



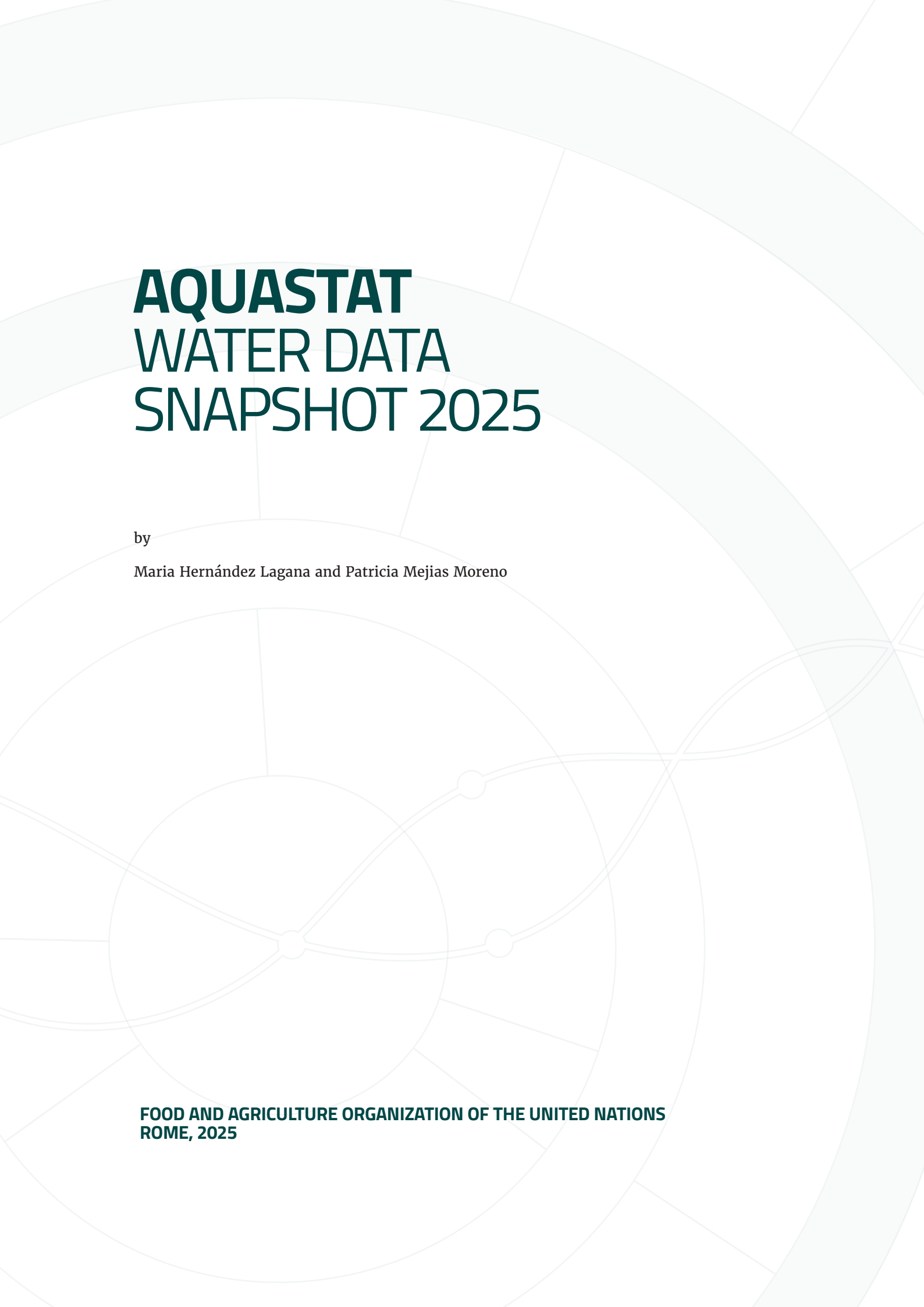
Food and Agriculture  
Organization of the  
United Nations

# AQUASTAT

## WATER DATA SNAPSHOT 2025





The background features a series of concentric circles in shades of light gray. Overlaid on these is a network diagram consisting of several circular nodes connected by thin, light gray lines. The nodes are positioned at various points, some on the circles and others between them, creating a web-like structure. The overall design is clean and modern, with a focus on geometric shapes and connectivity.

