

Progress on Level of Water Stress

18%

of the world's renewable water resources is being withdrawn, after taking into account environmental flow requirements (SDG indicator 6.4.2, 2020)

- Data provider: FAO through [AQUASTAT](#)
- Available time series: 2000-2020
- Number of countries (and areas) reporting in the last five years: 166
- Proportion of world population covered by reporting in the last five years: 99%
- Proportion of world economy covered by reporting in the last five years: 98%
- Proportion of world land area covered by reporting in the last five years: 99%
- [Learn more about the indicator here](#)
- [Read the latest progress report here](#)



Improving farming systems will help reduce the demand for water and alleviate the pressure on ecosystems. Healthy ecosystems are in turn essential to stabilize the water cycle, allowing more recharge for aquifers and a steadier run-off in surface streams.

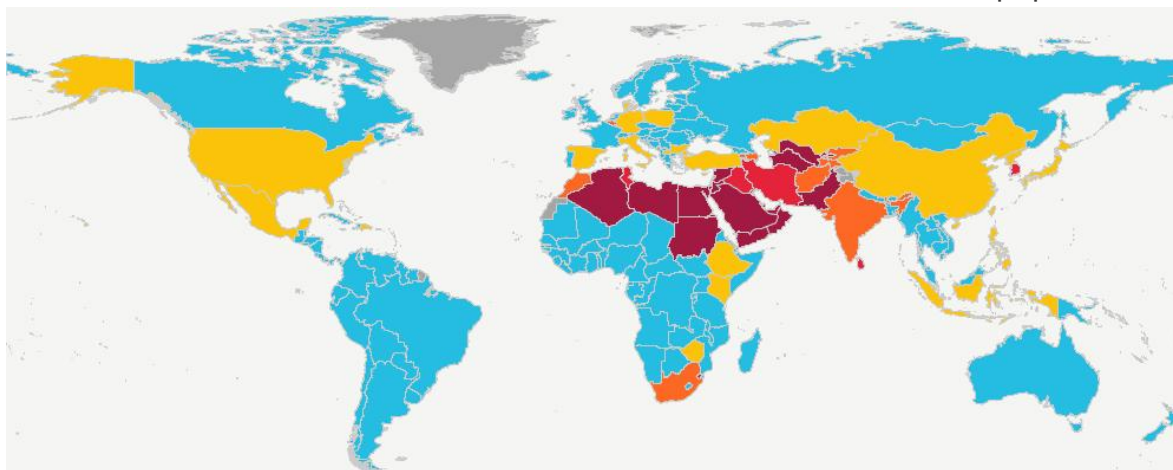
SDG target 6.4 is: 'By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.'

To track progress towards the target, SDG indicator 6.4.2 monitors how much freshwater is being withdrawn by all economic activities, compared to the total renewable freshwater resources available.

Global status of indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (2020) ^[1]

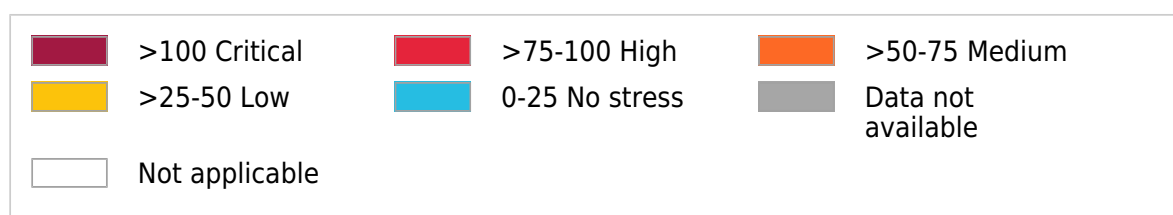
Number of people living in countries (or areas) with water stress (using more than 50% of available water resources): --- (---% of the world population)

Number of people living in countries (or areas) with critical water stress (using more than 100% of available water resources): --- (---% of the world population)

