Global Set of Climate Change Statistics and Indicators: Results of the Global Consultation, part 2

Eighth Meeting of the Expert Group on Environment Statistics
New York, 12-21 October 2021 (virtual)
Session 1: Climate Change Statistics and Indicators: Global Set
Global Consultation, part 2

1. Responses
2. Results, key observations
3. Remaining gaps and challenges
4. What else needs to be done:
   • With EGES
   • Bilateral work
Responses, part 2

• UNSD with the help of UNFCCC and EGES prepared a list which is comprehensive but not exhaustive and not mandatory
• 134 indicators, 194 statistics and metadata reviewed by 74 (out of 85) countries and about 17 (out of 25) int/reg. agencies
• Six info sessions and support by the regional commissions helped in the process
• UNSD provided feedback to all countries whose responses were received by about 30 sept; about 40 countries improved their responses
• Most countries could assess the suggested indicators (unlike in the Pilot last year), with short answers on relevance, soundness and data availability, also additional information, links, clarifications and suggestion
Results and key observations: completeness

- The overwhelming majority of comments provided by both countries and agencies were supportive and accepting in the proposed statistics and indicators.
- 5 countries and 3 international agencies have proposed new indicators.
- One country and one agency (FAO) proposed many.
- IMF included also detailed metadata for new indicators:
  1. Trade in low carbon technology products
  2. CO2 emissions in Gross Fixed Capital Formation of Direct Investment
  3. CO2 emissions in value added of Foreign Controlled Multinational Enterprises
- Several countries and agencies have proposed adjustments, modifications or proxies to the existing indicators/statistics.
- Complementarity: CARICOM, GCC (ECE set, most indicators are included; EEA, Eurostat)
Results and key observations: metadata

• Usefulness of the metadata was noted by many reviewers, while occasionally, suggestions for improvement were made.

• Several countries and agencies provided comments on metadata for indicators/statistics of their knowledge, for example:
  • UN-Women listed all indicators where disaggregation by gender is desirable
  • IOM provided conceptual information to define displaced people
  • IMF on expenditures and taxes

• 2 agencies (FAO, WCMC) provided detailed comments on all the metadata which was suggested for their specialized review.
Results and key observations: on relevance

Some countries assessed relevance for indicators, soundness and data for statistics, most assessed both.

Lowest is 12% (Sea ice cover), highest is 83% (Total emissions of direct greenhouse gases (GHGs, excluding LULUCF) (FDES 3.1.1.a))

• Average per area:
  - Drivers – 56%
  - Impacts – 43%
  - Vulnerability – 41%
  - Mitigation – 42%
  - Adaptation – 39%

• Separations by development stage, SIDS, geography are likely important

United Nations Statistics Division
Results and key observations: on soundness

Soundness is intended to inform comparability of the proposed indicators/statistics

Lowest is 3% (for ecosystem health and insurance premiums), highest is 61% (Total emissions of direct greenhouse gases (GHGs, excluding LULUCF) (FDES 3.1.1.a))

• Average per area:
  • Drivers – 36%
  • Impacts – 20%
  • Vulnerability – 21%
  • Mitigation – 21%
  • Adaptation – 16%

• Separations by development stage, SIDS, geography are likely important
Results and key observations: on data availability

Assesses readiness of countries to compile the proposed indicators/statistics

Lowest is 2% (Risk mitigation mechanisms (Subindicator of SDG 2.4.1) 3% for insurance premiums), highest is 78% (Total emissions of direct greenhouse gases (GHGs, excluding LULUCF) (FDES 3.1.1.a))

• Average per area:
  • Drivers – 47%
  • Impacts – 27%
  • Vulnerability – 28%
  • Mitigation – 26%
  • Adaptation – 20%

• Separations by development stage, SIDS, geography are likely important
Results and key observations: on data availability

Data availability used to revise the initial tiers:

