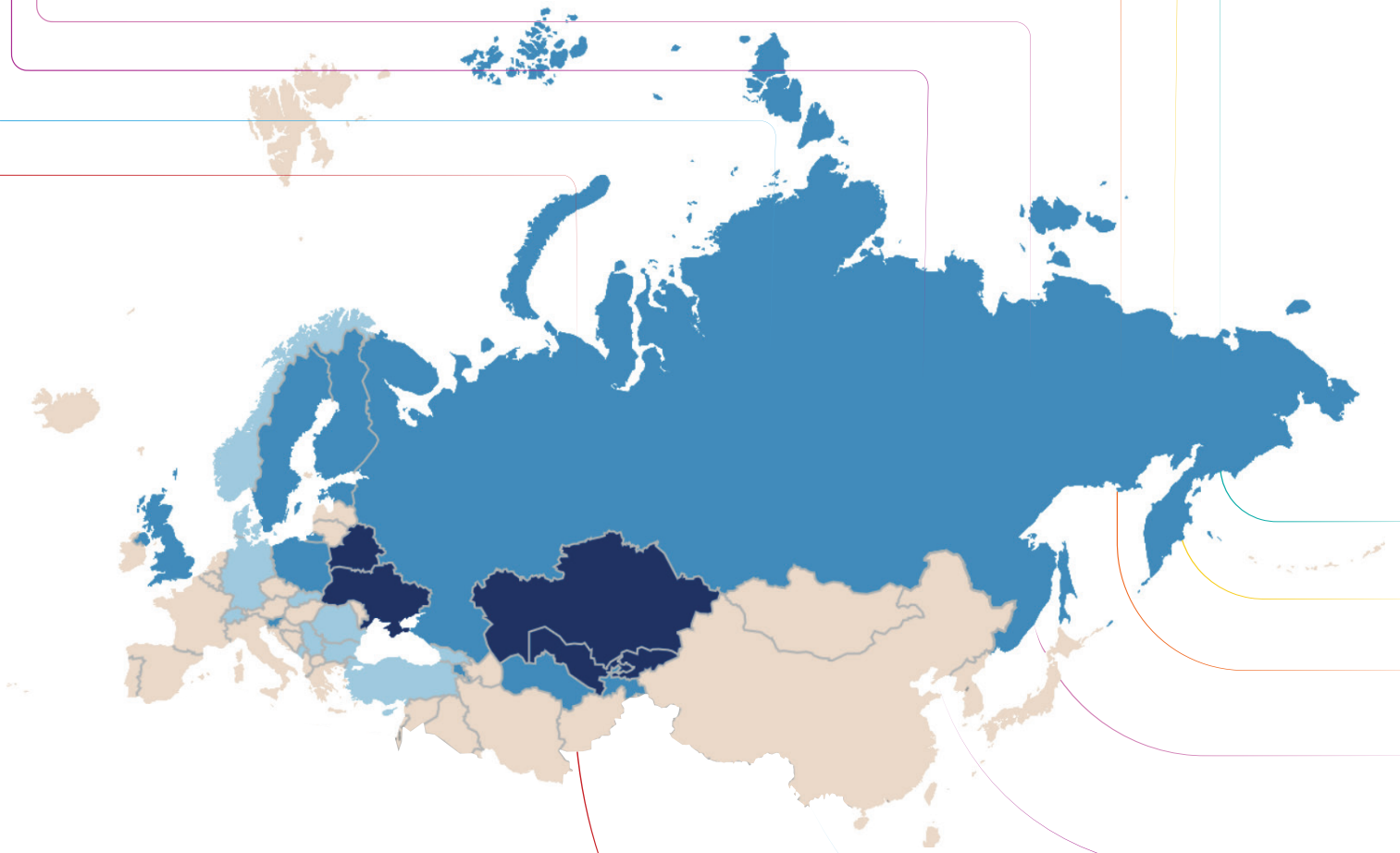


Sendai Framework Monitoring in Europe and Central Asia A Regional Snapshot

December 2020



Sendai Framework Monitoring in Europe and Central Asia A Regional Snapshot

The United Nations Office for Disaster Risk Reduction works towards the substantial reduction of disaster risk and losses to ensure a sustainable future. UNDRR supports the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, which sets out a people-centred approach towards achieving a substantial reduction in disaster losses from man-made and natural hazards and a shift in emphasis from disaster management to disaster risk management. The Regional Office for Europe covers 55 countries and works with countries and stakeholders to reduce disaster risk in Europe and Central Asia.

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Introduction

The Sendai Framework for Disaster Risk Reduction drives the global agenda on disaster risk reduction and resilience. The Sendai Framework addresses both man-made and natural hazards, including related technological, environmental and biological hazards such as the COVID-19 pandemic.

The Sendai Framework is organised around seven global targets, against which to assess global progress toward the expected outcomes of the Framework – four of them focused on reducing loss and damages from disasters, and three focused on ensuring effective processes for doing so.

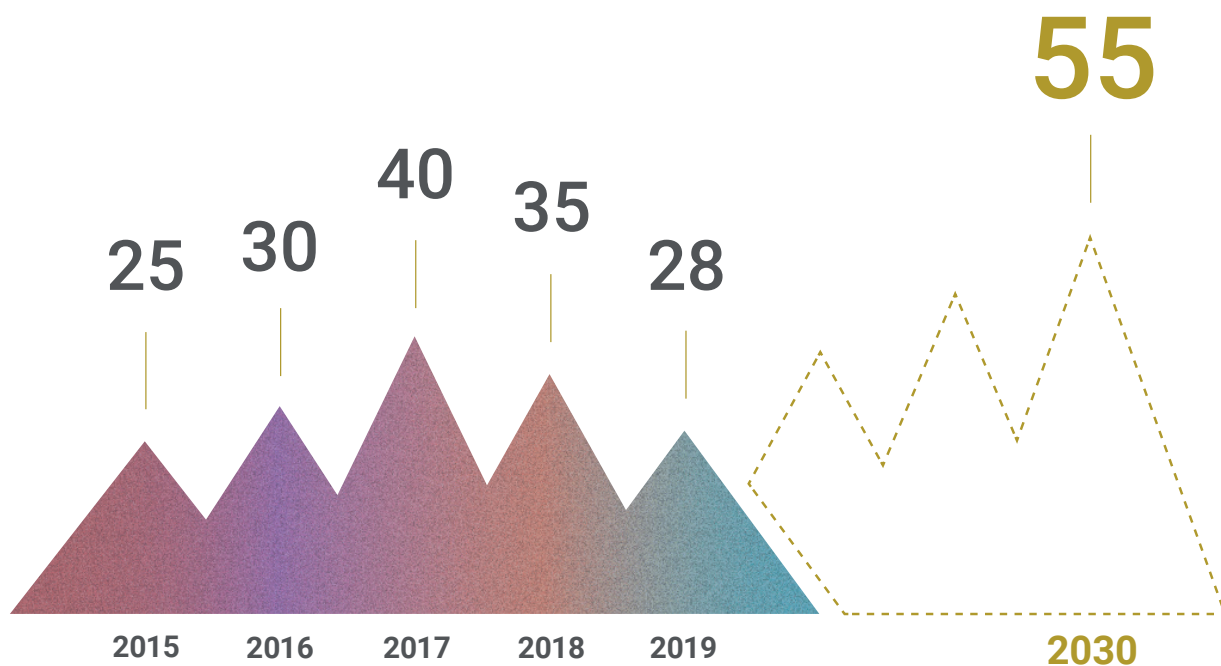
The monitoring of the Sendai Framework is carried out by Member Countries with support by the UN, in close association with the Sustainable Development Goals reporting process. A Sendai Framework Monitor (SFM) System was put in place to allow countries to report systematically against the global targets and indicators of the Sendai Framework, as well as to facilitate the contributions to the SDG reporting process against relevant indicators.

This report produced by the UNDRR Regional Office for Europe offers a snapshot of the aggregated data reported by Member Countries across the Europe and Central Asia region. It is based on data reported in the SFM system by 1st December 2020, following a first edition of this report released in May 2019. It is based on both validated and unvalidated data that is being used for a general consolidated analysis. Since the monitoring system is an open-ended reporting mechanism, the figures given here, especially of loss and damages, are only a snapshot at the given point in time building on the current status of reporting countries across the region.

