



Swiss Working Paper on Disaster Risk Reduction (DRR) in the Post-2015 Agenda

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"Reducing disaster risk and increasing resilience to natural hazards in different development sectors can have multiplier effects and accelerate achievement of the Millennium Development Goals."

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Disasters: drawbacks for sustainable development

Natural and man-made disasters often threaten human life, people's health, livelihood and security. As such they constitute a considerable drawback for sustainable life, prosperity and development. Moreover, they can heavily impact the environment, put communities further at risk, and destroy development gains. Households or communities invest much financial means to recover from a disaster or may even fall into the poverty trap by selling means of production (e.g. cattle) for recovery. In addition, high vulnerability (e.g. as a result of poverty) and poor coping capacities constitute low resilience against shocks and stresses.

"Natural disasters" as such do not exist. Natural events turn into a disaster only when human beings and their livelihoods and assets are exposed to nature and are not protected from, adapted to or prepared to cope with such shocks or stresses. In other words: hazards may be natural, disasters are not. This paper will nevertheless refer to the term "natural disaster" because of its wide use.

Several statistics¹ show a dramatic increase in losses due to disasters since the 1950s: today economic damage amounts to about USD 150 billion per year; and approx. 250 million persons (and their livelihoods) per year are affected by floods, storms, droughts or earthquakes. Unaccounted in these figures are the many small- to mid-scale disasters, which neither made their way in any statistics nor in any media coverage, but nevertheless, affect life and livelihoods. In contrast to increasing losses, statistics show a considerable decrease in fatalities in the last 30 years (CRED). Nowadays the average death toll stays at about 100,000 persons per year (sudden on-set disasters), with very high variability (14,000 in 2012, nearly 300,000 in 2010). It has to be noted that the slow-onset disasters (like the effect of drought, environmental degradation etc.) are not represented in these figures.

A clear increase in weather-related disasters can be observed (in contrast to a relatively stable number of other types of events like earthquakes, tsunamis or volcanic eruptions). A changing climate leads to changes in the frequency, intensity, spatial extent, duration, and timing of weather and climate extremes, and can result in unprecedented extremes². In particular the frequency of hazardous events (e.g. storms, floods, prolonged droughts, pests) is expected to increase in the future. However, the same report on extreme events also underlines that an increasing exposure and vulnerability of people and economic assets has been the major cause of long-term increase in economic losses from weather- and climate-related disasters. Most important are on-going population growth, unplanned urbanization, environmental degradation and higher susceptibility of societies to disasters. Long-term trends in economic disaster losses (adjusted for wealth and population increase) could not be directly linked to climate change so far (see e.g. Barredo et al.). Still, a role for climate change cannot be excluded.

¹ CRED: www.emdat.be; Munich Re: www.munichre.com/de/reinsurance/business/non-life/georisks/natcatservice/default.aspx; Swiss Re: www.swissre.com/sigma/

² IPCC SREX 2012; <http://ipcc-wg2.gov/SREX/report/>

DRR as a contributor to poverty reduction and resilience building

Disaster risk reduction (DRR) has become an important term in the last 10 years to name efforts to curb this malign trend of increasing losses. DRR addresses the further increase in risks, the reduction of existing risks (large-scale as well as small-scale) and the preparation for stress or shocks without historic parallels, e.g. due to climate change. DRR contributes to the safety and security of a society, key for people's welfare and sustainable development. It focuses on risks from natural hazards and the subsequent disasters. However, these risks have to be seen in an overall risk context including other risks faced by a society, like conflicts, economic, environmental or climate risks or the effects of technical failures. As for natural hazards, an integrated management approach of these risks is crucial to successfully reduce overall disaster risks.

As such DRR is a typical development issue contributing to the resilience of communities and nations, although there are close links to humanitarian post-disaster actions.

