MANUAL ON THE BSES: WASTEWATER STATISTICS

Session One: Environment Statistics Toolbox

Outline

• Status of each part of the methodology sheet
• Diagrams
• Focus on next steps required
• Comments and observations to encourage breakout group discussion
### Part 1: Statistics in sub-component 3.2: Generation and Management of Wastewater

11 statistics from within this sub-component of the Basic Set of Environment Statistics:

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of wastewater generated (vol.)</td>
<td></td>
</tr>
<tr>
<td>Pollutant content of wastewater (mass)</td>
<td></td>
</tr>
<tr>
<td>Volume of wastewater collected (vol.)</td>
<td></td>
</tr>
<tr>
<td>Volume of wastewater treated (vol.)</td>
<td></td>
</tr>
<tr>
<td>Total urban wastewater treatment capacity (capacity in volume and # of plants)</td>
<td></td>
</tr>
<tr>
<td>Total industrial wastewater treatment capacity (capacity in volume and # of plants)</td>
<td></td>
</tr>
<tr>
<td>Total volume of wastewater discharged to the environment after treatment (vol.)</td>
<td></td>
</tr>
<tr>
<td>Total volume of wastewater discharged to the environment without treatment (vol.)</td>
<td></td>
</tr>
<tr>
<td>Pollutant content of discharged wastewater (mass)</td>
<td></td>
</tr>
</tbody>
</table>
Part 2: Introduction/relevance

• Work and research being currently undertaken.
• Trying to define issues concerning wastewater statistics, why this is an important issue, justification for attention to this issue
• This particular part could benefit from an expert with specific expertise to wastewater
• The section’s experience in the field of wastewater statistics mostly follows work on the UNSD/UNEP Questionnaire on Environment Statistics (water section), table W4: Wastewater Generation and Treatment
...and another diagram used in the Organisation for Economic Cooperation and Development (OECD)/Eurostat Questionnaire on the State of the Environment (Inland Waters) to be considered
Part 3: Definitions and description of the statistics

Considering all terms defined in

• **UNSD/UNEP Questionnaire on Environment Statistics (water section)**, especially table W4: Wastewater Generation and Treatment are available.

• **Organisation for Economic Cooperation and Development (OECD)/Eurostat Questionnaire on the State of the Environment (Inland Waters)** contains the same definitions and even more additional definitions to other relevant terms. (especially for statistics concerning pollutant content)

• **International Recommendations on Water Statistics** (United Nations, 2012) – coherent, principles, concepts and definitions for collection and compilation of water statistics

• Coherence to be ensured with **Manual of the Basic Set of Environment Statistics of the FDES**
  - **Water Resources Statistics** (sub-component 2.6: Water Resources)
  - **Human Settlements Statistics** (sub-component 5.1 :Human Settlements)
Part 4: International Sources and Recommendations

- Texts related to Sustainable Development Goal 6: Ensure availability and sustainable management of water and sanitation for all, especially target 6.3.1: Proportion of wastewater safely treated
- International Standard Industrial Classification of All Economic Activities (ISIC rev. 4) (United Nations, 2008)
- OECD database [https://stats.oecd.org](https://stats.oecd.org) (generation and discharge of wastewater, treatment capacity, etc.)
Part 5: Data collection and sources of data

• Scope
  All wastewater generated within a country.
• Statistical units
  • Wastewater treatment plants (often servicing one city), and aggregation of those to conceivably city, provincial or national levels.
• Measurements
• Sources and institutions
  • National Statistical Offices, Ministry of Water, Ministry of Environment, etc.
• Data collection
• Aggregation/disaggregation
• Quality control and validation
6. Uses and dissemination

- **Presentation formats**
- **SEEA accounts/tables that use these statistics**
- **Common statistics/indicators**
- **SDGs**
  - SEEA: Wastewater received from (various ISIC industries)
  - SDG 6.3.1:
    - Proportion of wastewater safely treated (World Health Organization presenting tabulated data in Excel using a sub-indicator approach).
    - Individual statistics which contribute to the calculation of the indicator being collected and disseminated by UNSD via the UNSD/UNEP Questionnaire.
Comments and observations

• Existing draft compiled within UNSD requires much development.
• Calling for interest from those who may have expertise on wastewater statistics to collaborate with us.
• In addition to developing the wastewater related contents of the FDES, UNSD has mostly been involved with validating water and wastewater statistics through the UNSD/UNEP Questionnaire on Environment Statistics and in contributing to the metadata on SDG 6.3.1 on wastewater.