Discussions with national Sendai Focal Points in countries and the analysis of the data highlight key challenges that Member Countries are facing. This report points to a set of important thematic issues, which aim to support continuous efforts in monitoring the Sendai Framework and the Sustainable Development Goals.

The data analysed in this report dates back to 1st December 2020.

How many member countries have engaged in Sendai Framework Monitoring across the Europe region?

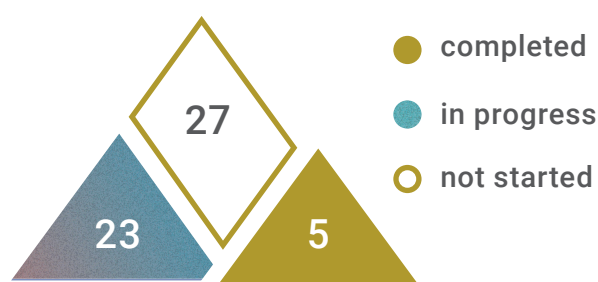


2018



7 Countries have completed reporting for 2018 (all targets validated): Albania, Belarus, Estonia, Kazakhstan, Kyrgyzstan, Monaco, Ukraine.

2019



5 Countries have completed reporting for 2019 (all targets validated): Belarus, Kazakhstan, Kyrgyzstan, Ukraine, Uzbekistan.

Section 1

State of Reporting 2018-2019

Target A

Target B

Target C

Target D

Target E

Target F

Target G



TARGET A

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

In 2019, 1,180 people lost their lives due to disasters. In general, progress has been achieved by countries in reducing risks associated with emergencies and disasters, leading to a decrease in mortality. Despite this, hazardous events (as we've witnessed with the COVID-19 pandemic) still impose a significant death toll on populations.

2018



2,954

people lost their lives based on data from 27 countries

2019



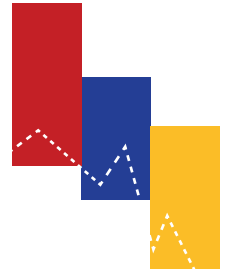
1,180

people lost their lives based on data from 19 countries



The story behind the data

Armenia's view on challenges with data source



Armenia's SFM Coordinator underlined the experience with the monitoring of the Sendai Framework as crucial for the country's benefit while also challenging for what concerns data sources. Research and data sources mapping have been identified as a fundamental first step for reporting.

For Target A, two different sources of recording disaster losses have been identified in Armenia. Ideally, these should have contained the same information for the same events, but this was not reflected in practice. The two reliable sources identified (the Civil Protection Department and Crisis Management National Center of the Ministry of Emergency Situations) generate their own different reports on the annual information against disaster losses and damages. The Civil Protection Department uses data collected from the announce of emergency, and the Crisis Management National Center of the Ministry of Emergency Situations using the final assessments of the damages recorded. One observation was that any information related to severe consequences (involving human losses) was immediately recorded by one specific source, therefore offering the possibility to successfully report data for Targets A.

Data for Target A has been found stored in a database organized by disaster types, facilitating the disaggregation exercise. Collecting disaggregated data by age, income and disability was identified as a challenge. In the consulted database, the only recorded information is sex. Unfortunately, data on disability and income are not recorded, therefore result unavailable. To overcome the lack of disaggregated data, the SFM Coordinator involved the National Statistics Committee, institution identified as the data source, in a Twinning programme, where the lack of disaggregated data has been highlighted to find a solution working together.



Biological Hazards and Target A Reporting

Biological, technological and natural hazards are within the scope of the Sendai Framework and should be covered in Target A for Sendai Framework reporting. Each type of hazardous event has a pattern of mortality and morbidity. Data should focus on causes of death that can be attributed to the hazardous event. Data should include deaths that are directly caused by the event or as a direct result of the hazardous event.

In the case of 'Biological hazards', an "event" is usually determined when the number of cases is higher than expected, e.g. it exceeds a certain threshold of cases for the hazard (which is often context specific). Deaths must meet the case definition for the disease and the end date is when the outbreak is declared over.

The health sector has a key role in reducing mortality both directly and indirectly attributable to all types of hazardous

events, including acts of violence and conflict. Beyond the data required for the global targets and indicators for Sendai Framework reporting, indirect causes of death may be attributed to the effect of the event on the availability and accessibility of health (and other) services; and the temporal dimension of mortality may extend to many months and years after an event, e.g. in the case of mental health and noncommunicable diseases.

Sendai Framework National Focal Points should engage with International Health Regulation Focal Points, Health statistics offices or/and health information management systems to ensure the inclusion of health data on mortality and missing persons in reporting for Target A.

(for more information consult the [WHO technical guidance notes](#) on Sendai Framework reporting for Ministries of Health).



Common example of data source, owner and analysis

Member States may use a diverse range of tools and processes to gather and report data on mortality:

- ◆ **Data sources:** Civil registration and vital statistics/active mortality surveillance (optional: mortality surveys).
- ◆ **Data owners:** Ministry of Health, national and subnational disaster management organizations, international emergency response organizations (e.g. health cluster, WHO).
- ◆ **Data analysis:** Dependent on the source. Annual data, e.g. civil registration and vital statistics, identify cause of death within timeframe and calculate excess mortality. For event data, recommended is to calculate the sum of deaths.

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 with 2005-2015

Progress has been made by countries in reducing disaster risks, leading to a decrease in the number of people affected by different hazardous events. Despite this, hazardous events still have a considerable impact on many people's lives and affect their health in various ways.

2018

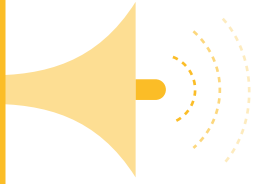


395,411 people
saw their dwellings
damaged due to
disasters, based on data
from **22 countries**

2019



59,401 people
saw their dwellings
damaged due to disasters,
based on data
from **18 countries**



The story behind the data

Ukraine's contribution on data collection



Ukraine has been regularly collecting data on emergencies and their aftermaths from 1997; since then an electronic emergency database has been maintained.

The Ukrainian legislation ensures data collection on victims of emergencies (persons who have been injured or killed). These data, made available in the country since 1997, are divided per adults (aged 18, and over) and children (under 18). The State Emergency Service of Ukraine regularly collects data on the number of people whose homes and livelihoods have been damaged or destroyed due to emergencies. Ministries, other central and local executive bodies, local governments, and economic entities, regardless of their subordination and ownership, are responsible for providing this information.

However, data collection on victims disaggregated by age, sex, incomes and disability, as the Sendai Framework Monitoring recommends it, was not possible. Therefore an inter-agency working group was established to improve data collection and

data disaggregation of emergencies, and a draft resolution of the Government of Ukraine has been prepared, which recommends the introduction of additional forms for data collection and their details, in accordance with indicators approved by UN Resolution of 2 February 2017 N° A/71/276, regarding the monitoring of the implementation of the Sendai Framework Program of Action for Disaster Risk Reduction for the period 2015-2030. The draft resolution of the Government of Ukraine is now under revision, to then be signed by the interested bodies.

Another significant achievement was the comparative analysis of domestic and European practices for collecting disaster loss data that the Ukrainian DLD working group conducted. This study led to the identification of some discrepancies, that helped the preparation of proposals for changes in regulations, and to data collection in line with the SFM requirements. After the approval of these changes, work on updating the national database on emergencies is foreseen.



Biological Hazards and Target B Reporting

The Sendai Framework recognizes the specific need “to establish a mechanism of case registry and a database of mortality caused by disaster in order to improve the prevention of morbidity and mortality”. The type of hazard event is likely to affect the method of attribution of injury and illness to the event. It is recommended to focus on direct causes of injury and cases of illness,

which are more feasible to attribute, collect and report. There should be a recognition that mental ill-health is likely to affect a large number of people following a disaster, and there are multiple challenges in measuring and recording these data.

Common example of data source, owner and analysis

Member Countries may use a diverse range of processes and tools to gather and report data on injury and illness:

- ◆ **Data sources:** Preferred: hospital statistics, disease surveillance systems. Other: surveys
- ◆ **Data owners:** Ministries of health, national and subnational disaster management organizations, international emergency response organizations (e.g. health cluster, WHO).
- ◆ **Data analysis:** Dependent on the source. Hospital statistics: include relevant coded episodes within specified timeframe.