# **AQUASTAT** WATER DATA SNAPSHOT 2025

by

Maria Hernández Lagana and Patricia Mejias Moreno

**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS**  
**ROME, 2025**

Required citation:

Hernandez Lagana, M. & Mejias Moreno, P. 2025. *AQUASTAT* water data snapshot 2025. Rome, FAO.  
<https://doi.org/10.4060/cd7054en>

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-140140-8  
© FAO, 2025



Some rights reserved. This work is made available under the Creative Commons Attribution- 4.0 International licence (CC BY 4.0: <https://creativecommons.org/licenses/by/4.0/legalcode.en>).

Under the terms of this licence, this work may be copied, redistributed and adapted, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If a translation or adaptation of this work is created, it must include the following disclaimer along with the required citation: "This translation [or adaptation] was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation [or adaptation]. The original [Language] edition shall be the authoritative edition."

Any dispute arising under this licence that cannot be settled amicably shall be referred to arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL). The parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of such a dispute.

Third-party materials. This Creative Commons licence CC BY 4.0 does not apply to non-FAO copyright materials included in this publication. Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

FAO photographs. FAO photographs that may appear in this work are not subject to the above-mentioned Creative Commons licence. Queries for the use of any FAO photographs should be submitted to: [photo-library@fao.org](mailto:photo-library@fao.org).

Sales, rights and licensing. FAO information products are available on the FAO website ([www.fao.org/publications](http://www.fao.org/publications)) and print copies can be purchased through the distributors listed there. For general enquiries about FAO publications please contact: [publications@fao.org](mailto:publications@fao.org). Queries regarding rights and licensing of publications should be submitted to: [copyright@fao.org](mailto:copyright@fao.org).

Cover photograph: ©FAO/Giulio Napolitano

# CONTENTS

|                                                                                              |           |
|----------------------------------------------------------------------------------------------|-----------|
| Foreword                                                                                     | v         |
| Abbreviations                                                                                | vi        |
| <b>AQUASTAT OVERVIEW</b>                                                                     | <b>1</b>  |
| What does AQUASTAT offer?                                                                    | 1         |
| How is the data collected?                                                                   | 2         |
| What is the latest data available?                                                           | 2         |
| <b>ABOUT THIS REPORT</b>                                                                     | <b>3</b>  |
| The structure                                                                                | 3         |
| Country definitions and classification                                                       | 3         |
| Aggregations                                                                                 | 4         |
| <b>WATER AND AGRICULTURE IN 2022</b>                                                         | <b>5</b>  |
| Renewable water resources                                                                    | 5         |
| Total renewable water resources per capita                                                   | 5         |
| Freshwater withdrawals                                                                       | 8         |
| Total freshwater withdrawals                                                                 | 8         |
| Freshwater withdrawals by economic sector                                                    | 9         |
| Freshwater withdrawals by source                                                             | 11        |
| Irrigation                                                                                   | 13        |
| Agricultural water and Sustainable Development Goal (SDG) Target 6.4                         | 16        |
| Sustainable Development Goal (SDG) Indicator 6.4.1: Change in water use efficiency over time | 16        |
| Sustainable Development Goal (SDG) Indicator 6.4.2: Level of water stress                    | 19        |
| <b>SOURCES</b>                                                                               | <b>22</b> |
| <b>APPENDIX 1</b>                                                                            | <b>23</b> |
| List of countries and regions                                                                | 23        |
| <b>APPENDIX 2</b>                                                                            | <b>28</b> |
| Glossary                                                                                     | 28        |
| <b>APPENDIX 3</b>                                                                            | <b>30</b> |
| Data tables (2022)                                                                           | 30        |