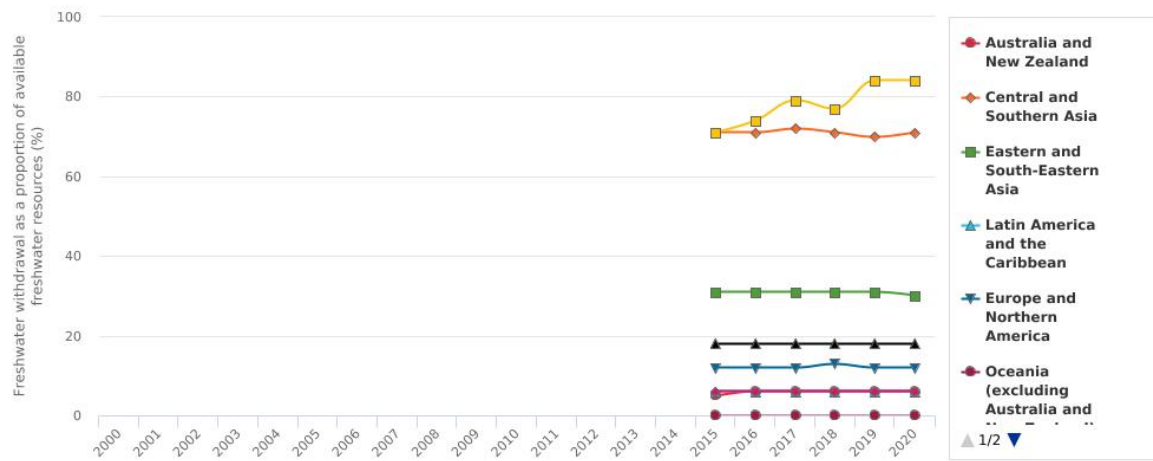


The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines represent approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning the sovereignty over the Falkland Islands (Malvinas).

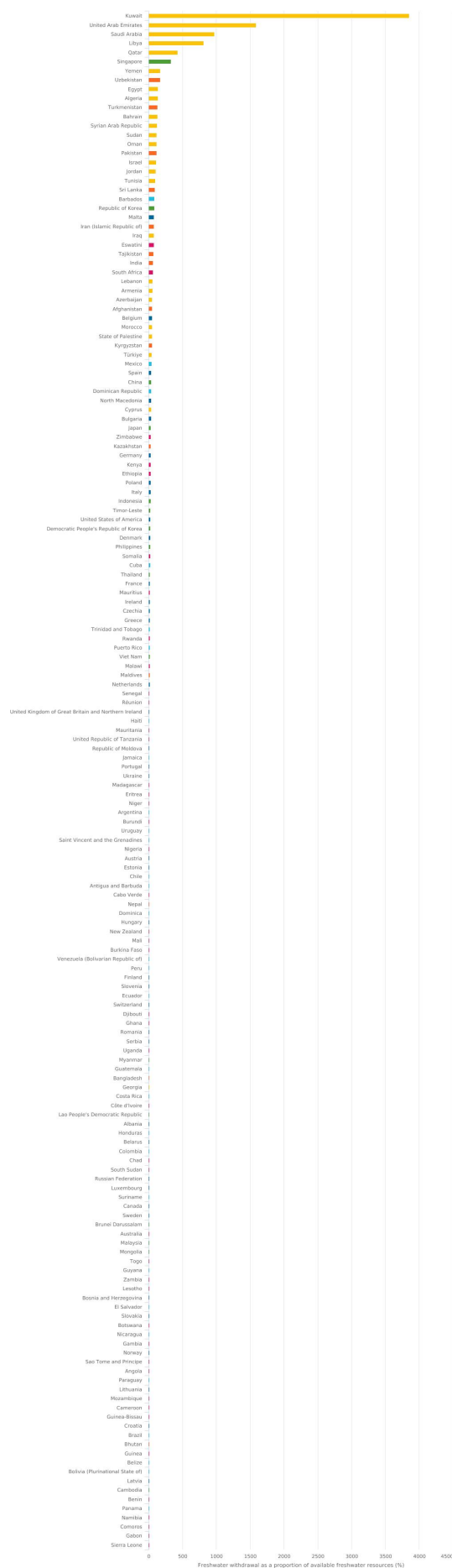
Freshwater withdrawal as a proportion of available freshwater resources (%)



