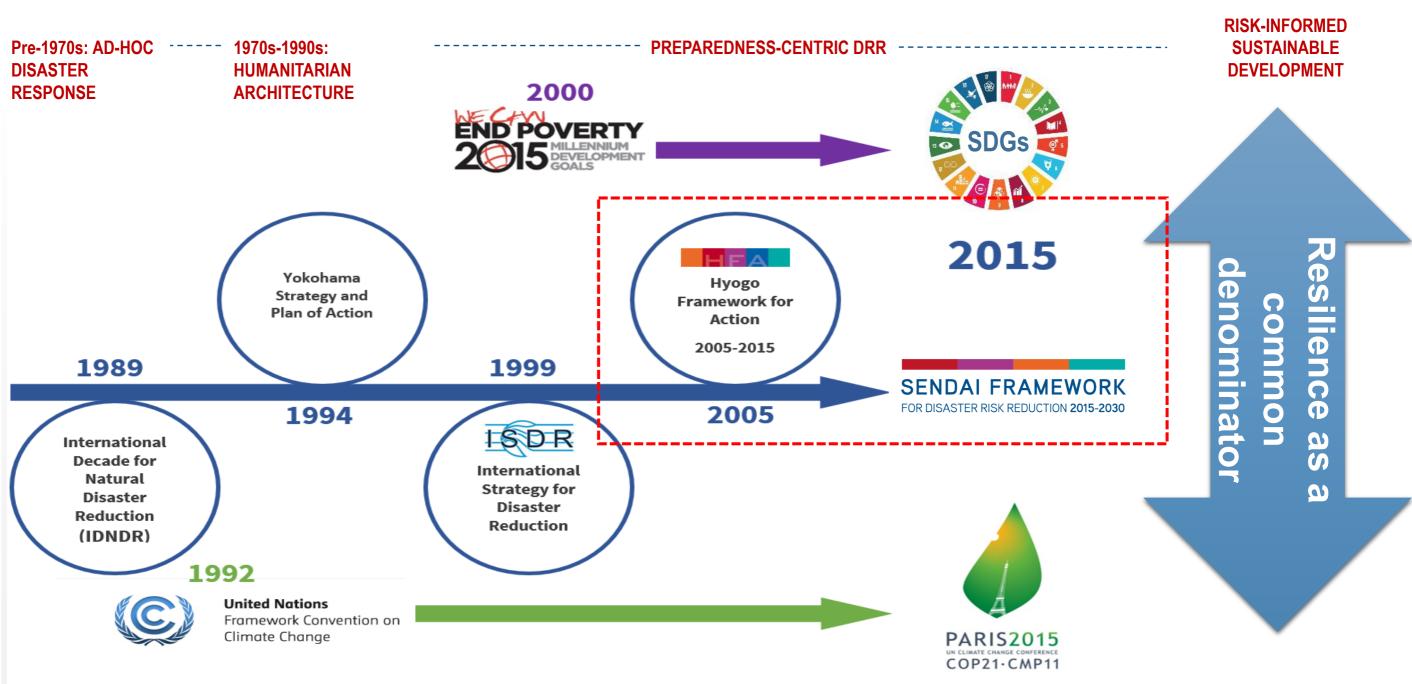
## Disaster-related statistics and link to climate change statistics

Ninth Meeting of the Expert Group on Environment Statistics New York, 25-28 October 2022





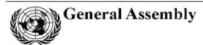
# 30 years of global disaster and climate governance



## Disaster-related statistics: Intergovernmental process

United Nations

A/71/644



Distr.: General 1 December 2016

Original: English

Seventy-first session Agenda item 19 (c) Sustainable development: disaster risk reduction

> Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction

Note by the Secretary-General

The Secretary-General has the honour to transmit herewith the report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly in its resolution 69/284 for the development of a set of possible indicators to measure global progress in the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, coherent with the work of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators, and the update of the publication entitled "2009 UNISDR Terminology on Disaster Risk Reduction".