# FIGURES

|                                                                                                                       |    |
|-----------------------------------------------------------------------------------------------------------------------|----|
| 1. Response rate of AQUASTAT questionnaire per region (2022)                                                          | 2  |
| 2. Total renewable water resources per capita per region (2015 and 2022)                                              | 6  |
| 3. Annual global water resources distribution per capita (m <sup>3</sup> /inhabitant) (2022)                          | 6  |
| 4. Top countries with lowest total renewable water resources per capita (2022)                                        | 7  |
| 5. Total annual freshwater withdrawal per region (1 000 million m <sup>3</sup> ) (2015 and 2022)                      | 8  |
| 6. Total annual freshwater withdrawal per capita in 2015 and 2022 (m <sup>3</sup> /inhabitant) (2015–2022)            | 9  |
| 7. Proportion of freshwater withdrawal of each economic sector over the total freshwater withdrawal per region (2022) | 10 |
| 8. Percentage of agricultural freshwater withdrawal over the total freshwater withdrawal (2022)                       | 10 |
| 9. Freshwater withdrawals by source per region (2022)                                                                 | 11 |
| 10. Use of non-conventional water per region (2022)                                                                   | 12 |
| 11. Percentage of the cultivated area equipped for irrigation per region (2015–2022)                                  | 13 |
| 12. Percentage of global cultivated area equipped for irrigation (2022)                                               | 14 |
| 13. Area equipped for full control irrigation, by irrigation method used per region (2022)                            | 15 |
| 14. Top 10 counties with largest area equipped for full control irrigation (2022)                                     | 15 |
| 15. Water use efficiency (USD/m <sup>3</sup> ) per region (2015 and 2022)                                             | 16 |
| 16. Global water use efficiency (WUE) (2022)                                                                          | 17 |
| 17. Water use efficiency by economic sector per region (2022)                                                         | 17 |
| 18. Water use efficiency in the agricultural sector per region (2015 and 2022)                                        | 18 |
| 19. Water stress per region (2015 and 2022)                                                                           | 19 |
| 20. Global water stress (2022)                                                                                        | 20 |
| 21. Countries facing critical and high levels of water stress (2022)                                                  | 20 |
| 22. Agricultural sector contribution to water stress per region (2015–2022)                                           | 21 |

# TABLES

|                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| A1.1. Countries and geographic region for statistical use (M49)                        | 23 |
| A3.1. Key variables to measure pressure on water resources by country (2022)           | 30 |
| A3.2. Key variables to measure pressure on water resources by geographic region (2022) | 39 |

# FOREWORD

Accurate and up to date data and information on water and agriculture are essential for governments, international organizations, policymakers, researchers, and all stakeholders working toward ensuring sustainable water management in agriculture and the achievement of sustainable development.

AQUASTAT, the Food and Agriculture Organization of the United Nations (FAO)'s Global Information System on Water and Agriculture, provides free access to country level statistics on water resources and use. Since 1994, AQUASTAT collects, analyses and disseminates data and information by country and region on water availability, use and agricultural water management. Its primary goal is to support agriculture and rural development by providing reliable, standardized and comparable data to inform evidence based policies and actions.

As the custodian agency for the Sustainable Development Goal (SDG) Indicator 6.4.1 (change in water use efficiency over time) and Indicator 6.4.2 (level of water stress), FAO, through AQUASTAT, monitors progress towards the global commitment to ensure availability and sustainable management of water and sanitation for all.

AQUASTAT also supports countries in strengthening their statistical capacities to produce more and better water data, setting standards and methodologies and fostering the dissemination and use of agricultural water data.

The AQUASTAT water data snapshot 2025 presents a concise overview of water and agriculture with the most recent data up to 2022 collected during the 2024 cycle. This report offers users easy access to more than ten key indicators providing a quick insight into the status of water resources, agricultural water use, irrigated areas, water use efficiency (WUE) and water stress at global, regional and national levels through clear visuals, charts and maps.

I hope this report enables you to take further action and join the efforts of the Organization to promote the equitable and sustainable water use and management for better production, better nutrition, a better environment and a better life for all, leaving no one behind.

A handwritten signature in black ink, appearing to be 'Lifeng Li', written in a cursive style.

