

Working Background Text on Indicators for the 7 Global Targets of the Sendai Framework for Disaster Risk Reduction

2 October 2015

Reissued on 23 October 2015 with technical corrections

The Working Background Text includes initial comments and proposals received at the first session of the Open-Ended Intergovernmental Expert Working Group on Indicators and Terminology relating to Disaster Risk Reduction, held in Geneva on 29-30 September 2015, as informed by the “Indicators to monitor global targets of the Sendai Framework for Disaster Risk Reduction 2015-2030 - a technical review” , as well as the correction of factual errors requested by the Experts.

The United Nations Office for Disaster Risk Reduction

Target A: Substantially reduce global disaster *mortality* by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015.

Target (a): Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015

A1 - Number of [deaths / deceased – Cuba, Bangladesh] and [missing [persons – Bangladesh] / presumed dead – Bangladesh] due to hazardous events per 100,000

[A2 - Number of [deaths / deceased – Cuba, Bangladesh] due to hazardous events

A3 - Number of [missing [persons – Bangladesh] / presumed dead – Bangladesh] due to hazardous events- Ecuador – delete A2 and A3]

(Critical discussion points on Target (a))

1. Death

- “Deaths” should be replaced by “deceased,” in alignment with the discussion on terminology regarding the word “killed.” (Cuba)

2. Missing

- It should be clarified because people may be missing for reasons not related to disaster (Russian Federation).
- Including “missing” may introduce problems of accuracy. Countries with less capability to track their citizens’ whereabouts are at a disadvantage (Egypt).
- There will be some double counting and no counting but unless it is significant percentage of the total number we should not be scared by this too much. (Czech Republic)

3. Direct/indirect, temporal and spatial dimension

- Landslides cause floods that kill people, which may also cause fatal waterborne illnesses: to which event is the death attributed (India)? “Attributions” of death and missing is one way to define the scope of this indicator.
- **By type of hazard:** It is recommended to specify per type of hazard to overcome the problem of attribution (Australia, Bangladesh) or “attributable to event x” (Paraguay).
- **By the time of death:** It is recommended to specify a “temporal dimension”: whether the death occurs directly after a hazardous event or after a hospitalization brought about by injuries due to a hazardous event. We would like to propose that the phrase “directly after” should be replaced by the expression of a time period which is going to be defined. (Greece); Falling trees in recovery from a hazardous event caused additional deaths later (Switzerland); Secondary deaths of first responders during relief and recovery period (Germany, Bangladesh, Lesotho).
- **By location of death:** Deaths counted by countries that record the deaths of citizens abroad are at risk of being double-counted (Germany). *UNISDR note: It is proposed the country where the event happened does report all deaths*
- Will this risk double-counting those injured/affected and those injured/affected and finally die? (Liberia, Bhutan, Philippines)

4. 100,000

- It should be clarified whether 100,000 is referred to the total population or the exposed population. Also it should be taken into consideration that if 100,000 is referred to the total population then the indicator A-1 might end up to misleading results under certain conditions. (Greece)
- At national level, each country can measure the mortality as is relevant to its own size of population. (Egypt)

5. Disaggregation

- It may be best to leave the level of disaggregation for the national level to decide, because some countries may wish to make policy decisions relevant to their particular circumstances that require data disaggregated in ways specific to their policy needs. (Philippines)
- There is no disaggregated data under Target (a): currently, there are too few categories compared to indicators under other targets. For example, El Salvador would be interested to disaggregate death by migratory status (El Salvador).

Target B: Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015.

(Proposed revision)

Target (b): Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015

B1 - Number of affected people [by hazardous event-**Qatar**] per 100,000.

B2 - Number of injured or ill people due to hazardous events.

B3 - Number of people who left their [places of residence/home -**Zimbabwe**][and places where they are-**Lesotho**] due to hazardous events.

B3a - Number of evacuated people due to hazardous events.

B3b - Number of relocated people due to hazardous events.

