



Food and Agriculture Organization
of the United Nations



Water and the SDGs: An Arab Perspective (6.4)

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SDG target 6.4

SDG-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



SDG indicators

FAO is custodian agency for the indicators of the SDG target 6.4:

- 6.4.1 Change in water use-efficiency over time ($\$/m^3$).
 - 6.4.2 Level of water stress: freshwater withdrawal in percentage of available freshwater resources (%)
 - 6.4.3 *Number of people affected by water scarcity/stress (??)*
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Water Scarcity

“An imbalance between supply and demand of freshwater in a specified domain as a result of a high rate of demand compared with available supply, under prevailing institutional arrangements and infrastructural conditions”

It is a **relative** concept, depending on the balance between supply and demand for water

It is a **dynamic** concept as it varies over time as a result of hydrological variability (either natural or human-induced)

Determinants: Population growth, natural water endowment and hydrology, water development (including production of new water), infrastructure development (including storage and distribution), institutional capacity to provide services, policies of development



Determinant	Governmental Control
Demography (population growth)	-
Natural water endowment	-
Hydrology/climate	- (some interference)
Water development	X
Infrastructure development	X
Institutional capacity	X
Developmental policies	X

It would be appropriate to have a metric for 6.4.3 that capture demand (from people) & supply (from govts)



Proposed metrics

- Sub-national **disaggregation** of indicator 6.4.2, layering with population density
- Computation of **water withdrawal per capita**, at sub-national level
- Level of water stress based on **% of water gap to full demand satisfaction** (GAP_w)

$$GAP_w = \frac{(\text{Minimum demand} - \text{water withdrawal})}{\text{Minimum demand}} \times 100$$

WATER GAP TO FULL-DEMAND (%)	LEVEL OF WATER STRESS
< 0	None
0-25	Moderate
26-50	High
> 50	Very-high



Thank you



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