DRR has strong social, economic and environmental dimensions: The reduction (prevention) of human losses has been and still is at the forefront of all DRR endeavours. The protection of people's lives using preventive and preparedness measures is key for many organisations, not only considering "natural" disasters but also other stresses and shocks like conflicts or environmental degradation. Only in recent years have there been calls for further investment in safer development across all sectors and more resilient livelihoods, using e.g. detailed risk assessment in development planning and design or cost-effectiveness considerations for risk reduction measures³. Prevention pays off: investing in increased safety and security of development investments will often be much cheaper than substituting for future damage and economic losses⁴.

In the past, DRR has been seen as a purely humanitarian issue, a response to disasters without taking into account DRR's important contribution to sustainable development. DRR is a multi-level and multi-stakeholder (government, private sector, civil society) issue and as such has important governance aspects. Only in recent years has a closer collaboration of development and humanitarian actors been observed and risks from natural hazards are now addressed with an integrated approach (an approach that has also been applied in Switzerland over the past 20 years).

Over the last few years, the concept of 'resilience' has achieved significant attention on international agendas because of a growing recognition that different types of risks, e.g. health, violence and conflict, climate change, natural disasters are inter-connected. The concept of resilience addresses the ability of a system (individual, household, community, state) to resist, absorb, accommodate to and recover from the effects of such shocks and stresses in a timely and efficient manner. Building Resilience requires bringing together humanitarian and development actors, working on disaster risk reduction, conflict prevention and climate change as well as working on social, economic and institutional development⁵.

Resilience building explicitly takes measures to tackle the root causes of disasters and disaster losses. Such measures include the management of natural resources, land use and land management considerations, maintenance and protection of critical infrastructures or financial issues. The reduction of economic, environmental and social vulnerabilities and the improvement of respective coping capacities contribute to the overall resilience of societies. A sound assessment of prevailing risks thus stands at the start of the whole resilience-building process.

³ World Bank: Natural hazards, unnatural disasters; www.gfdrr.org/nhud-home

⁴ see also SDC's DRR effectiveness report: Disaster Risk Reduction in International Cooperation - Switzerland's Contribution to the Protection of Lives and Livelihoods
www.preventionweb.net/english/professional/publications/v.php?id=17901

⁵ OECD factsheet on resilience 2013; www.oecd.org/dac/governance-development/May%2010%202013%20FINAL%20resilience%20PDF.pdf

Efforts made so far to manage disaster risks at international level

The International Decade of Natural Disaster Reduction, IDNDR (1990-1999) was a global response to the dramatic increase of losses from natural events in the 1980s. UN agencies and many states took the opportunity to lift the topic disaster reduction on various agendas. A major milestone was the 1st World Conference on Disaster Reduction in Yokohama in 1994. As follow-up of this decade, the United Nations established the UNISDR, the International Strategy for Disaster Reduction, a global mechanism with its secretariat in Geneva. The 2nd Conference on Disaster Reduction (Kobe, 2005), which took place only weeks after the devastating Indian Ocean tsunami, can be considered as the most relevant boost for the topic. The conference document, the "Hyogo Framework for Action (HFA), Building the Resilience of Nations and Communities to Disasters 2005-2015" was adopted by 168 nations and serves today as an important guiding document for many nations to systematically address disaster risks and to frame their DRR activities⁶. Switzerland was one of the main contributors to this document and chaired the drafting committee.

Global Assessment Reports (GAR) have been published in a 2 years' cycle following the Kobe conference (2009, 2011, 2013), reporting on the state of implementation of the HFA in the various countries and regions. The HFA Mid-Term Review (2010-2011) concluded that national and international institutions, including bilateral aid organizations and the United Nations, must integrate disaster risk reduction in their development, climate change adaptation, environmental and humanitarian planning, execution and accountability frameworks to safeguard development gains and investments. Switzerland has been a regular contributor to these assessments and reviews.

