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Brief communication: Sendai framework for disaster risk reduction – success or warning sign for Paris?

Discussion paper

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Abstract

In March 2015, a new international blueprint for disaster risk reduction (DRR) has been adopted in Sendai, Japan, at the end of the *Third UN World Conference on Disaster Risk Reduction (WCDRR, 14–18 March 2015)*. We review and discuss the agreed commitments and targets, as well as the negotiation leading to the Sendai Framework for DRR (SFDRR) and discuss briefly its implication for the later UN-led negotiations on sustainable development goals and climate change.

1 Introduction

Rising losses from extreme weather events and unequivocal evidence about climate change provide the backdrop of current international efforts to achieve agreement on emissions reductions and foster greater climate resilience. 2015 has the potential to mark a key milestone in these efforts – with several related policy processes culminating, offering a chance to integrate disaster risk reduction, climate change policy and poverty reduction more closely. At the same time there is a growing risk of further inaction if no political agreement can be found.

Earlier this year, state governments and international disaster risk communities got together in *Sendai*, Japan, to sanction a new international covenant on disaster risk reduction (DRR). Sendai, being nearest major city to the area devastated by the 2011 *Tōhoku* earthquake and tsunami, not far from the ill-fated *Fukushima Daiichi* nuclear power station, the choice of venue could hardly have been better.

The *Third UN World Conference on Disaster Risk Reduction (WCDRR, 14–18 March 2015)* was the first gathering in the course of the climate-risk-sustainable-development negotiations, to be followed by the International Conference on Financing for Development (FfD) in July, the United Nations summit for the adoption of the post-2015 development agenda in September, and the 21st session of the Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change

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(UNFCCC) in December. By the end of the year, all going well, the world's political leaders will have agreed on ambitious, binding climate mitigation targets as a part of a new global commitment to sustainable development.

2 The road to Sendai

5 No doubt that climate change, sustainable development, and financing for development are closely interconnected, and substantial progress in any of them hinges on attainments made in the others (Sachs and Schmidt-Traub, 2014). The renewed *global partnership* for sustainable development, one of six essential elements of the sustainable development agenda (UN, 2014a), will not be workable without mobilising
10 substantial financial and other resources. The official development assistance (ODA) from developed to developing countries, raised to the previously agreed target of 0.7 % of gross national income (GNI), will be but a part of comprehensive support for development, the exact terms of which will have to be agreed on. It is emblematic in this context that climate change, the truly global and one of the greatest challenge mankind
15 has ever faced, spurs and drives advancement on fundamental subjects of international law such as solidarity, accountability, and collaboration. The *right to development* (RTD), the declaration of which will celebrate the 30th anniversary next year, places a duty on countries to work closely together to create international environment conducive to development (Orellana, 2013). To succeed, this year's negotiations will
20 have to attend to this duty.

Disaster risk reduction plays an important role in this context. Over and over, medium- and large-scale disasters have undermined or made void decade-long poverty reduction efforts, especially in the unindustrialized countries. The global annual average economic losses from natural hazards to the built environment alone, as
25 as estimated in the 2015 edition of the *Global Assessment Report* (UNISDR, 2015), would rank 36th in the list of countries sorted by their nominal GDP. Extreme weather and climate related events amplified by human-induced climate change threaten to rocket

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the economic losses, and so does the persistence of high land consumption rates and risk-negligent development practices.

In the official UN language DRR has been raised as a global policy priority since the late 1980s, when the United Nations General Assembly proclaimed the 1990s as the International Decade for Natural Disaster Reduction. Since 2005, the *Hyogo Framework for Action* (HFA, 2005–2015) provided guidance for reducing the loss of life and assets in the event of disaster, and making the world safer from natural hazards. Although HFA prompted considerable progress towards a more proactive and holistic approach to DRR, the achievements remain patchy across regions and unevenly distributed across the priorities for action (Calliari and Mysiak, 2013). Most of all, the HFA has not succeeded in steering a *substantial* reduction of disaster losses in terms of human lives and social, economic and environmental damage and spending on DRR is still largely trumped by spending on disaster relief and reconstruction (Kellett and Caravani, 2013).

