Jordan Experience in Water & Waste Water Statistics

Eighth Meeting of Experts on Environmental Statistics

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jordan- DOS
Data available on: Quantities of surface, ground water and treated wastewater

Quantities of water supply for municipal and industrial uses

Wastewater treatment plants on design and operation capacity, detailed and specialized results on microbial and chemical tests

Chemical and physical analysis on drinking water
Status of Water Statistics in Jordan

- Quantity of water supply by source
- Water used for production and wastewater generated by certain sectors depending on specialized surveys
- Cost of water consumed as a commodity in some sectors
- Cost of infrastructure projects for water sectors
Overview of main data sources

- Survey

- Industrial Sector
- Government Sector
- Medical Sector
- Education & Hotels
Overview of main data sources

- Administrative record
Administrative Records
Sources of Data

Data was collected & calculated from different sectors and sources that are necessary to compute this indicator, namely: the Department of Statistics (DoS), Ministry of Water & Irrigation (MWI), and the Ministry of Agriculture (MoA). It is necessary to have a national coordination in place to ensure timely & consistent data collection.

Services & water supply efficiency is calculated as the service sector value added (ISIC 36-39 and ISIC 45-99) divided by water withdrawn for distribution by the water collection, treatment and supply industry (ISIC 36), expressed in USD/M³. Services value-added is obtained from national statistics, deflated to the baseline year 2015.
Water Resources

- The climate is generally arid: 70% of the country receives less than 100 mm
- 90% of the country receives less than 200 mm
- Northwestern highland: 2% receives around 300 mm

Water resources

1. Surface water: Jordan Rift Valley, springs and floods
2. Ground water: renewable and non-renewable
3. Treated wastewater
## Waste Water Indicators

### Wastewater Production and Treatment

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total wastewater generated</td>
<td>757.0</td>
<td>773.8</td>
<td>778.0</td>
<td>803.0</td>
<td>1000 m3/d</td>
</tr>
<tr>
<td>Manufacturing (ISIC 10-33)</td>
<td>85.5</td>
<td>83.1</td>
<td>71.2</td>
<td>70.4</td>
<td>1000 m3/d</td>
</tr>
<tr>
<td>Households</td>
<td>671.5</td>
<td>690.7</td>
<td>706.8</td>
<td>732.6</td>
<td>1000 m3/d</td>
</tr>
<tr>
<td>Wastewater treated in urban Wastewater treatment plants</td>
<td>671.5</td>
<td>690.7</td>
<td>706.8</td>
<td>732.6</td>
<td>1000 m3/d</td>
</tr>
</tbody>
</table>
### Water & Wastewater Indicator

**Used Water Quantity by Source and Usage, 2020 (m.c.m)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Livestock</th>
<th>Irrigation</th>
<th>Industrial</th>
<th>Municipal and tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Water</td>
<td>363.88</td>
<td>8.4</td>
<td>200.51</td>
<td>6.19</td>
</tr>
<tr>
<td>Ground Water **</td>
<td>593.64</td>
<td>1.53</td>
<td>203.01</td>
<td>25</td>
</tr>
<tr>
<td>Treated Wastewater</td>
<td>170.09</td>
<td>0</td>
<td>166.74</td>
<td>3.35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1127.61</td>
<td>9.93</td>
<td>570.26</td>
<td>34.54</td>
</tr>
</tbody>
</table>
Difficulties in Environmental Statistics Division

- Deficiency in detailed data related to natural resources; e.g., water asset accounts describe stock at the beginning and end of an accounting period which is not available

- Need for specialized studies related to degradation and pollution of resources which is expensive (effect of air pollution on health and valuation of water in agriculture depending on change in productivity approach)

- Fear of under- or over-estimating resources

- Training on calculation methodologies
Water Sector Challenges

- Scarcity of renewable water resources
- Depletion of ground water
- High losses during distribution and weakness in delivery
- Limited wastewater plants efficiency
- High population number forced immigration
- Per capita water supply is around 120 m³/day in 2020 and expected to be 90 m³/year in 2025
Mechanism of implementation and work

Higher Steering Committee (HSC)

Department of Statistics Group

Ministry of Planning Working Group

Focal points from various concerned institutions
Goal 6

Total indicators: 11
Available indicators: 10
% 91
Challenges to Sustainable Development Indicators

- There are gaps, lack of comprehension and required levels of details to produce the indicator.
- Shortages of financial support for the implementation of large sample surveys to provide basic data for some indicators.
- The need for coordination to assess the development of indicators and determine performance indicators for each indicator.
- Difficulties in the implementation of some surveys on the provision of indicators.
Recommendations

- Adopt a clear and binding plan of action for Arab countries to produce sustainable development reports.
- Provide financial support to Member States to comply with these reports within the time set for the collection of indicators.
- Provide technical assistance and training on SEEA, FDES, water statistics and methodologies to support the compilation of water-related SDG indicators.
- At the national level, focus on the importance of a national task force for the preparation of the report on sustainable development covering all national focal points.