Lifeng Li

Director, Land and Water Division, FAO



# ABBREVIATIONS AND ACRONYMS

|             |                                                         |
|-------------|---------------------------------------------------------|
| <b>EFR</b>  | environmental flow requirements                         |
| <b>FAO</b>  | Food and Agriculture Organization of the United Nations |
| <b>NGO</b>  | non-governmental organization                           |
| <b>SDG</b>  | Sustainable Development Goal                            |
| <b>UN</b>   | United Nations                                          |
| <b>UNSD</b> | United Nations Statistical Division                     |
| <b>WUE</b>  | water use efficiency                                    |



# AQUASTAT OVERVIEW



© FAO/Giulio Napolitano

## WHAT DOES AQUASTAT OFFER?

The Food and Agriculture Organization of the United Nations (FAO)'s AQUASTAT portal (FAO, 2025a) provides a core database of country statistics, focused on water resources, water uses and agricultural water management. AQUASTAT also offers other water information in the form of complementary databases, such as the database on dams and reservoirs and the water and agriculture related institutions database.

Concretely, the system provides data, metadata, reports, country profiles, river basin profiles, regional analyses, maps, tables, spatial data, guidelines, and other tools on:

- water resources (internal, transboundary and total);
- water uses (by sector, source and wastewater);
- irrigation (location, area, typology, and technology);
- dams (location, height, capacity, and surface area); and
- water related institutions, policies and legislation.

AQUASTAT is an important source of information for different stakeholders ranging from United Nations (UN) agencies to non governmental organizations (NGOs) and from private companies to governmental bodies.

## HOW IS THE DATA COLLECTED?

AQUASTAT relies on strong collaboration with national institutions and the expertise of designated country correspondents to collect data on water and agriculture. Data are gathered through the annual “Water and Agriculture” questionnaire and a more comprehensive questionnaire that is dispatched every five years.

This data collection process is grounded in national ownership and capacity, recognizing the critical role of countries in producing their own data. Once submitted, the data undergoes rigorous validation process by FAO, conducted in close collaboration and in continuous dialogue with national correspondents.

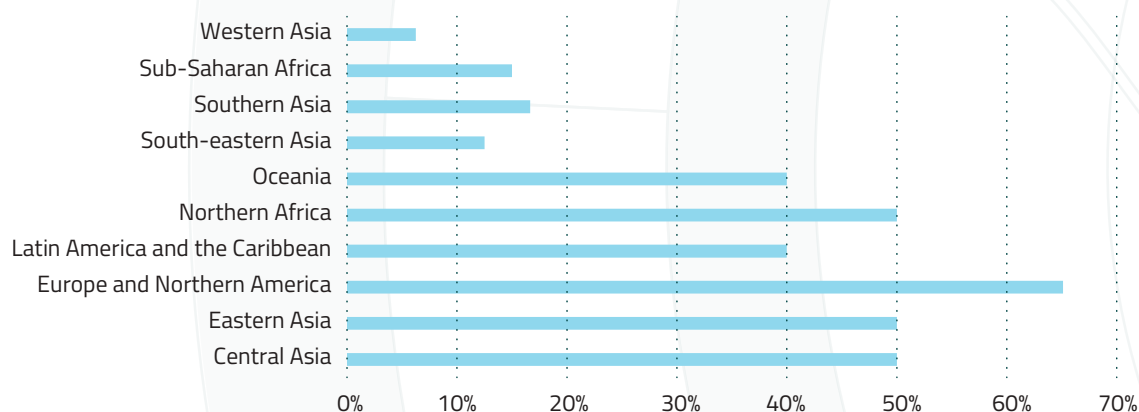
## WHAT IS THE LATEST DATA AVAILABLE?

The AQUASTAT water data snapshot 2025 presents key aggregated data of 2022. In 2025, AQUASTAT released data and indicators of all the world regions for 2022. The updates include information on two SDG 6.4 target indicators, SDG Indicator 6.4.1: Change in water use efficiency over time and SDG Indicator 6.4.2: Level of water stress, for which FAO is the custodian agency. The questionnaires received represent roughly 41 percent of the total sent (63 received over 153 questionnaires sent). Data from annual questionnaires were complemented with official statistics provided by national water and statistical bureaus, and reports published by relevant government ministries.