Therefore, the WCDRR was to address disaster risk with “*a renewed sense of urgency*” (UN, 2012), adopting a new and better international blueprint for DRR. In the run-up to Sendai the expectations were growing. The EU joined the voices calling for greater accountability, transparency and (improved) governance of risk under the new Framework (EC, 2014a–c). The zero-draft of the proposed new framework (SFDRR-0; UN, 2014), made public already in October 2014, suggested *action-oriented* targets that are *operationally feasible, measurable and achievable* (ibid). Vainly, as it turned out. Little decisiveness remained in the finally agreed text of the Sendai Framework for Disaster Risk Reduction 2015–2030 (SFDRR) at the end of a marathon negotiation that stretched out until late hours on the last conference day, and presented to the relatively small audience of participants that remained to learn the outcomes.

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3 The outcome: Sendai Framework for Disaster Risk Reduction 2015–2030

Eventually, the SFDRR lays down seven targets against which progress should be monitored and assessed:

- Substantially reduce global disaster mortality,
- Substantially reduce the number of affected people globally,
- Reduce direct disaster economic loss in relation to global GDP,
 - Substantially reduce disaster damage to critical infrastructure and disruption of basic services,
 - Substantially increase the number of countries with national and local disaster risk reduction strategies,
- Substantially enhance international cooperation to developing countries,
 - Substantially increase the availability of and access to early warning systems and disaster risk information.

[Note: The list has been edited. See full targets in the Supplement and UN (2015b).]

Disappointingly none of the targets specifies a quantitative degree of progress to be made. Instead, the text resorts to “substantial” qualifiers of advancement. The first five years of the SFDRR are intended as a run-up time for putting in place the national and local DRR strategies, while their attainments over 2020–2030 will be compared with the 2005–2015 baseline. Even worse, in most cases the targets are specified as collective (global) outcomes, rather than individual country-based achievements.

The first four targets of the new framework lean towards future disaster impact, determined to reduce mortality, affected people, economic damage, and damage to health and educational facilities. Although the target levels were not suggested, the SFDRR-0 made clear that the relative progress was to be measured in function of the

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number of disaster events experienced. This is problematic because hazard strikes are results of stochastic processes with much larger time horizons than the ten years over which the countries' progress will be judged. Likewise, at least some of these processes are not stationary, neither in terms of frequency nor intensity. Hence, the progress would have to be measured in terms of changes in "risk", expressed in *annual expected value* (AEV). But this would require a good understanding and constant monitoring of risk with its key drivers hazard, exposure and vulnerability, which cannot be taken for granted even in many developed countries.

The pre-conference draft outcome document (SFDRR-1; UN, 2015), released in January 2015, has given up postulating target levels. It also turned a blind eye to countries' individual achievements, and DRR progress will be accounted through collective assessments of all countries. The finally adopted SFDRR (UN, 2015b) is somewhat better defined and measures the relative progress as per-capita disaster impacts. Because it adopted the collective nature of achievements made, it allows for compensation of under- by overachievers. This means that greater achievements in one country or region can compensate the less-than-expected outcomes elsewhere. Granted, measurements of individual achievements can complement the global assessments and single out the underperformers. And the low performance of a few would not preclude achieving the overall goal.

The fifth target applies to the extension of national- and regional DRR strategies and is accepted as a protraction of the HFA's call on better coordination of disaster risk activities with development, civil protection, and other sectorial policies. Targets six and seven were only added in SFDRR-1 and became the most controversial pieces of the new framework. The former resorted to the language of the 2012 Earth Summit non-binding outcome document *Future We Want* (UN, 2012) that invited "governments at all levels as well as relevant subregional, regional and international organizations to commit to adequate timely and predictable resources for disaster risk reduction in order to enhance resilience of cities and communities to disasters, according to their own circumstances and capacities" (p. 33). The proposed target six reiterated the same

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language by requesting *adequate, timely and predictable* financial and other resources from developed countries by means of international cooperation. Connected to this, but elsewhere in the text, the SFDRR-1 positioned management of multi-hazard disaster risk under the regime of *common but differentiated responsibilities*. This formulation, brought in from climate negotiations under the UNFCCC, was subject to heated discussion in Sendai. Debate revolved around whether to frame and operationalize the international commitments around explicit (i.e. enforceable) liabilities or moral (i.e. voluntary) pledges to help countries and communities in need. Had this articulation been adopted, the developed countries would in some way accepted a duty to assist the countries unable to develop and implement risk reduction in their own territories, if not liability for the damage and losses triggered by the environmental (including climate) change. None of the SFDRR-1 language made its way to the finally adopted Framework that merely insisted on the need to “enhance international cooperation . . . through adequate and sustainable support”. A small comfort for the proponents of a stronger language came from the fact that the final text of the SFDRR includes an explicit endorsement of all the principles contained in the *Future We Want* document, as well as the principles sanctioned by the 1992 Rio Earth Summit.

