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1. Definition and method of computation

Local Disaster Risk Reduction DRR Strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030: local disaster risk reduction strategies and plans, across different timescales with targets, indicators and time frames, aimed at preventing the creation of risk, the reduction of existing risk and the strengthening of economic, social, health and environmental resilience (Sendai Framework, para 27 (b)).

The DRR strategies need to be based on risk information and assessments.

Local Government: Form of public administration at the lowest tier of administration within a given state, which generally acts within the powers delegated to them by legislation or directives of the higher level of government.



#TsunamiDay2016 support from IOC-UNESCO and Indonesia at the Indian Ocean Tsunami Warning and Mitigration System Workshop © UNISDR.

Note: Terminology discussed and finalized in the Openended Intergovernmental Working Group for Sendai Framework for Disaster Risk Reduction.

1.1 Method of computation

Summation of data from National Progress Report of the Sendai Framework Monitoring

2. Rationale and interpretation

Sendai Framework for Disaster Risk Reduction 2015-2030 calls for local governments to adopt and implement local DRR strategies with their own targets, indicators and timeframes. (Mainly based on TST Issue Brief 20, 11, 23, 14 and 12)

The global population is now half-urban and is expected to be nearly 70% urban by 2050. Increasing resilience of cities is critical to reduce disaster risk and achieve sustainable development. Cities are also very vulnerable to natural disasters, especially climate-related shocks. Over half of all coastal areas are urbanized and 21 of the world's 33 megacities lie in coastal flood zones. Coastal cities are particularly affected by sea level rise, coastal flooding and erosion, and extreme events (e.g. Tsunamis and storm surges) due to the undermining natural protective barriers, low levels of development combined with rapid population growth in low lying coastal areas and inadequate capacity to adapt. In addition to the impact on communities and non-human species, the unplanned urbanization also undermines the ecosystem services that support much hard urban infrastructure. This type of development also exacerbates urban vulnerability to climate change impacts, including hydro-meteorological and geological hazards.



U.S. and Chinese Soldiers participate in Disaster Management Exchange in Oregon © Flickr / US pacific command.

When resilient infrastructures such as health, education, roads and other critical services are located in parts of the city where disadvantaged groups live, and when affordable access to them is addressed, positive direct impact will manifest through reduced inequality and enhanced inclusive and sustainable growth. Cities, which will continuously account for the global population share

over the SDG monitoring period offer unique opportunities for proactive action towards enhanced risk resilience. There is an increasing number of cities that are adopting and implement local DRR strategies, which will continuously contribute to sustainable development from economic, environmental and social perspectives.

The indicator will build bridges between the SDGs and the Sendai Framework for DRR because the adoption of local DRR strategies is one of Sendai Framework global targets, which are being tracked through the Sendai Framework Monitoring System.



Sendai Framework Priority 3 Investing in disaster risk reduction for resilience © i.ytima.com

3. Sources and data collection

National Progress Report of the Sendai Monitor, reported to UNISDR

4. Disaggregation

- By country,
- By city

5. Comments and limitations:

This indicator is based on a proposal by UNISDR, based on the experience and knowledge gathered during monitoring of the Hyogo Framework for Action - HFA (2005-2015). The indicator was reviewed and examined by other UN agencies including FAO, GFDRR, IOM, UNCCD, UNDP, UNESCAP, UNESCO, UNFPA, UNHCR, UNOCHA, UNOOSA, UNOPS, UNU, UNWOMEN, WHO and WMO and submitted to the IAEG process in early-July 2015. It was reviewed again by the Technical Expert Group consisting of more than 60 experts from the UN system, academia and research sectors, civil and private sectors in 27-29 July

2015; from where it was submitted and examined by the Member States in the 1st Open-ended Intergovernmental Expert Working Group on Indicators and Terminology on Disaster Risk Reduction held in 29-30 September 2015. The indicator is currently under review by the Member States and UNISDR is receiving written inputs from the Member States.

The proposed indicators will also be used to monitor Sendai Framework global targets and therefore detailed definitions shall be discussed and agreed upon in the Open-ended Intergovernmental Expert Working Group on Indicators and Terminology on Disaster Risk Reduction, as outlined in the Sendai Framework for Disaster Reduction 2015-2030.

Reporting through the HFA Monitor and the succeeding Sendai Monitor is voluntary, and countries contribute to a global database collecting DRR policy information. The number of countries reporting to UNISDR through the HFA Monitor increased from 60 in 2007 when reporting started to 133 in 2013. Because there is no specific data addressing this indicator at the moment, a baseline set at 2015 should be created, which can be effected through a questionnaire administered to all countries. This will help to monitor both the Sendai Framework and the SDGs.

Gender equality issues: Not included.

6. Data for global and regional monitoring

Summation of data from National Progress Report of the Sendai Monitor.



Members of the Namuka village (Fiji) disaster management committee undertaking search and rescue during a simulation exercise © Flickr / Department of Foreign Affairs and Trades

7. Main linkage with SDG Targets:

This indicator is "multi-purpose", and is linked to other targets as listed below.

Target 11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Target 13.b: Promote mechanisms for raising capacities for effective climate change-related planning and management, in least developed countries, including focusing on women, youth, local and marginalized communities

Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all



#switch2sendai March 18, 2016, first anniversary of the Sendai Framework © Flickr / LINISDR

Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

Target 3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

Supplementary information:

Related targets in the Sendai Framework for Disaster Risk Reduction 2015-2030:

Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.

Sendai Framework for Disaster Risk Reduction 2015-2030:

(http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf)



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