Some figures are the result of imputations made by FAO’s statistical working system to treat missing values at country and regional levels. Thanks to the imputation methods at country level, data will be available for the whole time series (unless the latest official value has not been updated for 10 years or more). Imputed data is displayed with an appropriate flag in the AQUASTAT dissemination system (FAO, 2025b).

Europe and Northern America was the region with the largest response rate with 65 percent of questionnaires received, followed by Central Asia, Eastern Asia and Northern Africa with 50 percent of response rate.

► **FIGURE 1. RESPONSE RATE OF AQUASTAT QUESTIONNAIRE PER REGION (2022)**



Source: Authors' own elaboration based on AQUASTAT records on data collection for 2024.



# ABOUT THIS REPORT

## THE STRUCTURE

The AQUASTAT water data snapshot 2025 presents key indicators on water resources related to agriculture, offering readers a clear overview of the current state and use of water resources worldwide. Specifically, the snapshot covers the following domains:

- an overview of total renewable water resources;
- water withdrawals by economic sector and source;
- irrigation; and
- status and progress toward Sustainable Development Goal (SDG) Target 6.4 on water use efficiency and water stress.

## COUNTRY DEFINITIONS AND CLASSIFICATION

The country classification adopted in this publication is based on the United Nations Statistical Division (UNSD)'s M49 classification (UNSD, 2025). The official FAO names can be found at FAO's Names of Countries and Territories (NOCS) (FAO, 2025c).

## Aggregations

Regional and subregional aggregates are based on the country groupings defined in the UNSD's M49 classification (UNSD, 2025).

For the aggregation of SDG Indicator 6.4.1, global and regional estimations were achieved by summing up the values of the various parameters constituting the elements of the formula (the value added by sector and water use by sector). The aggregated indicator was then calculated by applying the formula with those aggregated data, as if it were a single country.

For the aggregation of SDG Indicator 6.4.2, aggregations were achieved by using a weighted mean. Regional and global estimates were achieved by summing up the national figures on renewable freshwater resources and total freshwater withdrawal, considering only the internal renewable water resources of each country to avoid double counting and the external renewable freshwater resources of the region, if any. The environmental flow requirements (EFR) at regional level were estimated as the average of the countries' EFRs and applied to the regional water resources.