[B3c – Number of people protected per 100,000 - **Cuba**]

[B4 - Number of people whose [houses / dwellings or homes – **Australia, Zimbabwe**] were damaged due to hazardous events.

B5 - Number of people whose [houses / dwellings or homes – **Australia, Zimbabwe**] were destroyed due to hazardous events. **Cuba** -- merge B4 and B5]

B6 - Number of people who [received / required – **Zimbabwe**] [food relief aid/aid including food and medical aid – **Morocco, Zimbabwe**] due to hazardous events.

Other indicators proposed in the 1st OEIWG

[B7 – Number of people whose livelihoods were disrupted, destroyed or lost due to hazardous events – **Zimbabwe**]

(Critical discussion points on Target (b))

1. Indicator structure (Computation of B1)

- Are these one single composite indicator or a set of parallel indicators? If one indicator, what are some alternative components for calculating B1? How to do with double-counting? (European Union)
- To simplify this indicator, the indicators could be limited to those that are easily collected at the global level while greater detail can be applied at the national level. (Czech Republic)
- Without a standard for statistical methods to synthesize the data on Target (b), it would be better to collect the indicators separately. (Italy)

2. Direct/indirect

- What would be the minimal level of affectation - i.e. would you measure individuals affected by an event occurring at a distance but who are indirectly affected because they need to use a road that leads to their workplace? Can we consider that all those people are affected the same way as people who have completely lost their house? (Niger).
- Include affected in globalized events, for example losing family members involved in an event in a foreign country? Need boundary between directly and indirectly affected (Netherlands).

3. Ill/Injured (B2)

- Definition in terminology is too wide. Prefer SDG proposal definition. (Sweden)

4. Evacuated (B3a)

- **Period of evacuation post-event:** It clearly shows affectation. (Japan)
- **Residents and visitors:** Should not only be place of residence, or people residing there, but also visitors who might be there for business or personal reasons. Disasters do not distinguish residents and non-residents. (Lesotho)

5. Relocated (B3b)

- **Short distance relocation:** Ethiopia recognizes movement of small distances as “relocations.” Would this be considered within the definition of this term, as relates to indicator B3b? (Ethiopia)

- **Temporal dimension:** Sometimes temporal evacuation can begin to seem more permanent (Australia).
- **“Positive, life-saving measures” v. “Negative, disrupting measures”:** Negative measures include things like the disruption to livelihood, access to education of children/drop-out rates (India). Positive measures include “voluntary” relocation to mitigate risk, which is different from forced relocation (Colombia).

6. Food aid (B6)

- Why is this limited to droughts? (Philippines) What about receipt of health aid assistance, e.g. opening hospitals in higher ground during a flood or in mountains? (Morocco)

7. 100,000

- It should be clarified whether 100,000 is referred to the total population or the exposed population. Also it should be taken into consideration that if 100,000 is referred to the total population then the indicator B-1 might end up to misleading results under certain conditions. (Greece)

Target C: Reduce *direct disaster economic loss* in relation to global gross domestic product (GDP) by 2030.

(Proposed revision)

Target (c): Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030

C1 –Direct Economic loss due to hazardous events in relation to global gross domestic product

C2 – Direct agricultural loss due to hazardous events

C3 - Direct economic loss due to industrial facilities damaged or destroyed by hazardous events

C4 - Direct economic loss due to commercial facilities damaged or destroyed by hazardous events

[C5 - Direct economic loss due to houses damaged by hazardous events

C6 - Direct economic loss due to houses destroyed by hazardous events – **Switzerland** -- merge C5 and C6; **Cuba**-- delete C5 and C6; **Japan** -- retain C5 and C6]

C7 - Direct economic loss due to damage to [critical infrastructure/public infrastructure- **Bhutan, Kenya**] caused by hazardous events

Other indicators proposed in the 1st OEIWG

[C8 –Direct economic loss due to cultural heritage damaged or destroyed by hazardous events -**Bhutan**]