(for more information consult the [WHO technical guidance notes](#)).



TARGET C

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

Economic losses force millions of people into poverty each year. The global pandemic has exacerbated the reported losses from extreme weather events and increased exposures and vulnerabilities due to climate change and insufficient capacity to manage disaster risks.

2018

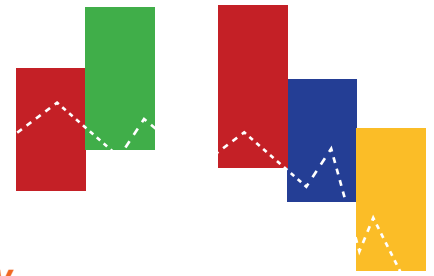
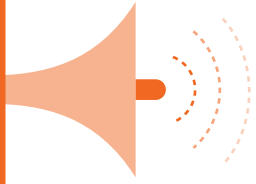


USD 1.43 billion
in direct economic
losses were attributed to
disasters, based on data
from **20 countries**

2019



USD 514 million
in direct economic
losses were attributed to
disasters, based on data
from **17 countries**



The story behind the data

Countries' contribution on hurdles and terminology

In **Armenia**, the damage and loss assessment acts sent by the community committees form the basis of the reports generated by the Civil Protection department, all of them are related to economic losses, critical infrastructures, disruption of basic services and more. The absence of distinctions between types of information, e.g. the Human losses and Economic ones, makes reporting on Target C harder. Human losses are easier to detect, due to their urgent and immediate recording through the Crisis Management centre (the 911 call centre). Meanwhile, the economic losses are harder to be assessed and evaluated; sometimes, the data recording system varies, posing a serious hurdle to Target C monitoring, but efforts to bring uniformity are already being made.

In **Belarus'** legislation terminology, the term "Disaster" is absent but portrayed by "Emergency Situation", supported by the well-developed Classification of Emergency Situations document.

In 2016 the Intergovernmental Expert Working Group formalized a "Disaster" definition, and as a result, since 2017, Belarus considers "Disaster" as a major accident with the following consequences:

- 10 persons (10+) dead;
- 100+ injured or sick;
- 100+ IDPs;

International assistance requested.

Thankfully since SFDRR has been introduced, Belarus has not experienced any disasters, so its reporting against Target C has been very easy.



Biological Hazards and Target C Reporting

Economic loss and health impacts of all types of hazardous events are closely connected from the personal to national to global levels. Economic losses push millions of people into poverty each year with consequences for their health and the ability to access health care.

Detailed assessments of economic loss are often carried out by governments and multilateral organizations following large-

scale disasters by using a range of methods, e.g. post-disaster needs assessments (PDNAs), Economic Commission for Latin America and the Caribbean (ECLAC). However, the economic losses associated with small- and medium-scale events, which may account for up to half of all economic losses, are rarely assessed or even documented.

Common example of data source, owner and analysis

Member States may use a diverse range of processes and tools to gather and report data:

◆ **Data requirements:**

Minimum: total number of health facilities affected; hazardous events (by hazard type).

Recommended: number of facilities damaged and destroyed, by administrative/geographical area, size of facilities (estimate).

Desirable: damage to other health infrastructure (e.g. laboratories, pharmacies), number of health workers per facility, types of facilities, construction cost per m² for types of facilities.

◆ **Data sources:** Health facility databases (public, private, education (university), non-government), laboratory networks, health information systems; damage and loss assessments in emergencies; surveys (national/international).

◆ **Data owners:** Ministry of Health, public health agencies, national hospital associations, national disaster management offices.

(for more information consult the [WHO technical guidance notes](#)).

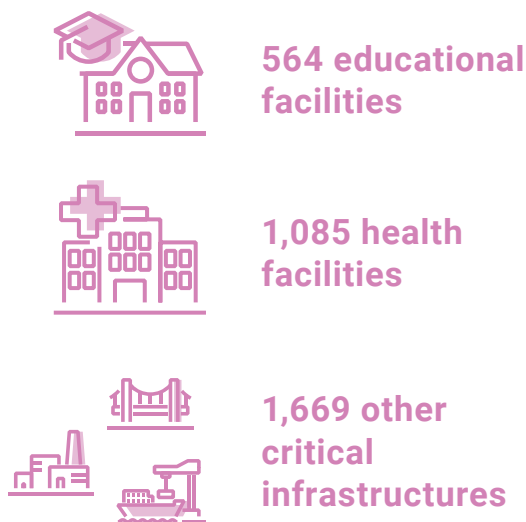


TARGET D

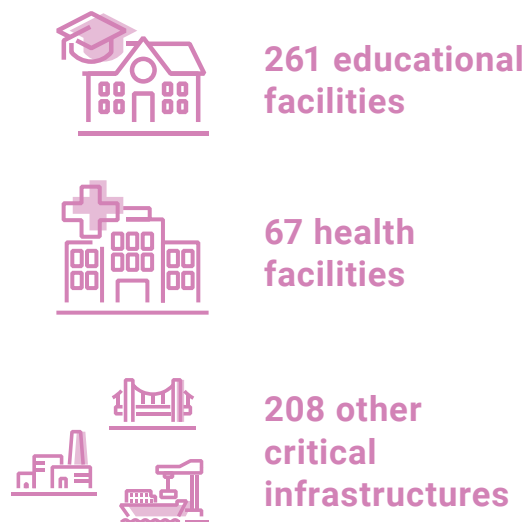
Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.

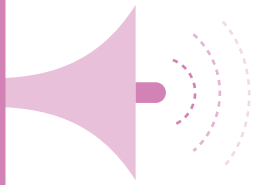
In emergencies and disasters, data on damage to critical infrastructures (health facilities, schools etc.) and disruption of basic services are collected through various forms of assessment. However, these data are not often recorded in a systematic way for all types of events. These data are vital for ensuring that full reporting of damages of critical infrastructures and basic services disruption is undertaken after each event, in order to be better prepared and to implement more effective policies.

2018



2019





The story behind the data

Bulgaria's contribution on facilitating data gathering to stakeholders and overcome challenges



In **Bulgaria**, the Directorate General Fire Safety and Civil Protection-MoI (DGFSCP) has been tasked to coordinate the implementation of the Sendai Framework and respectively to collect and report data against the global targets of the Framework. In this regard, every single year DGFSCP sends letters addressed to more than 300 stakeholders (including regional and municipality authorities, line ministries and agencies, National Statistical Institute, insurance sector, and others) requesting the relevant information upon each of the global targets. For this purpose and in order to facilitate the process, DGFSCP has developed a tool which contains information related to disaster situations that have been declared in the country throughout the years. Once collected, the received information is presented to the National Platform and upon approval is processed and entered into the Sendai Monitor System.

Since the launch of the Sendai Framework monitoring process, Bulgaria has faced different challenges:

- Lack of legal provision obliging key stakeholders to collect and share disaster-related data;
- Nearly half of the addressed stakeholders actually provided the needed information;
- In most of the cases the information provided by the mayors of municipalities has been incomplete;
- In some instances, information for particular disaster situations is not being provided;
- In some cases the information for the

same disaster, recorded by two or more independent sources does not match.

In order to address these challenges, Bulgaria has undertaken the following steps:

- DGFSCP established very closed cooperation with the National Statistical Institute in order to address the issues mentioned earlier, and find ways to improve data collection, insertion and validation. The resolution found consisted in arrange future data collection under the National Statistical Institute umbrella, which would resolve the data validation issues currently faced.
- In 2020 Disaster Protection Act was amended by adding a provision obliging stakeholders to collect, store and share disaster damage and loss data.
- In December 2019 an Agreement accelerating resilience to disaster risks between the Ministry of Interior of the Republic of Bulgaria and the International Bank for Reconstruction and Development was signed. This agreement is of utmost importance due to its relevance to DRM in the country. One of the components of the Agreement is: Collection of Historical Damage and Loss Data and Development of Concept for Future Collection.

Besides, the intention is to establish a robust disaster loss data collection system together with the National Statistical Institute. The current vision is the new system to allow to be fed with contributions from all the stakeholders and allowing the population to access data/ information relevant to its needs.