E/2019/24-E/CN.3/2019/34



#### **Statistical Commission**

Report on the fiftieth session (5–8 March 2019)

Economic and Social Council Official Records, 2019 Supplement No. 4

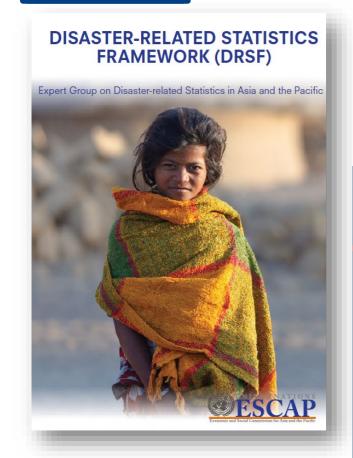


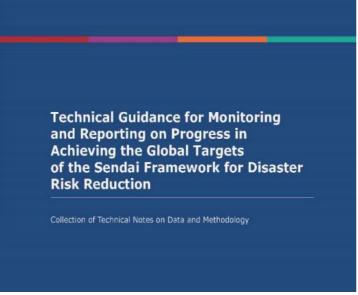


### Why a common statistical framework on disaster-related statistics?

- To enable disaster-related statistics to inform national policies and plans on disaster risk
  reduction
- To Improve national data systems on disaster risks and impacts
- To facilitate reporting to internationally agreed development agendas as they relate to DRR
- To harmonize, comparability and consistency of methods across countries
- To bridge between disaster risk management information and socio- economic statistics

## **Ensuring Data Standards**











Global Set of Climate Change Indicators and Statistics

### Sendai Framework indicators in the Global Set

-	-		-					-			
7	_	_	+	_	_	-	_	_	_		
Number	Indicator	Statistic	Tier	Themes	Paris Agreement	PAWP- Katowice Climate Package	Method	FDES Reference	SDG Reference	Sendai Feference	UN-ECE Reference
27	Direct agricultural loss attributed to disasters	Refer to origi	2	Disasters	7; 13.8	Decision 18	Sendai; SDG		[Part of] 1	C-2: Direct agricultural loss attributed to disasters	[Similar to]
40	Direct economic loss to all other damaged or destroyed product	Refer to origi	2	Disasters	7; 13.8	Decision 18	Sendai; SDG	[Similar to]	[Part of] 1	C-3: Direct economic loss to all other damaged or destroyed productive assets attributed to disasters.	
41	Direct economic loss in the housing sector attributed to disaste	Refer to origi	2	Disasters	7; 13.8	Decision 18	Sendai; SDG	[Similar to]	[Part of] 1	C-4: Direct economic loss in the housing sector attributed to disasters.	
42	Number of deaths, missing persons and directly affected person	ns attributed	1	Disasters	7; 13.8	Decision 18	Sendai; SDG	[Similar to]	11.5.1 Nur	[Similar to] A-1 (Compound): Number of deaths and missing persons attributed to disasters, per 100,000	[Similar to]
43	Number of climate refugees, climate migrants and persons disp	laced by clim	3	Disasters	7; 13.8	Decision 18	/CMA.1, chap			[Related to] B-1: (Compound) Number of directly affected people attributed to disasters, per 100,000	
		Number of p	€2	Disasters	7; 13.8	Decision 18	UN-ECE; Sen	[Similar to]	FDES 4.1.2.a	[Related to] B-4: Number of people whose destroyed dwellings were attributed to disasters.	UN-ECE 25:
75	Damage to critical infrastructure attributed to disasters	Refer to origi	2	disasters	7; 13.8	Decision 18	Sendai			D-1 (compound): Damage to critical infrastructure attributed to disasters.	
76	Direct economic loss resulting from damaged or destroyed critic	Refer to origi	2	disasters	7; 13.8	Decision 18	Sendai; SDG		[Part of] 1	C-5: Direct economic loss resulting from damaged or destroyed critical infrastructure attributed to disasters.	
80	Direct economic loss to cultural heritage damaged or destroyed	Refer to origi	2	Tourism; Disas	7; 13.8	Decision 18	Sendai; SDG		[Part of] 1	C-6: Direct economic loss to cultural heritage damaged or destroyed attributed to disasters.	
129	Share of government adaptation expenditure in relation to gro	ss domestic p	3	Expenditures; I	7.9;7.10	Decision 18	UN-ECE			[Related to] F-1: Total official international support, (official development assistance (ODA) plus other	UN-ECE 35:
133	Proportion of local governments that adopt and implement local	al disaster risk	2	Governance; D	7.9;7.10	Decision 18	Sendai; SDG		13.1.3 Pro	[Similar to] E-2: Percentage of local governments that adopt and implement local disaster risk reduction	
		Description o	2	Governance; D	7.9;7.10	Decision 18	Sendai; SDG		[Related to	implement national disaster risk reduction strategies in	
136	Coverage of early warning systems		3	Governance; D	7.9;7.10	Decision 18	Sendai			[Related to] G-1 (compound): Number of countries that have multi-hazard early warning systems	
		Existence and	2	Governance; D	7.9;7.10	Decision 18	Sendai; FDE	[Similar to]	FDES 6.3.1.	[Related to] G-1 (compound): Number of countries that have multi-hazard early warning systems	

#### The Global Set adds value by indicating:

- How climate change relates with the given Sendai Framework indicators [in relevance, in metadata]?
- Which other frameworks (e.g. FDES, SDGs) use the respective Sendai Framework indicator?
- What statistical methods may be helpful as well as the policy and reporting references?