[C9 – Direct economic loss due to environment degraded by hazardous events –**Morocco, Ecuador**]

[C10-Financial transfer and access to insurance-**Colombia**]

(Critical discussion points on Target (c))

1. Exhaustive or not (C1)

- Economic loss must be broader (Tanzania). Advocates for one simple aggregated indicator on a global scale and use other more detailed indicators for decision and monitoring on a national level. Not too many indicators are needed (Czech). Suggests not add more indicators, but put a robust methodology behind C1. (India, Switzerland). Economic loss depends on the economy of a particular country, so it is difficult to be exhaustive and meet the needs of all countries (Kenya).
- Suggest an “others” category for elements that is important to some countries but perhaps not others (Argentina).

2. Direct v. Indirect

- For example, damaged roads and effect on tourism (Switzerland). Also, floods damaged coal production, which in turn compromised energy production, which was eventually the cause of GDP contraction (Serbia).

3. Agricultural losses (C2)

- **Slow-onset hazards:** El Salvador had questions about agricultural losses due to drought, which is not a discrete event because of its slow-onset nature.
- **Coverage:** Need to capture all aspects of agricultural losses including irrigation and dams (Tanzania). Need to include fisheries. But it may be included in commercial activities. (Netherlands). Considers including floriculture (Kenya).
- **Price fluctuations due to disasters:** Profit sometimes rises during disasters. (Netherlands)

4. Industrial loss (C3)

- **Data collection challenges:** We don't have a baseline (Colombia). Private sector data is not always easy to get. Same can be said for commercial loss. (Switzerland).

5. Critical infrastructure (C7)

- **Coverage:** Definition of damage is important in this case. Bridges and tunnels should be mentioned. The length of interruption and number of people affected should be considered (Czech Republic). Airports might be reflected (Tanzania). Satellite services (ICT) should be included (Norway).
- **Link to basic service disruption:** Economic loss of critical infrastructure does not necessarily reflect basic service disruption. (Philippines)

Target D: Substantially reduce *disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.*

(Proposed revision)

Target (d): Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030

D1 – Damage to critical infrastructure due to hazardous events

D2 – Number of health facilities destroyed or damaged by hazardous events

D3 - Number of educational facilities destroyed or damaged by hazardous events

D4 - Number of transportation infrastructures destroyed or damaged by hazardous events

D5 – [Number / Length – **Australia, Argentina, El Salvador**] of time basic services have been disrupted due to hazardous events

Other indicators proposed in the 1st OEIWG

[D6-Number of education or health facilities removed from risk areas- **Brazil, Mexico, Czech Republic**]

[D7-Number of security service structures destroyed or damaged by hazardous events- **Qatar**]

[D8-Number of tourist infrastructure facilities destroyed or damaged by hazardous events- **Morocco**]

[D9- Number of states with resilience programmes or strategies for health and education facilities- **Czech Republic**]

(Critical discussion points on Target (d))

1. Exhaustive or not (D1)

- Supports the opinions to widen the scope of indicators (El Salvador, Brazil, Morocco). Need coherence with the terminology concerning critical infrastructure and widen the scope including energy and communications (Philippines).
- The indicators suggested cannot be fully encompassing the list of critical infrastructure (Germany). Support what was proposed by India on Target C (i.e. Suggests not add more indicators, but put a robust methodology behind C1) (Mexico)
- Depending on social group, “critical” is defined differently, e.g. women, rural people. etc. (Brazil)
- Suggest an “others” category for elements that is important to some countries but perhaps not others (Argentina).

2. Physical damage and basic service disruption

- Damage to critical infrastructure does not necessarily reflect basic service disruption. For example, damaged education building took 2 years for reconstruction but disruption of the education service was only 1 week. (El Salvador) Consider those that are not damaged or destroyed but do have a disruption of services (Argentina).