Biological Hazards and Target D Reporting

Damage and destruction of health-care facilities is important because of the disruption to health services and consequential health consequences. Disruption of health services may not be due to damage but may be the result of the disruption to other services upon which the functioning of the health facility depends, for example, power or water supply, supply chain or the unavailability of staff who have been affected by the event. Increased cases of disease and death are the expected health consequences from failure to access health and other basic services during and after

hazardous events. For example, patients with chronic conditions who are unable to obtain medications or equipment may develop complications, or an interrupted safe water supply may lead to contaminated water and the risk of waterborne outbreaks of disease.

In emergencies and disasters, data on damage to health facilities and disruption to health facilities are collected through various forms of assessment, however, these data are not often conducted systematically nor for all types of events.

Common example of data source, owner and analysis

Member States may use a diverse range of processes and tools to gather and report data, in the case of sub-indicators D2 and D7 for example:

◆ Data requirements:

Minimum: total number of health facilities affected; hazardous events (by hazard type).

Recommended: number of facilities damaged and destroyed, by administrative geographic area, damaged/destroyed, size of facilities (estimate).

Desirable: damage to other types of health facilities, other health infrastructure (e.g. laboratories, pharmacies).

◆ **Data sources:** Health facility databases (public, private, education [university], non-government), laboratory networks, health information systems; damage and loss assessments in emergencies.

◆ **Data owners:** Ministry of Health, public health agencies, national hospital associations, infrastructure providers, national disaster management offices.

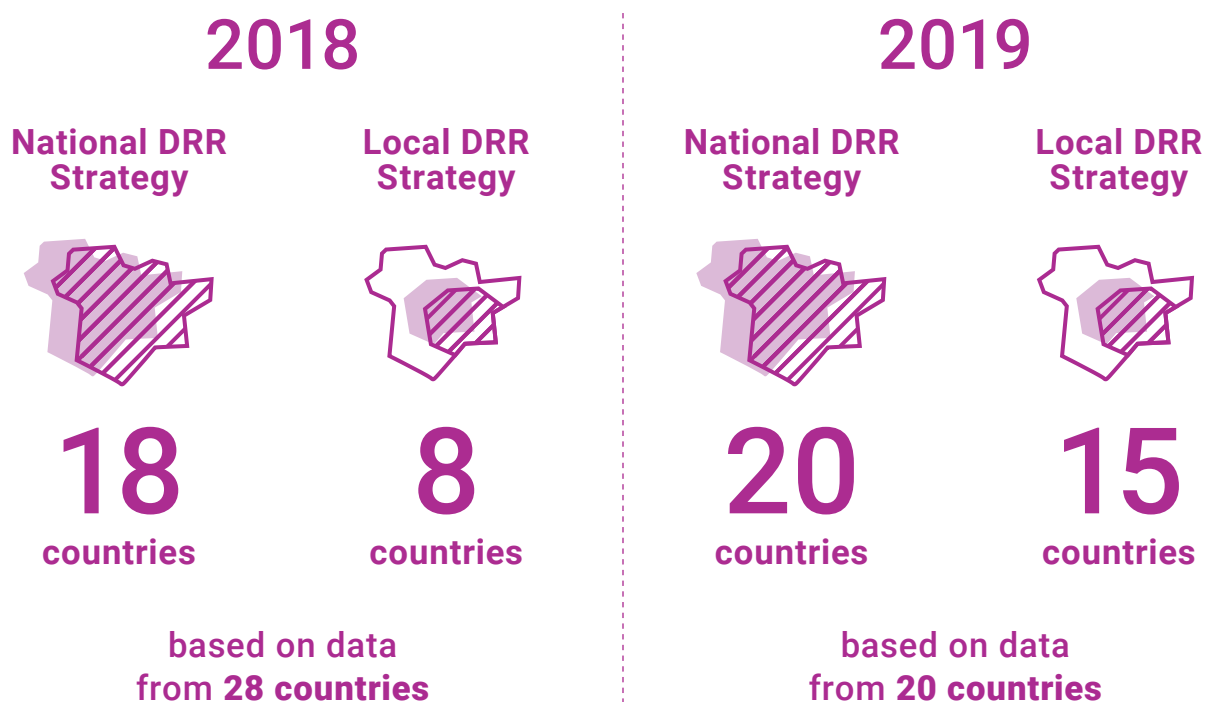
(for more information consult the [WHO technical guidance notes](#)).

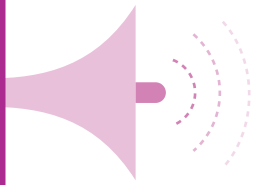


TARGET E

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

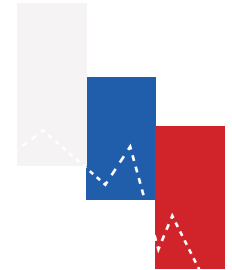
Target E sets clear goals and objectives for evaluating DRR strategies across different timescales and with concrete indicators, to prevent the creation of disaster risks, and the reduction of existing ones. National and local DRR strategies should take into consideration biological hazards along with natural, man-made, environmental and technological risks, based on the assessment of the risk landscape.





The story behind the data

Slovenia's contribution on National and Local DRR Strategies



Since the launch of the Sendai Framework monitoring process, **Slovenia** has faced the following challenges:

- Too many expectations from UNDRR (first milestones already set for March 2018)
- Very limited resources in the country (not even one person for the SFM)
- No ideas on how to approach the SFM reporting organization, despite the detailed study of the Technical Guidance for Monitoring and Reporting on Progress in Achieving the Global Targets on the Sendai Framework for Disaster Risk Reduction
- Absence of Desinventar Sendai, since Slovenia already has a national disaster loss database: AJDA

To face these obstacles, Slovenia

- gathered metadata (mostly from National Statistical Office – NSO);
- built on the partial disaster loss data already collected in the country;
- conducted analysis of the databases and national registers;
- established clear roles in the SFM system;
- benefited from dedicated SFM training.

Regarding Target E, the Slovenian Resolution on the National Programme of Protection against Natural and Other Disasters for the period 2016-2022 meets the criteria of the national Strategy for Disaster Risk Reduction, the new one is planned to be prepared in accordance with the UN guidelines ISDR – Guidelines: “Developing a National DRR Strategy and Planning for Implementation”. The condition for this is the change of national legislation. The assessment of the matching of the assessment of the matching percentage with 10 Sendai core requirements. The assessment has been done by experts who know both documents. After the Workshop on Sendai Monitoring that was held in March 2019 in Sarajevo, during the joint event of DPPI and UNDRR, it was highlighted how other strategic national documents could also be considered as a national DRR strategy. Building on that, Slovenia started the evaluation of what was not called but still constituted a national DRR strategy and assessed its compliance with SFDRR requirements.

In Slovenia, there are 212 municipalities which represent the local level in the country. Each municipality produces an annual plan for protection against natural and other types of hazards (financially evaluated). The legal basis for it is in place; the open issue remains its effective implementation.



Biological Hazards and Target E Reporting

Inclusion of health sector strategies in the national and local disaster risk reduction strategies will help building resilient health systems, and reducing the health risks and consequences of emergencies and disasters and enhance health security, universal health coverage, sustainable development and the resilience of communities and countries.

National and especially local disaster risk reduction plans should include health

sector strategies, roles and actions. To this end, UNDRR has promulgated the Public Health System Resilience - Addendum, with the support of World Health Organization (WHO) and partners, with the aim to support local authorities in strengthening their Public Health System resilience, by integrating coverage of the many aspects of public health issues and consequences of disasters.

Common example of data source, owner and analysis

Member States may use a diverse range of processes and tools to gather and report data related to biological hazards:

- ◆ Data on the inclusion of Reduction in health risks and consequences as a key outcome of local and national DRR strategies.
- ◆ Health strategies and components in local and national DRR strategies (including health sector roles and activities).
- ◆ Biological hazards in national and local DRR strategies.

(for more information consult the [WHO technical guidance notes](#)).