- Tier 3 indicators/statistics with more than 20% of the countries with data

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator</th>
<th>Statistics</th>
<th>Preliminary Tier</th>
<th>Themes</th>
<th>DATA</th>
<th>Updated Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td><strong>Use of fossil fuels</strong></td>
<td></td>
<td>3</td>
<td>Fossil fuels</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>Vulnerable species</td>
<td></td>
<td>3</td>
<td>Species</td>
<td>24%</td>
<td>2</td>
</tr>
<tr>
<td>87</td>
<td>Proportion of population with disability</td>
<td></td>
<td>3</td>
<td>Disability</td>
<td>39%</td>
<td>2</td>
</tr>
<tr>
<td>104</td>
<td>Progress towards GHG emissions reduction target</td>
<td></td>
<td>3</td>
<td>GHG emissions</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>Meteorological monitoring network</td>
<td></td>
<td>3</td>
<td>Meteorology</td>
<td>32%</td>
<td>2</td>
</tr>
<tr>
<td>128</td>
<td>Air quality monitoring systems</td>
<td></td>
<td>3</td>
<td>Meteorology</td>
<td>32%</td>
<td>2</td>
</tr>
<tr>
<td>129</td>
<td>Water monitoring systems</td>
<td></td>
<td>3</td>
<td>Water</td>
<td>24%</td>
<td>2</td>
</tr>
</tbody>
</table>
Results and key observations: on data availability

Data availability used to revise the initial tiers for tier 1 and tier 2:

- 16 tier 1 indicators with less than 50% data (3 of them are SDGs)
- 1 tier 2 indicator (Percent urban population) with more than 50% data; also 8 statistics
- 62 (out 80) indicators and 134 (out of 194) statistics retain the same tier
Remaining gaps & challenges

• Ensure that latest and complete statistical guidance is referenced as appropriate – CBD Global Biodiversity Monitoring Framework, DRR disasters classification, ESCAP DRSF, ECE set

• Gaps in the list: missing indicators/topics:
  • Gender (noted by UN-Women)
  • Aquaculture (noted by FAO)
  • One SDG missing 11.5.2

• Address the new indicators and proposed modifications

• Gaps in the metadata: rationale and limitations for each indicator, interpretation and compilation formulae

• Improve integration and links between the indicators and statistics
Remaining gaps & challenges

• Tiers need to be revised (where discrepancies were found and issues were raised)
  • According to 50% rule to distinguish between tier 1 and 2 (except for the SDGs)
• Roadmap for tier 3 work
• Draft Global Set to be updated/consolidated in the report to the Statistical Commission by mid November
• Metadata to be updated to the extent possible and published in the background report by end of January 2022
• Further work will be done following the Commission (Tier 3, metadata, certain fields in metadata)
Next steps with EGES

Wednesday group work-session to address:

• New indicators, proposed modifications, tier 3 work

UNSD has prepared a selection of the newly proposed indicators 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

A selection of the newly proposed indicators will be reviewed at the group work session on Wednesday

Proposals for modifications will be reviewed also examples of work on tier 3 indicators for which some countries responded with national methodologies
Bilateral work

Further work is needed to address gaps in existing/reviewed methodologies, gaps in metadata

• Draft Global Set, metadata and feedback were shared with the agencies with specialized statistical guidance where many indicators were sourced (FAO, UNEP, UNDRR, WHO, WMO, CBD/WCMC)

• Bilateral work was done with several agencies, more will follow including to address issues to be defined by the EGES

• Continuous discussions and improvements will follow in particular for tier 3 indicators, also to keep uptodate in other specialized areas
Thank you for your attention!

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

E-mail: envstats@un.org

Website: https://unstats.un.org/unsd/envstats/

Climate Change Statistics Website
https://unstats.un.org/unsd/envstats/climatechange.cshtml
and
https://unstats.un.org/unsd/envstats/ClimateChange_S tatAndInd_global.cshtml