3. Transportation infrastructure (D4)

- **Coverage:** should concern public transport such as bus (El Salvador)

4. Basic service disruption (D5)

- **Data collection challenge:** Number of times public services are interrupted are not reported, as often managed by the private sector (Colombia)

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

(Proposed revision)

Target (e): Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020

E1 - Number of countries that adopt and implement national DRR strategies in line with the Sendai Framework for Disaster Risk Reduction 2015- 2030

E2 – Percentage of local governments that adopt and implement local DRR strategies in line with the [Sendai Framework for Disaster Risk Reduction 2015-2030 /national disaster risk reduction strategy – **Nepal**]

E3 – Number of countries that [integrate/integrated- **Morocco**] [climate and disaster risk/climate change-**Morocco**] into [development planning/development plan-**Morocco**]

[E4 – Number of countries that adopt and implement critical infrastructure protection plan – **Czech Republic, India, Egypt**-delete]

Other indicators suggested by Expert Group

[E5 Number of countries with cross-sectoral bodies/forums, with clear roles and responsibilities identified across state institutions, civil society, private sector and international actors, in the implementation and review of DRR measures- **Cuba, Czech Republic**-delete; **Japan**-retain]

[E-6 Number of countries accounting for future risk in public and private balance sheets, setting financial targets to inform investment strategies for reducing risk and enhancing future prosperity- **Cuba, Czech Republic**-delete]

[E-7 Number of countries and local governments conducting (independent) periodic outcome reviews of the implementation of national and local DRR strategies - **Cuba, Czech Republic**-delete]

Other indicators proposed in the 1st OEIWG

[E8 Number of countries that adopt and implement sector specific DRR strategies in line with the Sendai Framework for Disaster Risk Reduction – **Tanzania**]

[E9 – Number of countries that have national financing mechanisms for DRR –**Madagascar, India**]

[E10 – Number of countries that have spatial and land use planning mechanisms for DRR – **Madagascar**]

(Critical discussion points on Target (e))

1. Computing methodology (E1)

- Rather than only yes/no, would it be possible to have quantitative indicators to measure levels of progress? (European Union)

2. Compliance monitoring

- How to monitor compliance to enforce implementation? (Australia)
- Egypt supported Pre-Sendai negotiation's member states' reluctance to introduce the need to monitor levels of compliance that may include any punitive name and shame process, and suggested the best way is how to encourage countries to develop strategies and leave it up to them to implement.

3. Additional indicators E5-E7 in Annex

- The extra proposals E5-E7 are not needed (Cuba, Czech Republic).
- E5 is of value, as it seems to relate to national platforms (Japan).

4. Local government monitoring

- **Local government** – should be defined as the lowest level government at which planning takes place (India). Egypt noted that during the Sendai negotiations, States had discussed the importance of acknowledging different forms of government.
- It is better that the local governments align with the national strategy rather than the Sendai Framework, as the national strategy will be aligned with the Sendai Framework. (Nepal)
- In order to be in line with Sendai, would local plans developed before Sendai need to be retrofitted in order to be monitored? (India)

5. Definitions

- Since the target speaks of national and local disaster risk reduction strategies, there is a need to define minimal standards on national and local disaster risk reduction (Lesotho).
- Target E indicators should mention matters related with goals, for example, basic services, people living in vulnerable situations (Netherlands). Indicators should cover priorities of action (Madagascar).