3349.52

2.88

93% Updat

20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95

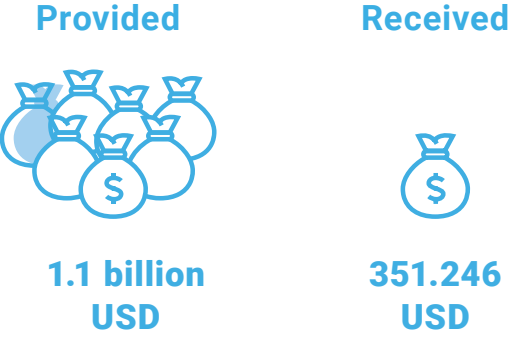
TARGET F

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

Target F seeks to enhance international cooperation to developing countries to implement national actions for DRR. It focuses on financial resources, and support for science, technology development and transfer, and capacity-building. This target seeks to map the funding to all aspects of DRR, which may be applied to standalone projects, health emergency and disaster risk management strategies or as part of wider multisectoral cooperation programmes. This should include funding and other forms of assistance for managing the risk of hazardous events within the scope of the Sendai Framework, namely natural, biological, technological and environmental hazards.

2018

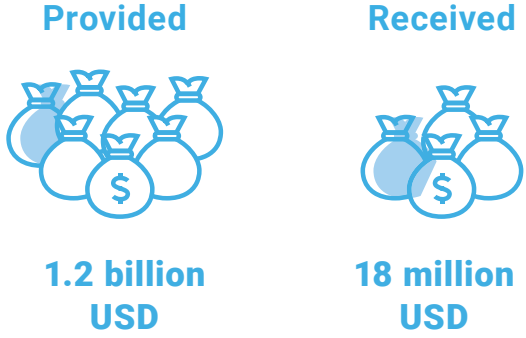
The total official international support for national disaster risk reduction actions



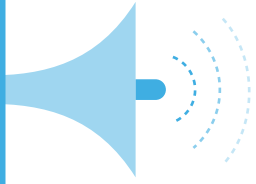
based on data from **11 countries**

2019

The total official international support for national disaster risk reduction actions



based on data from **11 countries**



The story behind the data

Belarus' contribution on international cooperation to developing countries and Finland's contribution on the technicalities of international cooperation to developing countries

In **Belarus**, there is a comprehensive system, which supports and regulates international assistance.

There are two main legal acts: President's Decision on International Technical Assistance (2003) and President's Decree on Foreign Gratuitous Aid (2020). Technical assistance goes for social and economic development, environment protection, development of critical infrastructure and more, including emergency prevention, preparedness and response. As a rule, such assistance is provided by international donors by implementing international short and long-term projects. International technical assistance is coordinated by the Government Commission and carried out by republican bodies, organisations, local authorities and other stakeholders. Foreign gratuitous aid, coordinated by the Department for Humanitarian Aid, has a much more comprehensive range of implementation, including emergency prevention, preparedness and response. This aid consists of goods and financial resources allocated to citizens, enterprises, organisation, local authorities and government bodies. Belarus has a sound system of data registration and analysis, but reporting template against Target F does not match the data disaggregation stipulated in the national legislation. To overcome this hurdle, Belarus analysed all international technical assistance projects and humanitarian aid activities implemented by the Ministry for

Emergency Situations, extracted budget allocations received from donors and put this total funds to the report.

In **Finland**, the DAC-marker for DRR is relatively new. Therefore, all relevant interventions with DRR related activities have maybe not been tagged with that marker. The main reasons are the following:

- The programme had started before the marker was introduced;
- The desk officer might not be familiar with the marker since it is relatively new.

The DRR-marker does not require indicating the percentage of the intervention that corresponds to DRR activities (opposed to the Rio-markers that require a % allocation). If the main purpose of the intervention is something else, but there are DRR activities in some components, the total budget of the intervention will be reported as DRR funding. Therefore, finance to DRR would be overestimated. It is difficult to obtain budget breakdowns for diverse type of activities (capacity-building, transfer of technology, and more), the majority of the finance is provided as core funding to multilateral organizations. In the case of bilateral projects, there are not the resources in place to carry out this type of analysis.

In Finland, it is hard to know the number of programmes or initiatives that include capacity-building since a lot of the funding goes through multilateral organizations as core funding but eventually they finance projects and programmes that might include capacity-building.



Biological Hazards and Target F Reporting

Ministries of health work with a range of partners to develop and implement capacities for Health emergency and disaster risk management across all levels of care and administration for prevention, preparedness, response and recovery from emergencies. In developing countries, funding for health can come from a range of providers, including international donors, multilateral agencies and through bilateral cooperation (e.g. foundations, development banks. The development of

pharmaceuticals (e.g. drugs, vaccines), equipment and innovative approaches to health information management may be considered as examples of technology transfer between countries with varying levels of development and resources. This needs to be captured to identify the wide-ranging work being undertaken to strengthen DRR in the health sector.

Common example of data source, owner and analysis

Member States may use a diverse range of processes and tools to gather and report data related to biological hazards, for example:

- Data on levels of international cooperation provided to the health sector in developing countries for national DRR actions in the form of ODA and multilateral and bilateral support.
- Data should be organized using the three categories that are consistent with the acknowledged principles of global cooperation, as used in SDGs and the Sendai Framework: (i) financial resources; (ii) technology development and transfer; and (iii) capacity-building.

(for more information consult the [WHO technical guidance notes](#)).



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.

This target constitutes a strong call to the value and implementation of early warning systems as an effective method for preventing loss of life, livelihoods, assets, economic losses and damage to critical infrastructure. Early warning systems empower communities whilst preparing them to face different types of hazards. The efficiency of these systems is measured through the number of lives saved and a general reduction in losses, directly related to the execution and consequent response from the population when a warning is launched.

2018



2

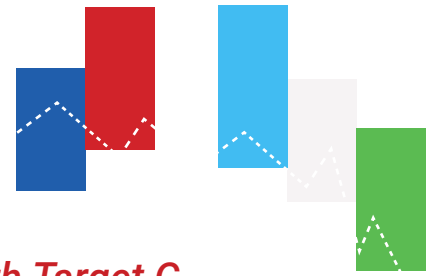
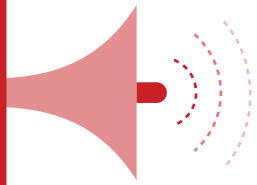
countries have reported full coverage of their at-risk population protected through pre-emptive evacuation, based on data from **15 countries**

2019



9

countries have reported to have multi-hazard early warning systems in place, based on data from **18 countries**



The story behind the data

United Kingdom's and Uzbekistan's experience with Target G

In **United Kingdom** Disaster Risk Reduction is an integral part of the domestic approach to civil contingencies and risk management, from early warning systems to infrastructure investment, to country's response to climate change. This is reflected in UK reporting of Sendai Target G and continued support of other nations to develop early warning services, based on the UK's Meteorological Office experience in developing the Natural Hazards Partnership and Flood Forecasting Centre. UK Sendai Target G reporting is supported by such services, legislative provision and associated national and local risk assessments.

The Government of the Republic of Uzbekistan, as a signatory to the Sendai Framework for Disaster Risk Reduction 2015-2030, in 2019 adopted its Strategy for the implementation of the Sendai Framework. In 2020, the Government monitored its progress against all the Targets of the Sendai Framework, reporting and validating its annual data for 2019 using the Sendai Monitoring System (SFM).

Among others, data was provided to the Target G to substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030. The G-2 Indicator reflecting the quality of the country's multi-hazard early warning system showed moderate achievement (0.5/1) by Uzbekistan. The G-3 Indicator (Number of people per 100,000 that are covered by early warning information through local governments or through

national dissemination mechanisms) was scored as 1/1, which means that there is full coverage of the population by early warning information through local governments or through national dissemination mechanisms is 100,000 i.e. all the population is informed by mass media including radio, TV, internet - website, e-mail, SMS, social media, and app as well as by local communication system including siren, public board, and phone. According to the data reported by Uzbekistan, the G-4 Indicator (Percentage of local governments having a plan to act on early warnings) was scored 1, which means that all the 14 out of 14 administrative territorial units have early warning plans. The G-5 Indicator (Number of countries that have accessible, understandable, usable and relevant disaster risk information and assessment available to the people at the national and local levels) is scored 0,5 (moderate achievement) which means that there is room for improvement in accessible, understandable, usable and relevant disaster risk information and assessment available to the people at the national and local levels. While reporting on the Target G, Uzbekistan also provided data on the G-6 Indicator (Percentage of population exposed to or at risk from disasters protected through pre-emptive evacuation following early warning), especially G-6a Indicator (Population exposed to or at risk from disasters protected through pre-emptive evacuation following early warning) showed that out of 1,679,019 people exposed to hazards, the number of people protected through pre-emptive evacuation was 1,679,019 i.e.100%.



