

18 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

Indicator type **Core indicator**

Published

Versioning

First publication Latest update

Area and sub-area

Area and sub-area

Presentation

Tier

Indicator definition and description

Unit of measure

Coverage

Spatial aggregation

Reference period

Update frequency

Base period

Disaggregation (operational indicators)

Disaggregation (operational indicators)	Comments
<input type="text" value="Spatial"/>	<input type="text" value="e.g. by river basin"/>
<input type="text" value="Temporal (by month, by season)"/>	

Other related -indicators (e.g.contextual, proxy, other core indicators)

ID	Subindicator	Type
<input type="text" value="40"/>	<input type="text" value="Water exploitation index"/>	<input type="text" value="Proxy indicator"/>
<input type="text" value="43"/>	<input type="text" value="Water consumption index"/>	<input type="text" value="Contextual indicator"/>
<input type="text" value="44"/>	<input type="text" value="Water abstraction by individual economic activities and households"/>	<input type="text" value="Contextual indicator"/>
<input type="text" value="45"/>	<input type="text" value="Water consumption (total and by different economic activities and households)"/>	<input type="text" value="Core indicator"/>

Relevance

Policy context and rationale

Related SDG indicator (SDG I.)

Relation w SDG-I.

Related Sendai Framework I.

Policy references

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Document title	Link
Integrated Water Resources Management (Global Water Partnership,)	http://www.gwp.org/the-challenge/what-is-iwrm/
Transforming our world: the 2030 Agenda for Sustainable Development (General Assembly of the United Nations, 2015)	https://sustainabledevelopment.un.org/post2015/transformingourworld

Methodology

Methodology for indicator calculation	<p>The indicator is computed as the total annual freshwater withdrawn (TWW) by main sectors divided by the difference between the long-term annual total renewable freshwater resources (TRWR) and the environmental water requirements (Env.), multiplied by 100. All variables are expressed in km³/year (10⁹ m³/year).</p> <p>Main sectors, as defined by ISIC standards, include for example agriculture; forestry and fishing; manufacturing; electricity industry; and municipalities. This indicator is also known as water withdrawal intensity.</p>
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Methodology references

Document title	Link
Integrated Monitoring Guide for SDG 6 (UN WATER, 2017)	https://www.unwater.org/publications/integrated-monitoring-guide-sdg-6-2/
Step-by-step monitoring methodology for indicator 6.4.2 (GEMI – Integrated Monitoring Initiative for SDG 6, 2019)	https://www.unwater.org/app/uploads/2020/02/EN-Step-by-step-for-indicator-6-4-2-V20190204_rev.pdf
Metadata of SDG indicator 6.4.2: Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (Food and Agriculture Organization of the United Nations (FAO), 2017)	https://unstats.un.org/sdgs/metadata/files/Metadata-06-04-02.pdf

Classification syst.	SEEA-CF: Classification of inland water bodies
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Data sources

Main source	Official statistics: SEEA and/or SNA
Explanation	<p>Best option: SEEA water accounts</p> <p>Other option(s): Data for this indicator are usually collected by national ministries and institutions having water-related issues in their mandate, such as ministries of water resources, agriculture, or environment. Data are mainly published within national water resources and irrigation master plans, national statistical yearbooks and other reports (such as those from projects, international surveys or results and publications from national and international research centres).</p>

SEEA Accounts that can serve as data sources

SEEA Account	Comments
Physical flow accounts for water	
Physical asset accounts for water resources	

UN-FDES	2.6.1: Water resources
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International databases containing this indicator

FAO Aquastat	http://www.fao.org/nr/water/aquastat/data/quer y/index.html?lang=en
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SDG indicators database

<https://unstats.un.org/sdgs/indicators/database/>

Comments

Comments

The indicator has certain limitations as it cancels out seasonal and sub-national water stress situations. However, longterm trends can be shown;
If the hydrological year (instead of the calendar year) is used to compute the indicator this should be indicated in the metadata.