Climate Change
Statistics and Indicators: Global Set

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Session 1: Climate Change Statistics and Indicators: Global Set

United Nations Statistics Division

Outline

1. Adaptation indicators
2. New indicators
3. Proposed modifications
4. Tier 3 work

Adaptation indicators in the Global Set

105	Number of sectors planning, budgeting and implementing climate change adaptation actions	5020	3	Governance
106	Share of government adaptation expenditure in relation to GDP (UN-ECE 35)	5030	3	Expenditures
107	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (SDG 1	5100	2	Governance
108	Coverage of disaster shelters per capita	5110	3	Governance
109	Climate change funds received	5120	3	Governance
110	Coverage of early warning systems	5130	3	Governance
111	Average increase of insurance premiums incurred due to climate change	5140	3	Insurance
112	Proportion of population with access to climate information	5200	3	Education
113	Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricu	5210	2	Education
114	Number of companies publishing sustainability reports (SDG 12.6.1)	5220	2	Corporate repor
115	Areas adapted to climate change [Adaptation at coastal zones or river basin]	5230	3	Land
116	Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas	5250	1	Protected areas
117	Share of green urban areas in the total area of cities (UN-ECE 82)	5300	3	Urban areas
118	Number of units dedicated to climate change in government structures	5310	3	Governance
119	Number of reports on climate change statistics and indicators	5320	3	Governance
120	Proportion of degraded area of ecosystems which has been restored	5330	3	Ecosystems
121	National National Integrated Coastal Zone Management (ICZM)	5340	3	Governance
122	Fisheries measures in place and multilateral/bilateral fisheries management arrangements	5350	3	Governance
123	Buildings adapted to climate change	5290	3	Buildings
124	Proportion of agricultural area under productive and sustainable agriculture (SDG 2.4.1)	5260	2	Agriculture
125	Progress towards sustainable forest management (SDG 15.2.1)	5360	2	Forests
126	Biodiversity information monitoring index	5500	2	Biodiversity
127	Meteorological monitoring network	5510	3	Meteorology
128	Air quality monitoring systems	5520	3	Meteorology
129	Water monitoring systems	5530	3	Water
130	Ocean monitoring	5540	3	Water
131	Water use per capita	5580	2	Water
132	Municipal waste collected per capita	5550	1	Waste
133	Proportion of municipal waste treated	5560	1	Waste
134	Proportion of domestic and industrial wastewater flows safely treated (SDG 6.3.1)	5570	2	Water quality

Criteria for selecting new indicators

UNSD received suggestions for new indicators from 5 countries and 3 international agencies.

These were screened according to the following criteria:
1) link to one of the five climate change areas
2) suitability for national policy-making and monitoring purposes
3) fit into the area/topics structure in a balanced manner
4) possible to develop into the indicator/statistic/metadata structure

Proposed new indicators

	New indicator/indicators	Suggested By	Yes/No
Indicator	Total municipal solid waste generated (Generation per capita, total annual generation, total daily generation)	country	
Indicator	Proportion of ~~the fisheries and aquaculture~~ sector (Ministry of Fisheries or equivalent) budget allocated for climate change adaptation [adaptation]	FAO	
Indicator	Proportion of management plans designed and implemented based on principles of ecosystem approaches ~~to fisheries (EAF) and to aquaculture (EAA)~~ [EAFnet EAF review in Africa Data collected through EAF-Nansen Programme]	FAO [links in separate document, summary]	

Proposed new indicators

	New indicator/indicators	Suggested By	Yes/No
Indicator	Number of initiatives on good practices and lessons learning, knowledge management and exchange for climate change adaptation ~~in fisheries and aquaculture~~	FAO	
Statistic under indicator 124	List of climate smart agriculture technologies	country	
Statistic under indicator 124	Number of climate adaptive breeds and cultivars	country	

Proposed modifications (1)