Biological Hazards and Target G Reporting

The inclusion of a dedicated target to substantially increase the availability of and access to Multi-Hazard Early Warning System (MHEWS) in the Sendai Framework for Disaster Risk Reduction 2015–2030 is a strong endorsement of the value of early warning systems to achieving reductions in loss of life, the numbers of people affected by disasters, economic losses and damage to critical infrastructure.

MHEWS are an integral part of risk management that includes identifying and assessing risks and strengthening emergency preparedness, including multi-hazard plans and specific hazard plans, e.g. for potential and actual disease outbreaks (coronaviruses, cholera, Ebola virus disease), drought, floods, cyclones and other extreme weather.

Ministries of health need to ensure that risks to health and early warning for infectious diseases are considered in the tracking of MHEWS and reporting against Target G.

The health sector has a strong record of developing and implementing early warning systems, especially for infectious diseases. For example, integrated disease surveillance and response (IDSR) work to monitor, relay and respond early to any potential outbreaks.

National reporting on strategic health emergency risk assessments, disease surveillance and risk communication (e.g. under State Party Annual Reporting for the International Health Regulations (2005) all support Target G and, therefore, can contribute to reporting against these indicators.

(for more information consult the [WHO technical guidance notes](#)).



Common example of data source, owner and analysis

Member States may use a diverse range of processes and tools to gather and report data related to biological hazards:

- Each country can specify the major hazards to be included in MHEWS; the health sector should be included in decision-making on which hazards are included in MHEWS and reporting.
- For Sendai Framework reporting, the country's determination of major hazards is based on hazard weighting, which may be linked to health consequences from all hazards (e.g. mortality, people affected) and health data on biological hazards.
- Health sector may have data on the number of people who evacuated due to early warning.

Section 2

Sendai Framework Monitoring: Thematic Insights

- **Regional Dynamics For Reporting: The Central Asia Experience**
- **Building Coherence: Sendai Framework Monitoring and the 2030 Agenda for Sustainable Development - A perspective from the UN Resident Coordinator in Serbia**
- **Sendai Framework Monitoring and Voluntary National Reviews: A perspective from Slovenia**
- **National Disaster Loss Databases And Sendai Framework Monitoring: A Positive Feedback Process**
- **Monitoring disaster displacement to support the implementation of the Sendai Framework**
- **Addressing biological hazards in Sendai Framework Monitoring**



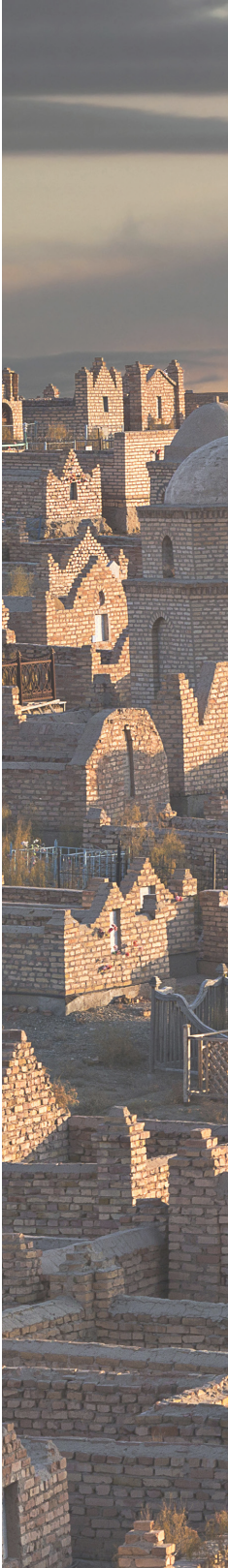
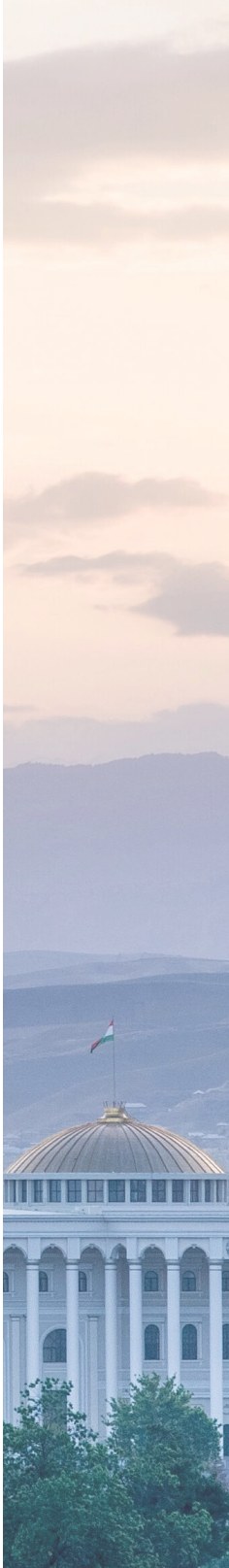
Regional Dynamics For Reporting: The Central Asia Experience

The Central Asia Initiative “Strengthening disaster resilience and accelerating implementation of Sendai Framework for Disaster Risk Reduction in Central Asia”, supported by the European Union and implemented by UNDRR, has made substantial progress in supporting countries of the region build the foundations for greater resilience through data, capacity, governance and cooperation at local, national and regional level. Efforts have focused on aligning collection of data, its analysis and reporting with the priorities of the Sendai Framework for Disaster Risk Reduction, which also supports the reporting on implementation of the Sustainable Development Goals.

Notably, through Central Asia Initiative and the support provided by the regional Centre for Emergency Situations and Disaster Risk Reduction (CESDRR) based in Almaty, all five countries of the region are actively working to reduce disaster risks by improving data disaggregation and reporting. Central Asian countries established cooperative relationship with the Centre for Emergency Situations and Disaster Risk Reduction, which is designed to better coordinate disaster and preparedness initiatives at the regional level. Sendai Focal points participated in SFM trainings and other regional meetings organized by the Center.

In 2020, all Central Asian States reported on national progress in implementation of the Sendai Framework for Disaster Risk Reduction using the online Sendai Framework Monitor system. This year, for the first time, Turkmenistan have started reporting through the SFM and inserted data on Target E – adopt and implement National Strategy on DRR aligned with Sendai Framework. By quantitative and qualitative reporting through SFM, and capacity building support at a regional level through CESDRR, Central Asian states will be able to assess and track its progress in reducing disaster risks according to the SFM indicator. This will also support regional and global analyses of Sendai implementation.

Through the Central Asia Initiative, and specifically through SFM reporting – by inserting accurate, timely, relevant, and accessible data, Central Asian states will have risk-informed policies and develop an understanding of risks in all its facets: hazard, exposure, and vulnerability, which will lead to take an integrated approach to risk reduction and development.



Building Coherence: Sendai Framework Monitoring and the 2030 Agenda for Sustainable Development - a perspective from the UN Resident Coordinator in Serbia

Managing and reducing the risk of disasters is a priority for Serbia, as shown most recently by the COVID pandemic and earlier by recurrent, catastrophic floods. Strengthening resilience to disasters allows first and foremost to save lives and livelihoods and it has been estimated that the 2014 floods alone affected 22% of the population and caused damages estimated at 4.8% of Serbia's GDP. Prioritizing resilience and preparedness to disasters also allows focusing scarce resources where they matter most, resulting in environmental, economic and societal benefits. For example, reforestation allows not only the reduction in the impact of floods, it also improves air quality and reduces GHG emissions. Involving communities in disaster preparedness at the same time allows a better understanding and response to their specific needs, especially those of the most vulnerable.

As regards the benefits of reporting against the Sendai Framework's indicators, of which Serbia is a signatory reaps numerous benefits, among them:

- insufficient data prevents authorities from fully quantifying the problem and can result in an underestimation of full costs and in underinvestment in this priority;
- understanding risk and its trends helps countries better plan and prepare for disasters, working on prevention and preparedness to respond effectively and efficiently;
- by better understanding risk, countries can make response capacity rapidly available in the communities that are most exposed, sa-

ving lives in the critical first hours after the emergency;

- properly sharing and communicating risk information among stakeholders allows multi-institutional, multi-stakeholders co-operation, among different ministries and authorities, with the donor community, the private sector and other stakeholders, which is of paramount importance since no single agency can bear this responsibility alone;
- better information on risks also prevents the creation of new risks. For example: in the built environment, by avoiding construction in flood-prone areas, or by retrofitting buildings to make them resilient to earthquakes.

