Improving Water-Use Efficiency Across All Sectors

18 May 2022

Arab Regional Preparatory Meeting for the Midterm Comprehensive Review of the Water Action Decade

Beirut, Lebanon, 18-19 May 2022
Goal 6 aims to:

“Ensure availability and sustainable management of water and sanitation for all”

Target 6.4: “By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity”

Source: 2030 Agenda for Sustainable Development

- 6.4.1 Change in water-use efficiency
- 6.4.2 Level of water stress
**Indicator 6.4.1: Change in WUE over time**

- WUE is a measure of the **economic output per unit of water**, considering both the productive uses and losses in the distribution networks.

\[ WUE = \frac{GVA}{V} \]

- This is an **economic indicator**; the aim is to **increase water-use efficiency**.
WUE is strongly influenced by the structure of the economy and the importance of water-intensive sectors.

Data source: FAO
19 $/m³

is the ratio of US Dollar value added to the volume of water withdrawals worldwide in 2019

10.1 $/m³

is the ratio of US Dollar value added to the volume of water withdrawals in the Arab region in 2019

Data source: FAO
Overview of WUE in Arab Countries in 2017-2018

Data source: FAO - Exported from UN-Water
https://sdg6data.org
Globally, WUE has increased by 10% over the period 2015-2018
CHANGE IN WUE IN THE ARAB REGION (2000-2018)

Data source: FAO - Exported from UN-Water
https://sdg6data.org
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Change in WUE for 21 Arab Countries (2000-2019)

Data source: FAO
Change in WUE, GVA and TWW for 11 Arab Countries

- List of countries: Algeria, Bahrain, Egypt, Iraq, Jordan, Oman, Palestine, Qatar, Saudi Arabia, Tunisia and United Arab Emirates
- This group represents 84% of the regional GVA, 72% of TWW and 61% of the regional population

Data source: FAO
FAO Capacity building on indicator 6.4.1 – 2020/21

2 FAO regional on-line trainings on SDG 6.4 indicators
- 5 weeks each
- 16 countries in the Arab Region
- Audience: 547 water professionals and statisticians enrolled out of 295 women

FAO Country trainings on SDG 6.4 indicators
- SDG 6.4 in Oman
- SDG6.4.2 in Algeria and Tunisia

FAO E-learning course on the indicator 6.4.1
URL: https://elearning.fao.org/course/view.php?id=475

SDG 6 Data Portal
URL: https://www.sdg6data.org/
1. WUE ~ $10.1\text{ USD/m}^3$ in 2019

2. Overall, WUE has been increasing: +3 to 5% since 2010

3. WUE is largely influenced by the weight of irrigated agriculture which is a “low-value” and water intensive sector

4. Available datasets are not sufficient to detect a significant trend in terms of “decoupling” between economic growth and water use.

5. Data availability and accuracy remain critical for the computation of the indicator in the Arab region.
1. **Increase national-level capacities for monitoring SDG 6 indicators**
   - To address data gaps
   - To enable countries to report more frequently - on an annual basis
   - To provide reliable and long-time series to assess the dependency between GVA and water use

2. **Continue efforts to improve water use efficiency**
   - Particularly relevant in the irrigated agriculture sector
   - Promote water accounting assessments to understand where efficiency can be improved in each sector

3. **Ensure social equity and environmental sustainability in water resource allocation**
   - Sustaining economic growth based on activities that are more efficient and less water-dependent does not mean to forego sectors with low WUE
   - It is important that water is allocated where it is most beneficial to the society and to protect the environment
THANK YOU