Change over time of indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources ^[2]

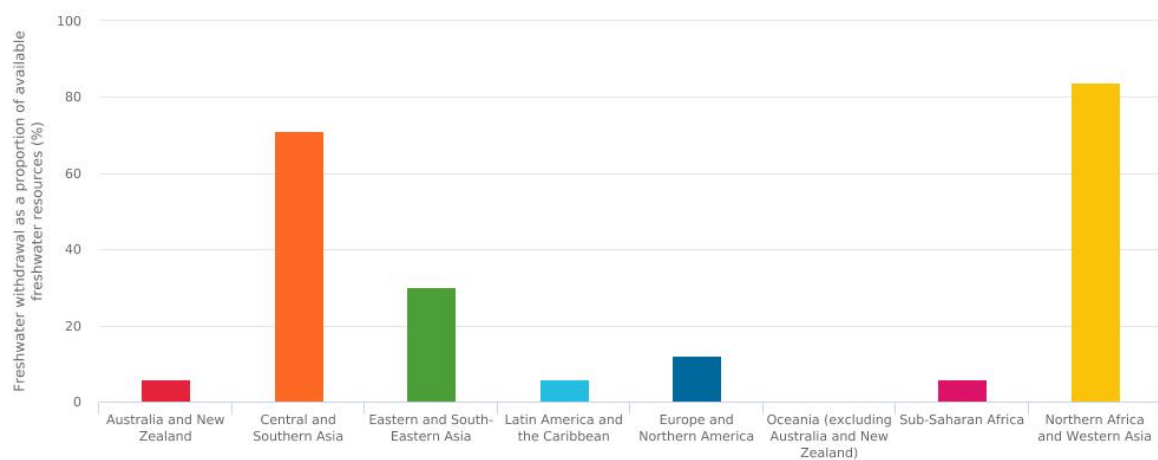


Status in different countries (or areas) of indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (2001-2020) ^[4]





Status in different SDG regions of indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (2020) ^[5]



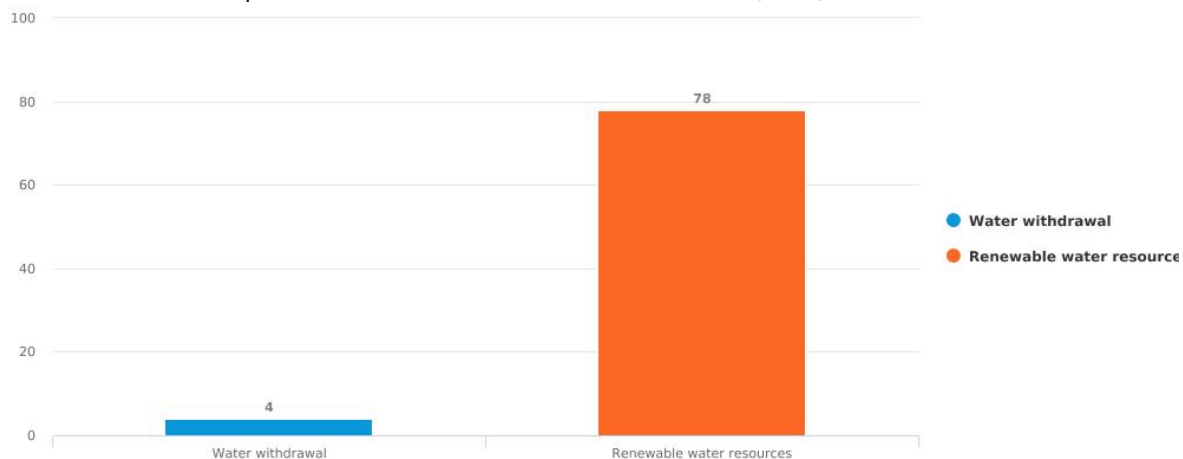
Status of different components of indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (2020)