Reporting against the progress on the Sendai Framework for disaster risk reduction in the Republic of Serbia is the responsibility of the Sector for Emergency Management, which is part of the Ministry of Interior, as the National focal point. The existing Desinventar Disaster loss database is used in the reporting process and Sector works closely with the Public Investment Management Office (PIMO) on the task of data collection, especially concerning the local level governments. Progress against the Agenda 2030, instead, is the responsibility of the Statistical Office of the Republic of Serbia (SORS), which maintains a database with up to date data on 83 indicators, which is about 34% of the total number of indicators of the global indicator framework.

The **benefits of reporting** against the Sendai Framework's indicators are multiple:

- Comprehensive and systematic data collection allows authorities to better understand and **quantify a problem**; it contributes to a more **accurate definition of strategies, solutions and appreciation of related costs towards development activities, as well as emergency response**;
- **Reporting allows the country to measure progress**, both in absolute, and relative to other similar countries. Reporting enables states and cities to share best practices, and leapfrog towards faster results. This is particularly relevant to the Western Balkans, where countries share similar types of disasters;
- Reporting on DRR, and risk communication towards a wide range of stakeholders allows **multi-institutional, multi-level cooperation**, between national and local authorities, with the donor community, the private sector and communities, for better planning and implementation;
- Risk management and reporting also leads **to improved regulations and standards, in all social and economic sectors**. This in turn **prevents the creation of new risks**. This is particularly important in the infrastructure sector, or as seen with COVID, in the health sector, both of which will be important pillars of the COVID19 recovery phase and EU accession efforts in Serbia.

With the increased impact of Climate Change on the magnitude and occurrence of disasters in the region and in Serbia specifically, in an environment of competition for resources and capacities affected by population trends, the management of risks as outlined in the Sendai framework become critical to ensure a cost efficient and people centered sustainable development. More than ever, DRR requires a whole-of-government, whole-of-society approach. It also requires a close coordination amongst many of the UN agencies operating in Serbia.

(**Françoise Jacob**, UN Resident Coordinator in Serbia)

Sendai Framework Monitoring and Voluntary National Reviews: A perspective from Slovenia

On 7 December 2017, the Government of the Republic of Slovenia adopted the Development Strategy of Slovenia 2030, the umbrella development framework of the country, which sets new long-term development foundations for Slovenia with five strategic orientations and twelve interrelated development goals. The Development Strategy of Slovenia 2030 also includes the implementation of the global development plan of the 2030 Agenda for Sustainable Development until 2030. We are pleased that the United Nations, due to its active approach to achieving the goals of sustainable development, ranks Slovenia among countries that have recognized the importance of global environmental and societal responsibility.

Second Voluntary National Review of sustainable development goals for Slovenia was presented at 2020 High Level Political Forum on Sustainable Development (HLPF), convened under the auspices of the United Nations Economic and Social Council from 7 to 17 July 2020 in New York.

The Government Office of the Republic of Slovenia for Development and European Cohesion Policy (SVRK) is responsible for monitoring and implementing the goals of sustainable development of the 2030 Agenda. In April 2020, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR) was asked by SVRK to provide data that it keeps within the indicators of the Sendai monitoring and which are directly related to the goals of sustainable development. These are as follows:

- **Objective 1:** Eradicate poverty: eradicate all forms of poverty worldwide;
- **Objective 11:** Sustainable cities and communities: to provide open, safe, sustainable and sustainable cities and settlements;
- **Objective 13:** Climate action: take urgent action to combat climate change and its consequences.

For the purpose of presenting the Second National Voluntary Review of achieving the goals of sustainable development, the ACPDR provided the Government Office of the Republic of Slovenia for Development and European Cohesion Policy with the following data for reporting within the aforementioned goals:

- Number of dead, missing and people affected by accidents per 100,000 inhabitants;
- Direct economic damage due to disasters as a share of global gross domestic product;
- Number of countries with national and local disaster risk reduction strategies;
- Proportion of local communities adopting and implementing local disaster risk reduction strategies in accordance with the Sendai Disaster Risk Reduction Framework 2015-2030;
- Direct economic damage from disasters relative to global GDP, including damage to critical infrastructure and disruption of basic services.

(**Katja Banovec Buross**, Sendai National Focal Point for Slovenia)

National Disaster Loss Databases And Sendai Framework Monitoring: A Positive Feedback Process

Member States routinely collect and record disaster loss data for multiple purposes. Largely driven by different compensation schema or insurance mechanisms (i.e. France), disaster loss data are usually present in national or sub-national institutions.

In the European Union for example, European Regulations require the collection of Disaster Loss Data: the EU Floods Directive envisages the collection of impacts of floods over the river basin as part of the preliminary risk assessment and the EU Solidarity Fund supports EU Member States to overcome disasters and requires a detailed assessment of the impact of disasters.

A closer look at the processes that Member States have implemented for building Disaster Loss Databases, reveals the inherent link with the Sendai Framework Monitoring and the role that the Framework is playing in improving national disaster loss databases. The process of establishing Disaster Loss Databases can be roughly represented in two main phases: data collection and data recording.

Data are generated during the disaster loss data collection phase; Member States practices are very diverse for this phase and include the collection of data and estimation of losses by ad-hoc or permanent commissions, local municipalities, national authorities, pool of experts, insurance mechanism, requests of compensation from affected population or other stakeholders -i.e. commercial companies or industries. National or sub-national regulations or procedures influence the type of data and indicators, that are collected, the level of disaggregation per gender, per income, per economic sectors and their quality.

The Sendai Framework is an opportunity for Member State to reflect on the data collection process for including new disaggregation, new indicators, to homogenize the approach at national level by adopting new data collection forms (i.e. Montenegro and Serbia) or even modifying the legislations as it occurred for example in Belarus, Moldova, Georgia and Ukraine, where new disaggregation for productive assets and critical infrastructures have been included in the national methodology for damage and loss estimation.

Collected Disaster Loss Data are successively recorded in databases and eventually become accessible to institutions and agencies.

This phase envisages the transmission of data from the different levels, from local to sub-national or national, from sectoral entities to a central authority that has the mandate to consolidate different information. Data are successively registered in archives of different nature that goes from the basic paper format -few cases- to more sophisticated database system (i.e. Slovenia).

DesInventar-Sendai, developed and supported by UNDRR, is a concrete technological solution for improving data recording in Member States and has been successfully adopted by several countries. The Sendai Framework is an incentive for Member State to improve the disaster loss data recording, by centralizing and consolidating the information and improving the data exchange among institutions.

A well-established Disaster Loss Data recording system facilitates the reporting to the Sendai Framework Monitoring and, similarly, the Sendai Framework Monitoring also calls on countries to improve Disaster Loss Data recording. The linkage between Sendai Framework Monitoring and Disaster Loss Database can be seen as a positive feedback process. Member States committed to monitor and report against the Sendai targets have included changes in the disaster loss data collection and recording system in the country, incorporating new disaggregation, new sectors, consolidating information from different agencies.

The changes are producing a positive feedback in the system, generating more and better data - both in terms of quality and usability, for the national disaster risk management systems and the Sendai Framework Monitoring contributing to the global effort of monitoring and reducing the impacts of disasters.

(**Marco Massabò**, Programme Director, CIMA Research Foundation, marco.massabo@cimafoundation.org)

Monitoring disaster displacement to support the implementation of the Sendai Framework

Why is important?

Disaster displacement is well recognised as a matter for DRR in the Sendai Framework and, while missing from its global indicators, displacement is a reality for most of the governments who have adopted it. In disaster-affected countries and communities worldwide, displacement is a strong people-centred marker of where increased efforts are needed to reduce exposure and vulnerability.