Target F: Substantially enhance *international cooperation* to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

(Proposed revision)

Target (f): Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030

[Chapeau:

This indicator directly supports the developing countries' implementation of the Sendai Framework and the fulfilment of the global goals. (Bangladesh, Egypt)

F1 - Level of non-earmarked support provided by developed countries and reported by developing countries. (Bangladesh, Egypt)

F2 - Number of developed countries having a policy marker as part of the legislation on provisions for support to developing countries to enhance the implementation of the Sendai Framework and the fulfilment of the global goals. (Bangladesh, Egypt)

F3- Progress on the implementation of paragraph 47 of the Sendai Framework, in particular subparagraphs 47(a) and 47 (b). (Bangladesh, Egypt, Ecuador, Brazil)

F4 - Progress in using the regional platforms for exchanging experiences and enhancing South-South cooperation for the implementation of the Sendai Framework. (Bangladesh, Egypt)

F5 - Level of support provided by international organizations in line with paragraph 48 of the Sendai Framework. (Bangladesh, Egypt)]

(Critical discussion points on Target (f))

- We need to break down the data such as three categories: 1) resources; 2) technology; and 3) training of staff. Disaggregated data is important to understand who the recipients are as well as type of assistance received. (Cuba, Indonesia, Bangladesh)
- What is important is to measure the level of cooperation, not only the number of donors. (Brazil).
- Quantity does not always mean quality. The indicator must measure how international cooperation will allow a country to implement Sendai. This includes financial and technical resources to meet all the priorities of the Sendai Framework. (Colombia)
- Agree with Colombia that “Enhance” might not mean increase. Idea of measuring quality and effectiveness of how international cooperation helps countries trigger their own resources is good. (Australia). We should look at quality not just quantity. (Canada)
- The target asks to measure “adequateness” and that the international cooperation is intended for developing countries (Bangladesh)
- It is also important to have a system of verification (Indonesia).
- Specific and easy-to-measure activities include climate forecasting systems, space-based technologies and information on water basins (India). Other types of related assistance, such as post-disaster assistance (Indonesia)

Target G: Substantially increase the availability of and access to *multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.*

(Proposed revision)

Target (g): Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030

G1 – Number of countries that have multi-hazard early warning system

[G2 – Number of countries that have multi-hazard monitoring and forecasting system – ~~Ethiopia, Czech Republic~~]

G3 – Number of people who are covered by multi-hazard early warning system [per 100,000- ~~Bhutan~~]

G4 – [Percentage / Number – ~~Cuba; El Salvador, Morocco~~ retain]] of local [and national – ~~Bhutan~~] governments having preparedness plan (including EWS response and evacuation components) or evacuation plan [and standard operating procedures – ~~Tanzania~~]

G5 – Number of countries that have [multi-hazard national risk assessment/risk information- ~~Bhutan~~] with results in an accessible, understandable and usable format for stakeholders and people

G6 – [Percentage / Number – ~~Cuba; El Salvador, Morocco~~- retain]] of local governments that have [multi-hazard risk assessment/risk information – ~~Bhutan~~], with results in an accessible, understandable and usable format for stakeholders and people

Other indicators suggested by Expert Group

[G7 - Percentage of population with understanding of the risk they are exposed to- ~~Philippines, Czech Republic~~]

[G8 - Number of countries that have national plans with budget and timeline for development of multi-hazard EWS- ~~Philippines, Czech Republic~~]

[G9 - Number of countries that have disaster loss databases publicly accessible- ~~Philippines~~-delete]

[G10 - Number of countries that have open data policies and mechanisms to make hazard and risk data accessible and available to all users-~~Philippines~~-delete]

(Critical discussion points on Target (g))

1. Computing methodology (G1)

- If the composite measures countries, how come the component indicators are countries, people and local governments? (Ecuador)

2. Additional indicators G7-G10 in Annex

- No need (Philippines oppose all, Czech Republic opposes G7 and G8)

3. Definitions

- Early warning system needs to be defined. Dissemination of information needs to be included (Czech Republic)

General: Critical issues on monitoring the global targets

1. *Scope of indicators (paragraph 15)*

- It would be important to have an indicator that points to unnatural disasters, caused by humans. (State of Palestine)
- We should focus on natural hazards. (Japan)
- We should better define the term 'disaster'. E.g. The number of minor disasters and then the ministry in country will see what are these types of disasters. (Belarus). In our case there are so many small-scale disasters that are the biggest source of our losses. (Indonesia)