# WATER AND AGRICULTURE IN 2022



© FAO/Giulio Napolitano

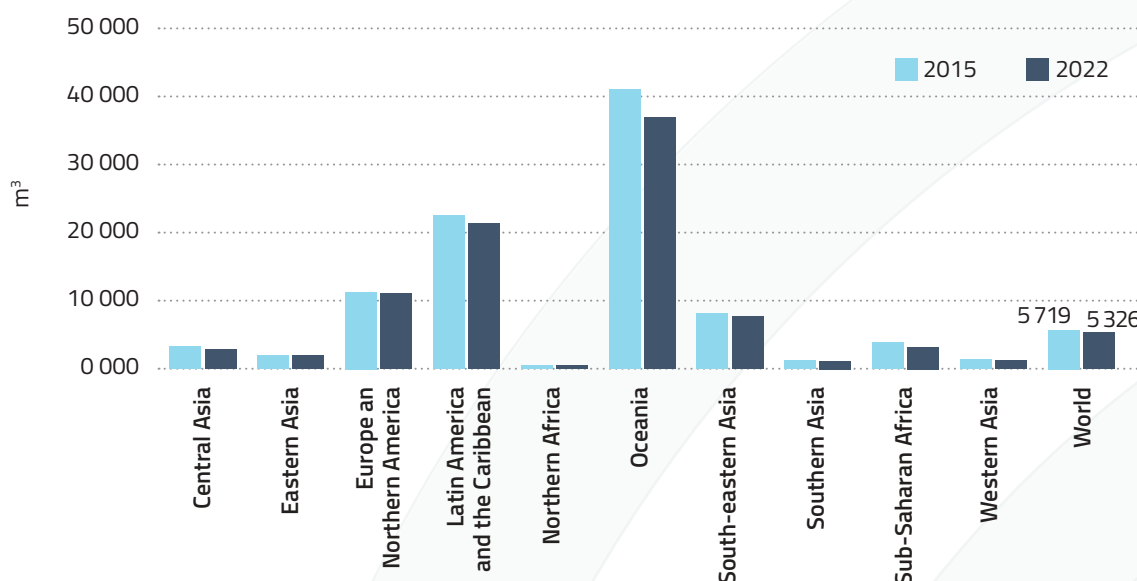
## RENEWABLE WATER RESOURCES

### Total renewable water resources per capita

Renewable water resources represent the long term average annual flow of rivers (surface water) and the recharge of aquifers (groundwater) generated by a country's precipitation. That is, the water available for the population and productive activities in a country. At the per capita level, global freshwater availability in 2022 was estimated at 5 326 m<sup>3</sup> per capita: a 7 percent decrease compared to 2015, when total renewable water resources stood at 5 719 m<sup>3</sup> per capita (**Figure 2**).

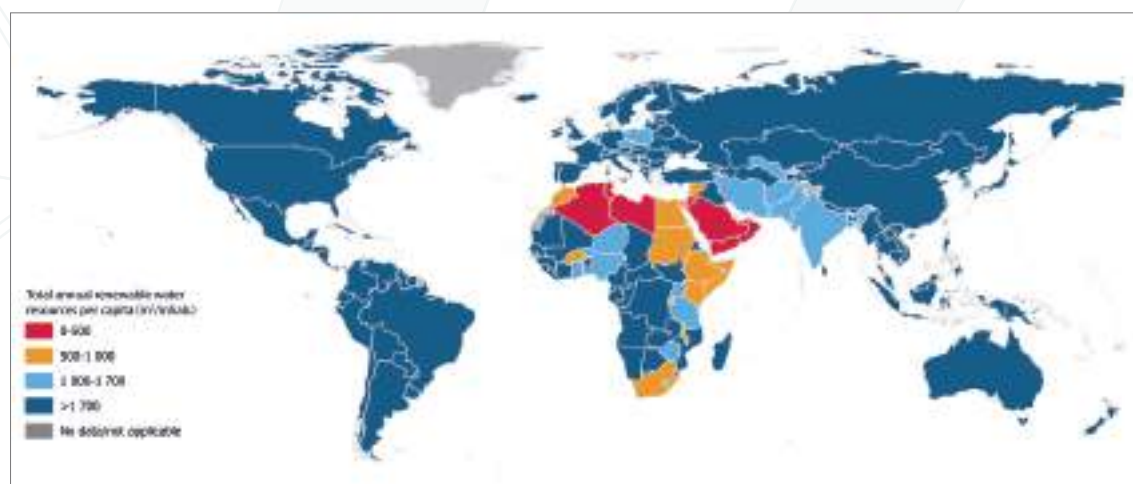
At the regional level, Northern Africa had the lowest freshwater resources per capita in 2022 with an estimated amount of 565 m<sup>3</sup> per inhabitant, followed by Southern Asia (1 226 m<sup>3</sup> per capita) and Western Asia (1 252 m<sup>3</sup> per capita). The rest of the regions had 1 700 m<sup>3</sup> per capita or more in the same year. Since 2015, all world regions experienced a decline in per capita availability of renewable water resources. Sub-Saharan Africa recorded the largest decrease, at 17 percent, followed by Central Asia (12 percent), Northern Africa (12 percent), Western Asia (11 percent) and Oceania (9.84 percent).