The seventh target focuses on available disaster risk information and assessments, and access to multi-hazard early warning systems. Understanding the hazard and risk, and measuring the progress towards accomplishing the DRR targets will only be possible if substantial efforts are put towards improving risk assessments and disaster impacts’ records. The SFDRR advocates multi-hazard, inclusive, science-based and risk-informed decision-making for which it is necessary to collect and share (non-sensitive), disaggregated risk information including the detailed records of the past events’ impacts. Over the past years, the UN Office for Disaster Risk Reduction (UNISDR) has been constantly improving the knowledge base on disasters’ impacts. The recent edition of the Global Assessment Report (GAR2015; UNISDR, 2015) is based on the evidence from eighty detailed country-wide disaster damage databases

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4 Are we on track with integrating climate and development policy?

The principle of *common but differentiated responsibilities* and *respective capabilities* (CBDR-RC) has been a part of the climate negotiation since the beginning, and is included in the preamble of the UNFCCC. It recognises that the countries have an obligation to support those who are most vulnerable and who have made a limited contribution to the creation of the climate change problem (Burton et al., 2012). But the application of the principle has been limited to climate mitigation efforts only (Pauw et al., 2014). The endorsement of this principle in the context of climate adaptation or disaster risk reduction would essentially mean accepting liability for the amplified natural hazard risk and the losses that cannot be prevented through mitigation or adaptation. The wording used in the SFDRR-1 seems to have aimed at fortifying the claims advanced under the *International Mechanism for Loss and Damage* (L&D) formally established at the UNFCCC's Conference of Parties (CoP) in Warsaw, November 2013. While it is not yet clear whether and in what form the L&D framework will be integrated into the climate agreement, currently a work-programme is being rolled out, which most prominently features a consideration for natural disaster in terms of comprehensive risk management. Also, while developed countries are unwilling to work towards implementation of this mechanism, "Southern" negotiators have made it clear in recent meeting rounds that any agreement in Paris and thereafter will need to consider this issue (ENB, 2015).

5 Will Sendai matter?

The WCDRR will not be remembered as a major breakthrough in terms of actionable efforts, yet it showed important shifts in terms of framing the debate, which will be conducive for other international discourses proceeding this year, including decisions on the SDGs and the climate change negotiations. The negotiation showed, perhaps unsurprisingly, that the DRR purview is not insulated from contentious themes in

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development and climate political realms. The disputes over the references to the CBDR-CB and the *right to development* have distracted attention from areas where major achievements could have been made, first of all the measurable targets able to guide and attest countries' efforts to prevent and reduce the disaster risk. By endorsing the principles underlined in the non-binding outcome document of the 2012 Earth Summit (UN, 2012), without using their language explicitly, the bone of contention was sent back to the policy arenas better equipped to address them.

Sendai will only be as good as the DRR actions that it spurs and that are delivered at local, national or global level. The interpretation of “substantially” used in the targets will be interesting, and clearly cause a lot of debate. Monitoring progress will be challenging, data availability and transparency are big concerns in many places of the world. The SFDRR resorts to the same ways of monitoring the quality and implementation of the DRR strategies as the previous HFA framework 2005–2015, generally admitted as having been too weak: self-reporting or, in addition, voluntary and self-initiated peer reviews. However, the accounting and monitoring system itself is too weak and progress per country cannot be properly measured. The seventh target is very valuable, because all accounting starts with reliable risk assessments.

The DRR community should persist in making the governments accountable for the implementation of the Framework. Some shortcomings of the agreement can be mended through the way the baseline for assessment is defined and progress reported. In the European Union, the Regulation 1313/2013/EU (EC, 2013) obliges the member states to conduct multi-hazard risk assessment by the end of 2015, and every three years thereafter. Seizing this year's assessments, the EU could show the determination that was not there in Sendai and serve as an example. Europe could only gain from major efforts put in better understanding of disaster risks and improved reporting of disaster impacts, including the economic damage and losses (EEA et al., 2013; De Groeve et al., 2013, 2014; JRC, 2015).

Whether Sendai turns out to be the “pivotal point” for global climate risk management remains to be seen. Many delegates commented that “any agreement is better than

no agreement". The key question is if and how the agreement in Sendai can send the right signals to the next round of political negotiations this year, most notably the development financing summit in Addis Ababa this summer, the sustainable development goals negotiations in autumn and the climate change negotiations later this year in Paris.

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