Water resources and withdrawal, total and per capita ^[6]

Renewable water resources, world average: --- m3 per capita (2020)

Water withdrawal, world average: --- m3 per capita (2020)

Environmental flow requirements: ---% of renewable water resources (2020)



Source data indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources^[7]

Country (or area), region and world data for the latest year of reporting: 2001 - 2020

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Afghanistan	2020	54.76	65.33	20.37	
Albania	2020	4.72	30.2	0.79	
Algeria	2020	137.92	11.67	10.46	
Angola	2020	1.87	148.4	0.71	
Antigua and Barbuda	2020	8.46	0.05	0.01	
Azerbaijan	2020	55.6	34.67	12.58	
Argentina	2020	10.46	876.24	37.78	
Australia	2020	3.47	492	13.74	
Austria	2020	9.64	77.7	3.49	
Bahrain	2020	133.71	0.12	0.43	
Bangladesh	2020	5.72	1227.03	35.87	
Armenia	2020	57.09	7.77	2.83	
Barbados	2020	87.5	0.08	0.08	
Belgium	2020	51.58	18.3	4.26	
Bhutan	2020	1.41	78	0.34	
Bolivia (Plurinational State of)	2020	1.18	574	2.09	
Bosnia and Herzegovina	2001-2020	2.48	37.5	0.33	
Botswana	2020	2.31	12.24	0.22	
Brazil	2020	1.48	8647	67.2	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Belize	2020	1.26	21.73	0.1	
Brunei Darussalam	2001-2020	3.47	8.5	0.09	
Bulgaria	2020	37.52	21.3	5.08	
Myanmar	2020	5.8	1167.8	33.39	
Burundi	2020	10.19	12.54	0.28	
Belarus	2020	4.38	57.9	1.33	
Cambodia	2020	1.04	476.1	2.18	
Cameroon	2020	1.56	283.15	1.09	
Canada	2020	3.73	2902	36.23	
Cabo Verde	2020	8.43	0.3	0.03	
Central African Republic	2020	0.34	141	0.07	
Sri Lanka	2020	90.79	52.8	12.95	
Chad	2020	4.29	45.7	0.88	
Chile	2020	8.98	923.06	32.37	
China	2020	41.52	2840.22	581.29	
Colombia	2020	4.36	2360	29.12	
Comoros	2020	0.83	1.2	0.01	
Congo	2020	0.03	832	0.09	
Democratic Republic of the Congo	2020	0.23	1283	0.68	
Costa Rica	2020	5.35	113	3.14	
Croatia	2020	1.48	105.5	1.23	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Cuba	2020	23.94	38.12	6.96	
Cyprus	2020	37.59	0.78	0.28	
Czechia	2020	20.77	13.15	1.37	
Benin	2020	0.98	26.39	0.23	
Denmark	2020	26.4	6	0.98	
Dominica	2001-2020	8.3	0.2	0.02	
Dominican Republic	2020	39.55	23.5	9.08	
Ecuador	2020	6.78	442.4	9.92	
El Salvador	2020	2.43	26.27	2.12	
Equatorial Guinea	2001-2020	0.17	26	0.02	
Ethiopia	2020	32.26	122	10.55	
Eritrea	2020	11.18	7.32	0.58	
Estonia	2020	9.23	12.81	0.85	
Fiji	2020	0.3	28.55	0.08	
Finland	2020	7.11	110	3.5	
France	2020	23	211	26.27	
Djibouti	2001-2020	6.33	0.3	0.02	
Gabon	2020	0.5	166	0.14	
Georgia	2020	5.39	63.33	1.65	
Gambia	2020	2.21	8	0.1	
State of Palestine	2020	50.26	1.67	0.9	
Germany	2020	33.5	154	28.48	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Ghana	2020	6.31	56.2	1.46	
Greece	2020	20.48	68.4	10.12	
Guatemala	2020	5.74	127.91	3.32	
Guinea	2020	1.37	226	0.89	
Guyana	2020	3.3	271	1.44	
Haiti	2020	13.38	14.02	1.45	
Honduras	2020	4.62	92.16	1.61	
Hungary	2020	8.07	104	4.66	
Iceland	2020	0.39	170	0.28	
India	2020	66.49	1910.9	761	
Indonesia	2020	29.7	2018.7	222.64	
Iran (Islamic Republic of)	2020	81.29	137.04	93.3	
Iraq	2020	79.51	89.86	56.62	
Ireland	2020	21.64	52	1.54	
Israel	2020	110.09	1.78	2.3	
Italy	2020	29.81	191.3	33.89	