► **FIGURE 2. TOTAL RENEWABLE WATER RESOURCES PER CAPITA PER REGION (2015 AND 2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

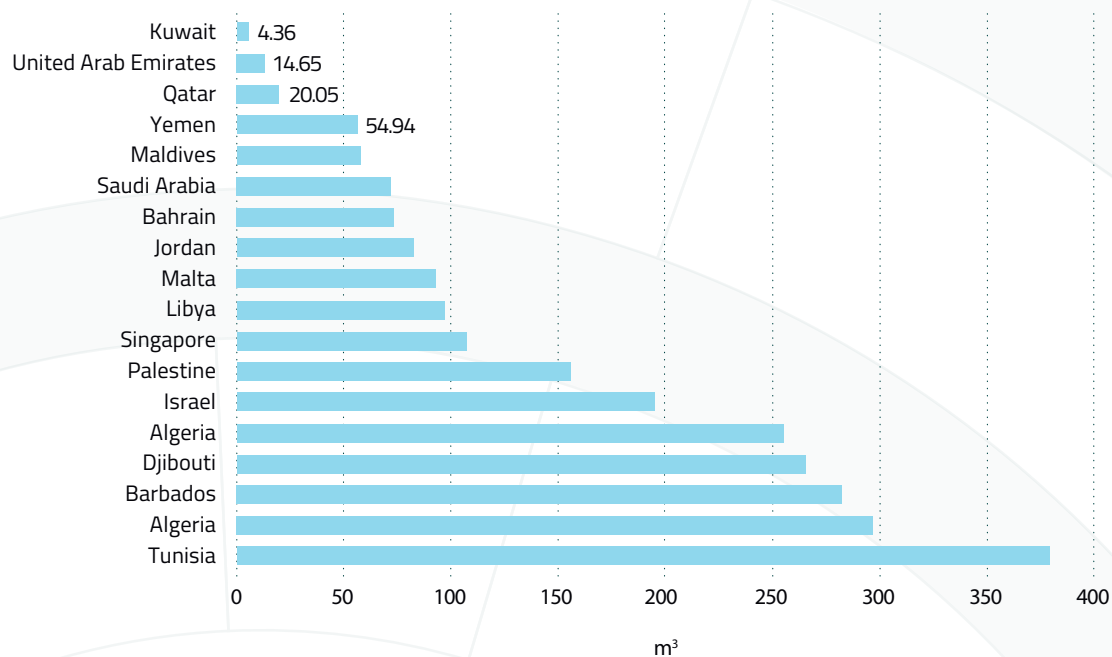
► **FIGURE 3. ANNUAL GLOBAL WATER RESOURCES DISTRIBUTION PER CAPITA (M³/INHABITANT) (2022)**



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line approximately represents the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet 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.

Sources: FAO (Food and Agriculture Organization of the United Nations). 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.  
 QGIS (Quantum Geographic Information System) Development Team. 2025. *QGIS 3.44* Solothurn. [Accessed 28 June 2025]. <https://qgis.org>. Licence: CC-BY-4.0.

► **FIGURE 4. TOP COUNTRIES WITH LOWEST TOTAL RENEWABLE WATER**



Source: **FAO (Food and Agriculture Organization of the United Nations)**. 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC BY 4.0.