Integrating displacement risk and impacts in national DRR policy and measures promotes coherence across multiple ministry or agency mandates as it spans both emergency and longer-term action needed to avoid and reduce further risk creation and enable sustainable solutions. This also promotes mutually reinforcing outcomes and efficiencies in data collection and reporting demands under other global policy agendas where displacement is recognised as an important issue: the Paris Agreement on climate change, the UN Secretary General's Agenda for Humanity, and the 2030 Agenda for Sustainable Development.

Countries' commitments under the Sendai Framework have the potential to mobilise sorely needed efforts to collect improved data on displacement situations as evidence for policy and action. At national level, next steps to translate the global framework

into knowledge and action will include retrofitting and building new national disaster loss databases to capture data necessary for global reporting, as well as the development of nationally appropriate targets and indicators. Given the importance of minimising and addressing disaster displacement to progress on DRR in countries, displacement should be included in national indicators to inform policy measures tailored to diverse contexts.

Systematic collection, management and accessibility to high quality displacement-related data must be prioritised, including the significant gap in data on slow-onset disaster displacement; understanding the geo-location of displacement (from where to where); as well as its temporal dimension (for how long people are displaced). Disaggregating data by trigger (hazard type) can also allow countries to better plan for risk reduction, preparedness and response.

What should be monitored?

The following list highlights key indicators of displacement that could be measured when monitoring progress on the implementation of the Sendai Framework:

- **The number of people pre-emptively evacuated**

Effective early warning systems are vital in reducing the number of people exposed to hazards. This reminds us that displacement is not always a negative outcome. Pre-emptive evacuations save lives, and they are an effective resilience measure. The Sendai framework emphasises the importance of regular disaster preparedness, response and recovery exercises, including evacuation drills, training and the establishment of area-based support systems to ensure rapid and effective responses to displacement, including “access to safe shelter, essential food and non-food relief supplies, as appropriate to local needs”.

Target G-6 calls for measuring the “Percentage of population exposed to or at risk from disasters protected through pre-emptive evacuation following early warning. Member States in a position to do so are encouraged to provide information on the number of evacuated people.” Keeping track of the number of evacuees will allow countries to measure their success in early warning and evacuation protocols.

- **The number of people displaced during and after disasters**

Although the Sendai Framework calls for monitoring the number of people “affected” by disasters (B1), so far it is not possible to know how many of them were forced to flee their homes. Their impacts, however, may be worse, and their vulnerabilities may be higher than those who were not displaced. There is not an indicator to measure the number of people displaced in the Sendai Framework, and yet it is critical to understand the scale of the phenomenon and the impacts on those having to flee.

Countries can develop their own tailored indicators, including an indicator on the number of people displaced during and after disasters. This will allow them to better understand their impacts (e.g. loss of livelihood because of displacement), location (e.g. in shelters, with relatives), etc. Ideally, information should be disaggregated by sex, age, and other relevant characteristics, in line with the SDGs.

- **The number of houses destroyed**

Where no specific indicators exist to monitor disaster displacement, states could still report on others established by the Sendai framework and SDGs without duplication of efforts. Target B-4 calls for monitoring the “number of people whose destroyed dwellings were attributed to disasters”. When no data on the number of people displaced by disasters is available, housing destruction could be used as a proxy to measure displacement. Depending on national indicators such as insurance penetration or construction costs, it is also possible to extrapolate the duration and the extent of economic disruption linked to the disaster.

- **The duration of displacement**

Understanding how IDPs’ vulnerabilities differ from one situation to another, irrespective of scale, is important in painting a comprehensive picture of the severity of their displacement. It is also vital to inform effective and targeted planning and responses to help bring displacement to a sustainable end, and to focus attention, political will, and resources where they are most needed.

Such assessments are challenging, however, mainly because of the absence of reliable data on the duration of displacement and the different coping capacities of individuals, communities and states. Some people are able to return shortly after a disaster strikes, but many remain displaced for months or even years and struggle to restore or rebuild their homes, land and property. Many IDPs also lose part or all of their income as result of their displacement, which weakens their resilience to future shocks. Keeping track of the duration of displacement would help filling these gaps.

(Vicente Anzellini, Manager, Global and Regional Analysis, Policy and Research Department, Internal Displacement Monitoring Centre (IDMC), vicente.anzellini@idmc.ch)

Addressing biological hazards in Sendai Framework Monitoring

Biological, technological and natural hazards are within the scope of the Sendai Framework and should be covered by the monitoring of the Sendai Framework.

Sendai Framework National Focal Points should engage with International Health Regulation Focal Points, Health statistics offices or/and health information management systems to ensure the inclusion of health data in the reporting against Sendai Framework Targets and Indicators.

Ensuring effective data gathering

A number of key national and local stakeholders, both public and private, will be important counterparts in monitoring progress against Sendai Targets. While a list will vary from one national context to the other, coordinators of Sendai Framework monitoring may consider engaging with:

- Ministry of Health
- Health statistics office/health information management systems
- National disease surveillance system
- National disaster management offices
- National statistics offices
- National Focal Point in the Ministry of Health for SDG reporting
- WHO Country Offices, WHO Regional Offices, WHO Health Emergencies
- National security bureau, law enforcement, police
- Ministries responsible for emergencies, civil protection
- Insurance companies

Customising Sendai Framework indicators

Member States may consider the option to add custom targets and indicators for national monitoring and reporting purposes. A custom target could be used for national and local use, whilst being related to global target from A to G.

Listed below are some suggestions on the type of custom indicators, useful for reporting biological hazards

- **Target A:** indicators that measure the pattern over time in national mortality from: (i) both direct and indirect causes of death; and/or (ii) attributable to all types of hazardous events per 100,000 population.
- **Target B:** indicators that measure the pattern over time of the number of people affected: (i) both directly and indirectly; and/or (ii) attributable to all types of hazardous events per 100,000 population.
The health sector has a key role in reducing morbidity both directly and indirectly attributable to all types of disasters and hazardous events. Further consideration could be given to reporting on the links between health and other wider determinants of health and well-being, livelihoods, quality of life, etc.
- **Target C:** indicators that measure the pattern over time of: (i) both direct and indirect economic losses; and/or (ii) losses that are attributable to all types of hazards, including those beyond the scope of the Sendai Framework (e.g. violence and conflict). In the future, the economic loss due to disruption of health services (from all sectors) and the impact of the livelihoods of the health workforce could be considered for the calculation of economic loss of productive assets. Further reporting could be considered for linking the number of people whose health is affected with the effect on people's livelihoods as an example of economic loss.
- **Target D:** indicators that measure the pattern over time of: (i) number of destroyed or damaged health facilities attributable to all types of hazardous events (including societal hazards); and (ii) number of disruptions to health services attributable to all types of hazardous events (including societal hazards, e.g. violence, conflict).

- **Target E:** indicators that measure how many countries have national and local disaster risk reduction strategies that contribute to the implementation of the Sendai Framework for Disaster Risk Reduction, such as:
 - The number of countries with national and local Health strategies that demonstrate the implementation of the Sendai Framework for Disaster Risk Reduction.
 - The number of national strategies to build capacity for the implementation of the International Health Regulations (2005), e.g. national action plans for health security.
 - The number of national health sector policies, plans and strategies (NHPSPs) that integrate national Health strategies or equivalents.

- **Target F:** Ministries of health will need to determine what types of international cooperation and for which actions should be included in reporting against Target F sub-indicators. It could include all measures to reduce risks of emergencies and disasters across the spectrum of emergency prevention, preparedness, response and recovery for all types of hazards. This is potentially a wide range of actions when health systems strengthening and prevention measures are considered.

- **Target G:** health specific indicators for early warning systems, and risk assessment and risk information for all hazards, such as:
 - Number of countries in which the health sector contributes and applies multi-hazard monitoring and forecasting systems.
 - Number of people per 100 000 that are covered by surveillance and early warning systems through local governments or through national dissemination mechanisms for biological hazards.
 - Percentage of local governments having plans for emergency preparedness and response to act on disease early warnings.
 - Number of countries in which the health sector has accessible, understandable, usable and relevant risk information and assessments available to the people at the national and local levels (including conducting multi-hazard health emergency risk assessments).
 - Number of countries in which the health sector has participated in evacuation planning, i.e. planning to meet the health needs of people who evacuate following early warning.

(for more information consult the [WHO technical guidance notes](#) on Sendai Framework reporting for Ministries of Health).



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