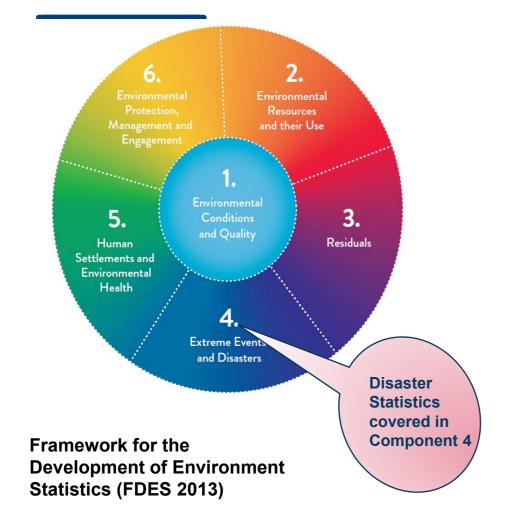
#### Other disaster-related indicators

- Indicators and statistics retained according to the theme 'disasters', including those beyond the Sendai Framework.
- A wider spectrum of indicators/statistics are covered spanning three areas: impacts (10), vulnerability (5) and adaptation (5).

Area	Topic	Indicator	Statistic	Tier	Themes	Paris Agreement	PAWP-Katowice Climate Package	Method	FDES Reference	SDG Reference	Sendai Framework Feference	UN-ECE Reference	
	2		Refer to original source in metadata		Disasters		Decision 18/CMA.1, o			[Part of] 11.5.2 Dir	C-2: Direct agriculti	[Similar to] UN-l	CE 28
	2			3	Agriculture; Disas		Decision 18/CMA.1, o						
	3	Frequency of hazardous events and disasters		2	Disasters	7; 13.8	Decision 18/CMA.1, o						
	$\perp$		Occurrence of hazardous events and disasters	-	Disasters	7; 13.8	Decision 18/CMA.1, o		[Similar to] FDES 4	.1.1.a Occurrence o	of natural extreme e		
			Occurrence of extremes of temperatures and precipitation	1	Disasters		Decision 18/CMA.1, o					UN-ECE 23: Occur	
	4				Disasters		Decision 18/CMA.1, o						
	4	Direct economic loss in the housing sector attributed to disaste		2	Disasters		Decision 18/CMA.1, o						
	4	Number of deaths, missing persons and directly affected persons attrib		1	Disasters	7; 13.8	Decision 18/CMA.1, o		[Similar to] FDES 4	11.5.1 Number of	[Similar to] A-1 (Co	[Similar to] UN-	CE 2
			Refer to original source in metadata	┖	Disasters	7; 13.8	Decision 18/CMA.1, o						
	4	Number of climate refugees, climate migrants and persons displaced by			Disasters	7; 13.8	Decision 18/CMA.1, o				[Related to] B-1: (Co		
			Number of people whose destroyed dwellings were attr	r 2	Disasters		Decision 18/CMA.1, o		[Similar to] FDES 4	.1.2.a.3 People aff	[Related to] B-4: N	UN-ECE 25: Numl	jer o
	7	Damage to critical infrastructure attributed to disasters	Refer to original source in metadata	2	disasters		Decision 18/CMA.1, o	Sendai			D-1 (compound): Da	mage to critical	infra
	7	Direct economic loss resulting from damaged or destroyed critic	Refer to original source in metadata	2	disasters	7; 13.8	Decision 18/CMA.1, o	Sendai; SDG		[Part of] 11.5.2 Dir	C-5: Direct economi	c loss resulting	from
	8	Direct economic loss to cultural heritage damaged or destroyed	Refer to original source in metadata	2	Tourism; Disaster	7; 13.8	Decision 18/CMA.1, o	Sendai; SDG		[Part of] 11.5.2 Dir	C-6: Direct economi	c loss to cultura	her
	1	Proportion of population living in coastal areas		2	Sea and coasts; D	7.1; 13.8	Decision 18/CMA.1, o	hapter IV; Decisi					
	1	Proportion of population living in non-coastal hazard-prone areas		3	Disasters	7.1; 13.8	Decision 18/CMA.1, o	hapter IV; Decisi					
			Population living in hazard-prone areas	2	Disasters	7.1; 13.8	Decision 18/CMA.1, o	FDES	FDES 5.1.3.c Popula	ation living in haza	ardprone areas		
	1	9 Share of government adaptation expenditure in relation to gross domes	tic product	3	Expenditures; Dis-	7.9;7.10	Decision 18/CMA.1, o	UN-ECE			[Related to] F-1: To	UN-ECE 35: Share	of g
	1	Reportion of local governments that adopt and implement local	disaster risk reduction strategies in line with national of	2	Governance; Disa:	7.9;7.10	Decision 18/CMA.1, o	Sendai; SDG		13.1.3 Proportion	[Similar to] E-2: Per	centage of local	gove
			Description of local disaster risk reduction strategies	2	Governance; Disa:	7.9;7.10	Decision 18/CMA.1, o	Sendai; SDG		[Related to] 13.1.2	[Related to] E-1: Nu	mber of countri	es th
	1	4 Coverage of disaster shelters per capita		3	Governance; Disa:	7.9;7.10	Decision 18/CMA.1, o	hapter IV; Decisi					
			Number of disaster shelters	3	Governance; Disa:		Decision 18/CMA.1, o						
	1	6 Coverage of early warning systems		3	Governance; Disa:	7.9;7.10	Decision 18/CMA.1, o	Sendai			[Related to] G-1 (co		
			Existence and number of early warning systems	2	Governance; Disa:	7.9;7.10	Decision 18/CMA.1, o	Sendal; FDES	[Similar to] FDES 6	.3.1.a.7 Existence	[Related to] G-1 (co	mpound): Numb	er of
	1	9 Extent to which (i) global citizenship education and (ii) education	n for sustainable development are mainstreamed in (a)	2	Education; Disast	12	Decision 17/CMA.1	SDG		13.3.1 Extent to wi	hich (i) global citizer	nship education	and
													_