Côte d'Ivoire	2020	5.09	84.14	1.16	
Jamaica	2020	12.47	10.82	1.35	
Japan	2020	36.05	430	78.4	
Kazakhstan	2020	34.1	108.41	24.56	
Jordan	2020	104.31	0.94	1.1	
Kenya	2020	33.24	30.7	4.03	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Democratic People's Republic of Korea	2020	27.74	77.15	8.66	
Republic of Korea	2020	85.22	69.7	27.08	
Kuwait	2020	3850.5	0.02	1.25	
Kyrgyzstan	2020	50.04	23.62	7.66	
Lao People's Democratic Republic	2020	4.79	333.5	7.35	
Lebanon	2020	58.79	4.5	1.84	
Lesotho	2020	2.57	3.02	0.04	
Latvia	2020	1.07	34.94	0.18	
Liberia	2020	0.26	232	0.15	
Libya	2020	817.14	0.7	5.83	
Lithuania	2020	1.83	24.5	0.25	
Luxembourg	2020	3.96	3.5	0.05	
Madagascar	2020	11.26	337	13.56	
Malawi	2020	17.5	17.28	1.36	
Malaysia	2020	3.44	580	5.49	
Maldives	2001-2020	17.12	0.03	0.01	
Mali	2020	8	120	5.19	
Malta	2020	81.86	0.05	0.06	
Mauritania	2020	13.25	11.4	1.35	
Mauritius	2020	22.06	2.75	0.61	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Mexico	2020	44.82	461.89	89.55	
Mongolia	2020	3.4	34.8	0.46	
Republic of Moldova	2020	12.56	12.27	0.8	
Morocco	2020	50.75	29	10.43	
Mozambique	2020	1.75	217.1	1.47	
Oman	2020	116.71	1.4	1.92	
Namibia	2020	0.86	39.91	0.29	
Nepal	2020	8.31	210.2	9.5	
Netherlands	2020	16.8	91	8.31	
New Zealand	2020	8.05	327	4.89	
Nicaragua	2020	2.22	164.52	1.27	
Niger	2020	11.02	34.05	2.58	
Nigeria	2020	9.67	286.2	12.48	
Norway	2020	2.05	393	2.69	
Pakistan	2020	116.31	246.8	183.45	
Panama	2020	0.9	139.3	1.21	
Papua New Guinea	2001-2020	0.1	801	0.39	
Paraguay	2020	1.84	387.77	2.41	
Peru	2020	7.18	1879.8	38.55	
Philippines	2020	26.25	479	85.87	
Poland	2020	30	60.5	9.21	
Portugal	2020	12.32	77.4	6.13	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Guinea-Bissau	2020	1.5	31.4	0.19	
Timor-Leste	2020	28.27	8.22	1.17	
Puerto Rico	2020	19.54	7.1	3.27	
Qatar	2020	431.03	0.06	0.88	
Réunion	2001	15.15			
Romania	2020	6.01	212.01	6.42	
Russian Federation	2020	4.12	4525.44	64.82	
Rwanda	2020	20.2	13.3	0.6	
Saint Vincent and the Grenadines	2001-2020	9.7	0.1	0.01	
Sao Tome and Principe	2020	1.88	2.18	0.04	
Saudi Arabia	2020	974.17	2.4	25.99	
Senegal	2020	16.28	38.97	3.02	
Serbia	2020	6	162.2	5.32	
Sierra Leone	2020	0.5	160	0.21	
Singapore	2001-2020	328.24	0.6	0.66	
Slovakia	2020	2.39	50.1	0.56	
Viet Nam	2020	18.13	884.12	82.03	
Slovenia	2020	6.78	31.87	1	
Somalia	2020	24.53	14.7	3.3	
South Africa	2020	65.03	51.35	19.19	
Zimbabwe	2020	35.41	20	3.77	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Spain	2020	43.25	111.5	29.02	
South Sudan	2020	4.23	49.5	0.66	
Sudan	2020	118.66	37.8	26.94	
Suriname	2020	3.95	99	0.62	
Eswatini	2020	77.56	4.51	1.07	
Sweden	2020	3.58	174	2.48	
Switzerland	2020	6.5	53.5	1.77	
Syrian Arab Republic	2020	124.36	16.8	16.76	
Tajikistan	2020	69.94	21.91	9.9	
Thailand	2020	23.01	438.61	57.31	
Togo	2020	3.39	14.7	0.22	
Trinidad and Tobago	2020	20.33	3.84	0.38	
United Arab Emirates	2020	1587.33	0.15	4.98	
Tunisia	2020	98.11	4.62	3.59	
Türkiye	2020	45.71	211.6	62.21	
Turkmenistan	2020	135.21	24.76	26.24	
Uganda	2020	5.83	60.1	0.64	
Ukraine	2020	12.26	175.28	9.87	
North Macedonia	2020	38.7	6.4	0.47	
Egypt	2020	141.17	57.5	77.5	