	Global set	Proposed changes	Yes/No
Indicator 105	Number of sectors planning, budgeting and implementing climate change adaptation actions	• Consider 'Percentage of sectors with respect to a defined total, which could show the mainstreaming of adaptation in the sectors'; • Consider readiness/capacity	
Statistic 5141	Insurance premiums incurred due to climate change	Damage limitation refunds paid for agricultural farmers by damage types	
Statistic 5301	Green urban area (FDES 5.1.5.b)	Local government owned green areas	
Indicator 117	Share of green urban areas in the total area of cities (UN-ECE 82)	• Conservation of green areas at the district, provincial, departmental and national levels. • 'Green blue space, excluding conventional farming (green space and freshwater area per capita)'	
Statistic 5292	Number of dwellings with adequacy of building materials defined by national or local standards (FDES 5.1.3.g)	Number of dwellings which were modernized with energy savings	

Proposed modifications (2)

	Global set	Proposed changes	Yes/No
Statistic 5233	Area of nature-based protection from storms	"The share of the area of protected areas of federal, regional and local significance in the total area of the country's territory" SDG 15.1.2	
Statistic 5501	Number of species monitored	In the statistics of meteorophenological variables, data on phases or stages of different species of wild and agricultural plants, such as birds, are considered	
Indicator 133	Proportion of municipal waste treated	% municipal waste landfilled treated or % municipal waste landfilled, as landfilling is where most GHG emissions occur	
Indicator 112	Proportion of population with access to climate information	• Actionable consumer information needs to be distinguished from general climate change awareness. • better to monitor the climate change awareness directly - 'Climate change concerns (% of population)'	

Tier 3

	Indicator	National methods and feedback	Comment
Indicator 118	Number of units dedicated to climate change in government structures	Several countries responded "yes" to Methodological Soundness • EEA---The indicator refers to adaptation, on the other hand focuses on climate change units in government structures. Climate change units usually deal both with climate change mitigation and climate change adaptation, or other topics. We would recommend making a direct reference to climate change adaptation units to be able to successfully gather information and monitor the coverage of adaptation, or changing the area and topic of the indicator from adaptation/ climate change adaptation management and practice to a different category. O UNFCCC--- not, only for adaptation but everywhere	
Indicator 119	Number of reports on climate change statistics and indicators	Several countries responded "yes" to Methodological Soundness • EEA--- The indicator refers to adaptation, on the other hand focuses on reports on climate change statistics and indicators. These reports usually provide information on general climate policy, mitigation, means of implementation and other relevant issues. We would recommend making a direct reference to climate change adaptation reports to be able to monitor the coverage of adaptation, or changing the area and topic of the indicator from adaptation/ climate change adaptation management and practice to a different category. • IMF--- Indicator 119 could be refocused on quality/coverage of reports on climate change statistics and indicators. It seems that the quality/coverage of reports on climate change statistics and indicators is more useful than the number of such reports. The former can be used to assess the climate change statistics capacity and gaps. But it is not clear how the latter can be used. In addition, the cross-country comparison of the latter will likely be confusing. How can we compare few comprehensive reports with many narrowly focused and fragmented reports? o UNFCCC--- not, only for adaptation but everywhere	
Indicator 127	Meteorological monitoring network	12 countries responded "yes" to Methodological Soundness; • Several countries provided a reference link; International references (WIGOS, WMO provided by 2 countries	

Optional (on metadata)

- <u>Rationale</u>

- <u>Limitations</u>

- <u>Interpretation</u>

- <u>Compilation formulae</u>

- <u>More dissagregation</u>

- <u>Tier revision</u>

Optional (on list)

- Linkages among the indicators

- How to handle indicators which belong to more than one area

  Share of climate change mitigation expenditure in relation to GDP (UN-ECE 30)

  Share of government adaptation expenditure in relation to GDP (UN-ECE 35)

- Repeated statistics:

  - E.g.: precipitation, sea level rise, land cover, land use, forest area

- Social and economic statistics: GDP and population

Thank you for your attention!

For more information please contact the Environment Statistics Section at the United Nations Statistics Division:

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