnership with other agencies is interested to learn how flood resilience can be enhanced through mitigation technologies, recognising that by working with Practical Action these solutions will be locally appropriate. This combination of private sector and NGO expertise and a long term commitment creates a powerful advocacy platform that can reach very different audiences with the key messages. Critically these messages will be distilled from the evidence and learning from a global programme implemented by a variety of actors.

One specific opportunity in working with the private sector is building the potential that markets provide to reduce risk. The Emergency Market Mapping and Analysis (EMMA) toolkit¹³ aims to improve emergency responses by encouraging practitioners to better understand, support and make use of local market-systems in times of disaster.

- **Monitoring implementation of the Hyogo Framework of Action (HFA):** We are working in countries and at the regional and global scales to monitor efforts to deliver risk reduction under the HFA. By engaging partners through alliances and networks we are monitoring national commitments and global progress to deliver DRR and informing out policies to ensure that these efforts reach those who have the weakest voices and are most vulnerable.

¹¹ Practical Action 2009, From Vulnerability to Resilience. Practical Action, Bourton Hall, UK 2009

¹² <http://practicalaction.org/practical-action-and-zurich-team-up>

¹³ <http://practicalaction.org/emma-toolkit>

What drives our work?

Our policy influencing approach to DRR is based on research and operational experience gained over many years in South Asia, Africa and Latin America. This shows that secure and sustainable livelihoods not only lift communities out of poverty and reduce their susceptibility to hazards but importantly can prevent them falling back into poverty when a disaster strikes.

Central to our DRR work is involving people in decision making, through the use of participatory approaches and technological innovation that is in line with the principle of *technology justice*. Participation and technology are critical to ensure a sustainable, fair and just future for all.

Technology justice in DRR requires the involvement of the poorest and most vulnerable in the development of solutions so that technologies deliver the biggest impacts for the poorest and most vulnerable and are not driven by a profit motive alone. This requires a critical examination of not only how technology reduces vulnerability but also how the use of some technologies can increase vulnerability to disasters, for example by degrading the local environment or contributing to global carbon emissions exacerbating climate change. Thus *technology justice* is central to our work; whereby we aim to build a movement, where technology is used for the benefit of all, in a way which is not at the expense of future generations.

Effective participatory approaches ensure that the voices of poor women, men and indigenous communities are brought to the fore in decision making. It is essential that marginalised people are supported to build relationships and engage with stakeholders and processes such as municipal services, the setting of local authority budgets, or the development of DRR plans; if these strategies are going to meet their needs and help them escape poverty in spite of future disasters.

During the period 2012-17, we will build on our DRR experience, generating evidence about the effectiveness of technologies for disaster preparedness (e.g. early warning systems, GIS mapping, insurance services) and integrating what we know about climate change into our understanding of risk and vulnerability. We will continue to work with local and national authorities and explore how markets can contribute to reduce risk. We will continue to influence international dialogue around the achievements and future directions of the HFA to ensure resource allocations reach those who need it most. Only with a holistic approach to development will resilient societies be established that effectively contribute to a growing and more robust global economy for the benefit of all.

What are our recommendations?

1. The concept of Resilience and the practice of DRR must be fully integrated into the post-2015 development agenda/Sustainable Development Goals, requiring the consideration of risk reduction for each goal. The report of the High Level Panel of Eminent persons¹⁴ has a specific DRR target under proposed goal 1 and has sustainable development as one the transformational shifts at the core of the new agenda; this clearly recognises DRR is necessary to deliver sustainable development.
2. Governments and key stakeholders recognise in their policies the inter-connectedness of hazards and livelihoods, and recognise long term trends and the crucial role of governance,

¹⁴ <http://www.beyond2015.org/sites/default/files/HLPReport.pdf>

especially how empowered citizens and communities can transform local government to deliver effective DRR, thus delivering an integrated approach to DRR at all scales, particularly on the ground where the impact of disasters are felt hardest.

3. We are uniquely positioned to increase global recognition of the role that technology and innovation play in alleviating and occasionally exacerbating disasters on people's well-being. We must make efforts to demonstrate and advocate for the positive role that technology can play to promote disaster sensitive development and challenge technology based development approaches that exacerbate vulnerability.
4. Increase funding for DRR, critically investment in long-term initiatives which save lives and precious assets while reducing the need for short-term humanitarian assistance. This is either through dedicated DRR funding areas or alternatively by ensuring that DRR is integrated into existing development projects and future programmes.

Find out more

SharePoint site:

<http://sp-uk.practa.org.uk/PPA/UKAims/DRR/SitePages/Home.aspx>

DRR group on LinkedIn http://www.linkedin.com/groups?gid=4787955&trk=myg_ugrp_ovr

From Vulnerability to Resilience Framework (V2R)

<http://practicalaction.org/conceptual-framework-for-reducing-vulnerability-1>

For more information please contact:

Colin McQuistan

Senior Policy and Practice Advisor DRR and Climate Change

Policy and Practice Team

Practical Action

colin.mcquistan@practicalaction.org.uk