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
United Kingdom of Great Britain and Northern Ireland	2020	14.35	147	8.42	
United Republic of Tanzania	2020	12.96	96.27	5.18	
United States of America	2020	28.16	3069	444.29	
Burkina Faso	2020	7.82	13.5	0.82	
Uruguay	2020	9.79	172.2	3.66	
Uzbekistan	2020	168.92	48.87	58.9	
Venezuela (Bolivarian Republic of)	2020	7.54	1325	22.63	
Yemen	2020	169.76	2.1	3.56	
Zambia	2020	2.84	104.8	1.57	
Andorra	2020		0.32		
Bahamas	2020		0.7		
Solomon Islands	2020		44.7		
Cook Islands	2020		0		
Faroe Islands	2020		0		
Kiribati	2020		0		
Grenada	2020		0.2	0.01	
Holy See	2020		0		
Liechtenstein	2020		0		

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Monaco	2020			0	
Montenegro	2020			0.16	
Nauru	2020		0.01		
Vanuatu	2020		10		
Niue	2020		0		
Micronesia (Federated States of)	2020		0		
Marshall Islands	2020		0		
Palau	2020		0		
Saint Kitts and Nevis	2020		0.02	0.02	
Saint Lucia	2020		0.3	0.04	
Seychelles	2020		0	0.01	
Tokelau	2020		0		
Tonga	2020		0		
Tuvalu	2020		0		
Samoa	2020		0		
Northern Africa and Western Asia	2017-2020	83.94	580.4		
Oceania (excluding Australia and New Zealand)	2017-2020	0.16	884.26		
Europe and Northern America	2017-2020	12.45	13758.84		

Country (or area), SDG region, world	Year	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
		Overall (%)	Renewable water resources	Water withdrawal	Environmental flow requirements
Eastern and South-Eastern Asia	2017-2020	30.36	9847.02		
Central and Southern Asia	2017-2020	71.13	4155.71		
World	2017-2020	18.24	42825.6		
Australia and New Zealand	2017-2020	5.6	819		
Sub-Saharan Africa	2017-2020	6.18	5488.56		
Latin America and the Caribbean	2017-2020	5.98	19203.52		

Description of indicators

[1]

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources > Overall (%)

Level of water stress measured as the ratio of total freshwater withdrawal to total renewable freshwater resources, after taking into account environmental flow requirements.

[2]

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources > Overall (%)

Level of water stress measured as the ratio of total freshwater withdrawal to total renewable freshwater resources, after taking into account environmental flow requirements.

[3]

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources > Overall (%)

Level of water stress measured as the ratio of total freshwater withdrawal to total renewable freshwater resources, after taking into account environmental flow requirements.