The process for a successor of the HFA document has been launched in 2012 and should finally result in the post 2015-DRR framework, to be adopted during the 3rd World Conference on Disaster Reduction (Japan, March 2015).

DRR in the sustainable development policy discussions

During the MDG Review Summit in 2010, DRR was acknowledged as an important issue for sustainable development, as evident from Paragraph 35 of the Outcome Document:

"Para. 35. We acknowledge that disaster risk reduction and increasing resilience to all types of natural hazards, including geological and hydro-meteorological hazards, in developing countries, in line with the HFA, can have multiplier effects and accelerate achievement of the Millennium Development Goals. Reducing vulnerabilities to these hazards is therefore a high priority for developing countries. We recognize that small island developing States continue to grapple with natural disasters, some of increased intensity, including as a result of the effects of climate change, impeding progress towards sustainable development."⁷

The Rio+20 'The Future We Want' outcome document entitles DRR and building of resilience to disasters to be addressed in the context of sustainable development and poverty eradication. The inter-linkages among DRR, recovery and long-term development planning should be strengthened. The HFA serves as guiding document.

Switzerland's positions related to DRR in the post-2015 sustainable development framework

→ Switzerland considers that DRR should be firmly imbedded as a transversal theme in the sustainable development goals, in such a way that DRR is rightly perceived as a contribution to the achievement of

⁶ HFA; www.unisdr.org/hfa

⁷ MDG Review Summit 2010, Outcome Document, available at:
www.un.org/en/mdg/summit2010/pdf/mdg%20outcome%20document.pdf

these goals. In particular, DRR aspects/targets would be relevant in goals on: water, infrastructure, agriculture, education, environment, natural resources, energy, health and alike.

→ DRR must be seen as a core element of the necessary adaptation to climate change but must also go beyond this: it is an approach to safeguard people's security, safety and contribute to their sustainable development.

→ A clear link should be made between the post-2015 DRR framework and the post-2015 sustainable development framework;

→ Accountability mechanisms should be encouraged and developed to help measure action taken and progress achieved in DRR

→ Switzerland does not actively promote a standalone DRR goal in the post-2015 sustainable development framework and considers that DRR can best be tackled through integration with other goals. Although DRR goals on the impact level are frequently discussed, Switzerland considers these hardly achievable and therefore highly questionable. Moreover, these would require long-term developments over many decades and cannot be achievable by 2030⁸.

→ Switzerland advocates for DRR targets on the outcome level: targets on the outcome level are much better positioned to be achievable and to be monitored. Examples for such targets include:

1. All nations to develop a national disaster risk reduction and resilience strategy by 2020 and implementation plans, respectively.
2. DRR fundamentals being elaborated and disseminated (e.g. hazard and risk maps, disaster statistics, impact statistics, scenarios,)
3. National multi-stakeholder Platform(s) created, functioning and working together
4. DRR mainstreamed into national development plans and national adaptation plans (NAPAs)
5. Cost-effectiveness and cost-benefit calculations applied for DRR investments by 2025
6. DRR assessments are included as a requirement in international development cooperation.
7. Application of integrated risk management approaches

→ In addition, Switzerland considers that the following elements should be taken into account:

- Risk-conscious development: all development activities in disaster-prone environments require risk assessment (multi-risk, not only natural hazards), necessary disaster proofing and business continuity management approaches

- Private sector participation in risk reduction (e.g. insurance and finance sectors, operators of critical infrastructures) progress of reduced risks to be monitored in all countries following a standard approach, not only developing countries (accountability)

- Fundamental information about risks available for concerned stakeholders

- Economic considerations in risk reduction (an answer to the question of how much safety at what cost?): Investing in disaster risk reduction is cost-effective and pays out – a 1:5 ratio (cost to benefit) can be achieved

⁸ Examples for such goals include: "Nations to halve disaster mortality and people affected by 2030"; Nations to halve disaster related economic loss by 2030"; "Nations to halve the vulnerability and exposure of the poorest by 2030".