Number	Indicator	Statistic .	Tier	Themes	Paris Agreement	PAWP- Katowice Climate Package	Method	FDES Reference	SDG Reference	Sendai Framework Feference	UN-ECE Reference
28	Crop loss due to climate extremes		3	Agriculture; Dis	7; 13.8	Decision 18/	CMA.1, chap				
39	Frequency of hazardous events and disasters		2	Disasters	7; 13.8	Decision 18/	CMA.1, chap				
		Occurrence of hazardous events and disasters	2	Disasters	7; 13.8	Decision 18/	FDES	[Similar to]	FDES 4.1.1.a	Occurrence	e of natural ext
		Occurrence of extremes of temperatures and precipitation	1	Disasters	7; 13.8	Decision 18/	UN-ECE				UN-ECE 23: 0
		Refer to original source in metadata		Disasters	7; 13.8	Decision 18/	CMA.1, chap				
100	Proportion of population living in coastal areas		2	Sea and coasts	7.1; 13.	Decision 18/	CMA.1, chap				
102	Proportion of population living in non-coastal hazard-prone areas		3	Disasters	7.1; 13.	Decision 18/	CMA.1, chap				
		Population living in hazard-prone areas	2	Disasters	7.1; 13.	Decision 18/	FDES	FDES 5.1.3.c	Population	living in ha	zardprone area
134	Coverage of disaster shelters per capita		3	Governance; D	7.9;7.1	Decision 18/	CMA.1, chap				
		Number of disaster shelters	3	Governance; D	7.9;7.10	Decision 18/	CMA.1, chap				
139	Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment		2	Education; Disa	12	Decision 17/	SDG		13.3.1 Exte	nt to which	n (i) global citiz

#### **Key messages**



- For the Global Goal on Adaptation, the adaptation target of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, is aligned with the Sendai Framework goal of reduction of hazard, vulnerability and exposure, and enhancing capacity and resilience.
- The Global Set can assist countries in identifying climate indicators/statistics that support monitoring of the Sendai Framework and others related to disaster risk reduction
- Framework for the Development of Environment Statistics (FDES) and the Global Set, as statistical frameworks adopted by the Statistical Commission can support further processes like development of the Global Framework for disaster-related statistics



Global Set of Climate Change Indicators and Statistics



# Thank you

www.preventionweb.net

www. undrr.org