[4]

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources > Overall (%)

Level of water stress measured as the ratio of total freshwater withdrawal to total renewable freshwater resources, after taking into account environmental flow requirements.

[5]

Water withdrawal > Total > Total

Annual quantity of water withdrawn for agricultural, industrial and municipal purposes. It includes water from primary renewable freshwater resources and secondary sources of water, as well as water from over-abstraction of renewable groundwater or withdrawal of fossil groundwater, direct use of agricultural drainage water and (treated) wastewater, and desalinated water. It does not include in stream uses, which are characterized by a very low net consumption rate, such as recreation, navigation, hydropower, inland capture fisheries, etc. Definitions of sectors follow the ISIC 4 coding: 1. Agriculture includes agriculture, forestry and fishing (ISIC A); 2. Industry includes mining and quarrying, manufacturing, constructions and energy (ISIC B, C, D and F); 3. Municipal includes service sectors (ISIC 36-39 and ISIC 45-99), including water collection, treatment and supply industry (ISIC 36).

Renewable water resources > Total > Total

Total Renewable Water Resources (TRWR): The sum of internal renewable water resources (IRWR) and external renewable water resources (ERWR). It corresponds to the maximum theoretical yearly amount of water available for a country at a given moment.

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources > Environmental flow requirements

Quantity and timing of freshwater flows required to sustain freshwater ecosystems and the human livelihoods and wellbeing that depend on them.

[6]

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources > Overall (%)

Level of water stress measured as the ratio of total freshwater withdrawal to total renewable freshwater resources, after taking into account environmental flow requirements.

Renewable water resources > Total > Total

Total Renewable Water Resources (TRWR): The sum of internal renewable water resources (IRWR) and external renewable water resources (ERWR). It corresponds to the maximum theoretical yearly amount of water available for a country at a given moment.

Water withdrawal > Total > Total

Annual quantity of water withdrawn for agricultural, industrial and municipal purposes. It includes water from primary renewable freshwater resources and secondary sources of water, as well as water from over-abstraction of renewable groundwater or withdrawal of fossil groundwater, direct use of agricultural drainage water and (treated) wastewater, and desalinated water. It does not include in stream uses, which are characterized by a very low net consumption rate, such as recreation, navigation, hydropower, inland capture fisheries, etc. Definitions of sectors follow the ISIC 4 coding: 1. Agriculture includes agriculture, forestry and fishing (ISIC A); 2. Industry includes mining and quarrying, manufacturing, constructions and energy (ISIC B, C, D and F); 3. Municipal includes service sectors (ISIC 36-39 and ISIC 45-99), including water collection, treatment and supply industry (ISIC 36).

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources > Environmental flow requirements

Quantity and timing of freshwater flows required to sustain freshwater ecosystems and the human livelihoods and wellbeing that depend on them.

About

Through the UN-Water Integrated Monitoring Initiative for Sustainable Development Goal (SDG) 6, the United Nations seeks to support countries in monitoring water- and sanitation-related issues within the framework of the 2030 Agenda for Sustainable Development, and in compiling country data to report on global progress towards SDG 6. The Initiative brings together the United Nations agencies who are formally mandated to compile country data for the purpose of global reporting on SDG 6.

To learn more about water and sanitation in the 2030 Agenda for Sustainable Development, and the Integrated Monitoring Initiative for SDG 6, visit our website:

www.sdg6monitoring.org

Monitoring SDG 6 involves a wide range of stakeholders across different sectors and levels of government. To enable a comprehensive assessment and analysis of the state of water resources and possible development paths, one of the monitoring effort's key objectives is to collate all the information, in support of an integrated management approach that helps reduce institutional fragmentation. For this reason, the Integrated Monitoring Initiative has developed the SDG 6 Data Portal, which brings together data on all the SDG 6 global indicators, as well as other key social, economic and environmental data.

To explore the data and assess progress towards SDG 6, and generate snapshots such as this one, visit our portal: www.sdg6data.org.



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WMO

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MINISTÈRE
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Federal Ministry
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and Development



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Sida



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