Preliminary results of the analysis of existing environment related indicator sets (EGM-FDES 2.13)

Expert Group Meeting on the Framework for the Development of Environment Statistics

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United Nations Statistics Division

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I. Background

- EGM in 2009 recommended that UNSD develop a core set of environment statistics to provide guidance to countries with limited resources and at early stages of environment statistics.
- Core set should include limited number of variables accompanied by methodological description and guidance for their compilation.
- Core set of environment statistics should be based on *UNSD List of Environmental Indicators* (adopted by Stat. Com. 1995) and on assessment of international data collections, major global/regional indicator initiatives, and consider pertinent data needs created by global environmental conventions and MEAs.

I. Background (cont.)

- The timetable for the revision of the UN FDES and the establishment of the core set of statistics is that both outputs should be submitted to the 43rd session of the Statistical Commission in 2012 for adoption.
- The Statistical Commission, at its 41st session in 2010, endorsed the programme of work for the revision of the FDES and the development of a core set of environment statistics.

(For more details see paper to (E/CN.3/2010/9) and report of the 41st session of the Statistical Commission at: (http://unstats.un.org/unsd/statcom/sc2010.htm)

II. Core set of environment statistics - overview

- As noted earlier the EGM requested that UNSD produce a first draft of the core set of environment statistics for this meeting.
- However, due to the ongoing work on the revision of the FDES where the structure, topics and contents have not yet been agreed upon, UNSD decided to present an analysis of existing environment related indicator sets, as well as a list of common indicators from the reviewed indicator sets.
- UNSD compiled indicators from 37 sources (65 lists/sets) comprising international, regional, inter-governmental institutions, global environmental conventions, academia and NGOs, and selected preliminary themes/sub-themes under which to organize them.

II. Indicators vs. statistics/variables

- Indicators are: used to synthesize and present complex information; a means of summarizing, simplifying and communicating information to decision makers, policy analysts, researchers, the business community and the general public; are used for making comparisons over time, within and between countries.
- Indicators can be individual variables, ratios, aggregates, or some other form of derived data.

III. Some issues - indicators vs. statistics

- Currently the information obtained from the sources (lists/sets) are a combination of indicators, statistics/ variables if we look at them in the traditional sense. E.g. in forests, we have included Protected forest area as well as Protected forest area as a percentage of total forest area.
  - What level of information should be included?
  - Should we have the indicators, as well as the underlying statistics/variables/data used to produce the indicators?

III. Some issues - what sources to use

- The 37 (65 lists/sets) sources are: ADB, BIP, CDIAC, CARICOM, CHRR, CRED, CSD, CBD, Ramsar, EECCA, ESCAP, ECE, ECLAC, ECOWAS, EEA, Eurostat, FAO, GISIN, IPCC, IUCN, ILAC, MDG, NEPAD, OECD, PSMSL, SEDAC-CIESIN, UNEP (Basel, Ozone, WCMC, etc.), UNFCCC, UN-HABITAT, UNCCD, UNSD, World Bank, WHO, WMO, WRI, Yale/Columbia.
  - Do they cover all the possible sources?
- Currently no national sources were consulted.

III. Some issues – criteria for inclusion of lists/sets

- The 65 lists/sets were obtained from a variety of information: established lists of indicators (e.g. MDG, CSD) proposed sets of indicators (ECE/OECD/Eurostat), databases (FAO Aquastat, UNEP-GEMS), compendia (ESCWA, OECD), etc.
  - What should be the criteria for inclusion of the lists/sets?

III. Some issues – criteria for selection of indicators

- In the current proposed set of statistics/indicators the only criteria used for inclusion was the number of times (frequency of or most common indicators) the indicator appears.
  - What should be the criteria and priorities for the selection of the indicators?
    - frequency; policy relevance; coverage; availability of meta-data and methodology; measurability; availability of data and time series.

IV. Preliminary themes/sub-themes (10) and the 2575 indicators included

- Forests (260 indicators)
- Energy (212 indicators)
- Agriculture (220 indicators)
- Land (119 indicators)
- Waste (162 indicators)
- Coastal and marine areas (161 indicators)
- Natural disasters and extreme events (258 indicators)
- Air and climate (397 indicators)
- Freshwater (498 indicators)
- Ecosystems and biodiversity (288 indicators)

IV. Organization of the sub-themes

- Within each theme it was attempted to create sub-themes which would be similar across the themes, e.g., for forest, we have used quantity, quality and management, and then some other titles or sub-themes. Quantity, quality and management can work for freshwater, with some additional sub-themes, such as social/health issues, production, consumption etc. But this can't work across all themes, e.g., natural disasters. And some themes don't have exactly all the same sub-themes.

V. Questions

- We need to answer the questions that I have raised.
  - Should we have the indicators, as well as the underlying statistics/variables/data used to produce the indicators?
  - Do the 37 (65 lists/sets) cover all the possible sources?
  - What should be the criteria for inclusion of the lists/sets?
  - What should be the criteria and priorities for the selection of the indicators?

V. Additional Questions

1. Should ‘Environmental Health’ be included as a theme? Prop. of population using an improved sanitation facility has been included in ‘Freshwater’. Prevalence of air pollution diseases has been included in ‘Air and climate’.
2. Where should indicators on Minerals, Slums and Urbanization be included?
3. Indicators on mangroves appear in ‘Forests’, ‘Coastal and marine areas’, and ‘Ecosystems and biodiversity’. Sea level rise is in ‘Coastal and marine areas’.
4. Frequency of extreme events is in ‘Natural disasters and extreme events’ and ‘Air and climate’. Frequency of natural disasters is only in ‘Natural disasters and extreme events’. Should it also be in ‘Air and climate’?

VI. The way forward

- Based on the criteria that we decide for selection of the indicators, we need to further reduce the number of indicators in the core set as there are possibly too many now and some have not even been identified.
- Policy relevance should be considered to be one of the most important criteria.
- The core set should be matched with the FDES structure and accept the fact that there will be some empty cells. We should therefore prioritize the indicators included.
- The core set and the FDES should be combined into one document.

Thank you

for your attention