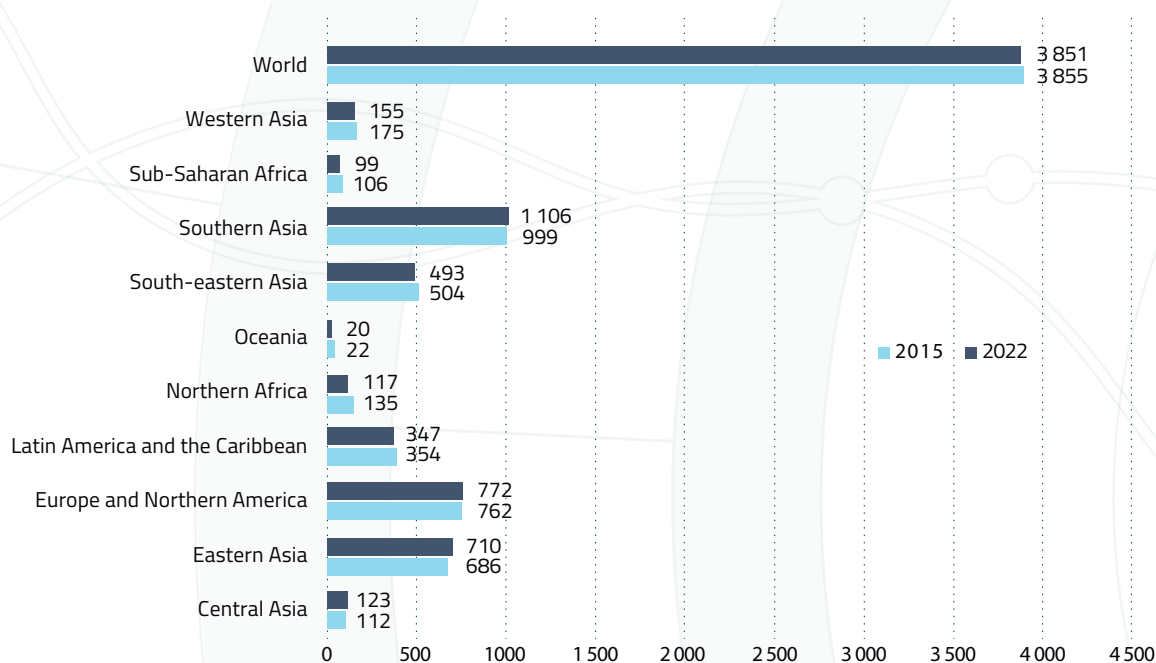
## FRESHWATER WITHDRAWALS

### Total freshwater withdrawals

At the global level, freshwater withdrawals slightly increased by 0.1 percent between 2015 and 2022, though notable regional differences exist. Northern Africa saw the largest increase, with freshwater withdrawals rising by 16 percent, from 117 million m<sup>3</sup> in 2015 to 135 million m<sup>3</sup> in 2022. Western Asia and sub-Saharan Africa also experienced significant increases in their withdrawals by 13 percent and 12 percent respectively during the same period. In contrast, Central Asia experienced the most significant reduction, with withdrawals dropping by 9 percent (from 123 million m<sup>3</sup> in 2015 to 112 million m<sup>3</sup> in 2022 (Figure 5). Eastern Asia, Southern Asia, and Europe and Northern America also recorded decreases of 3 percent or less.

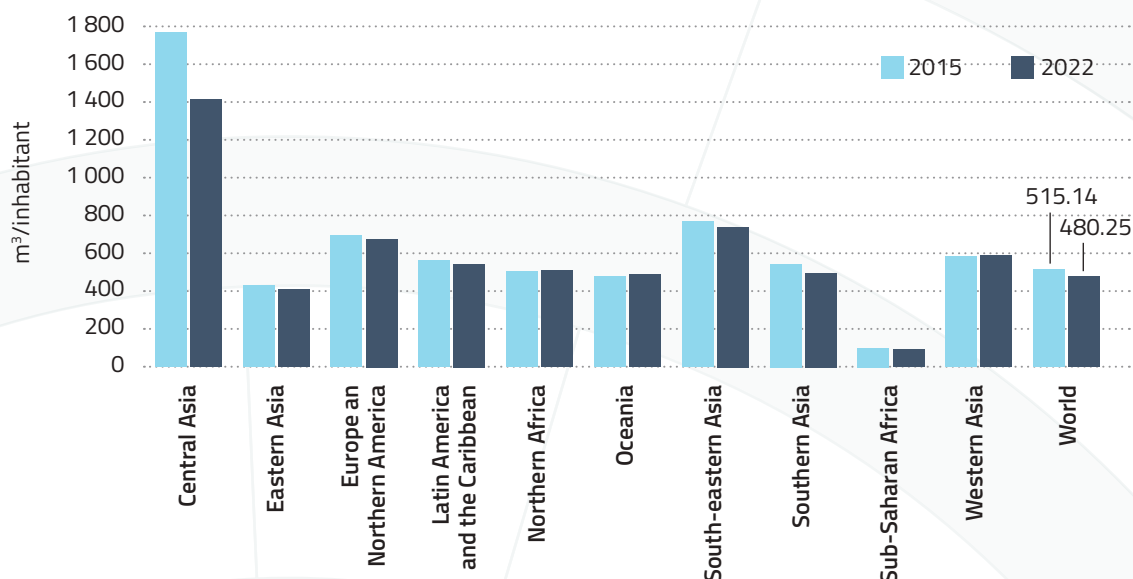
Per capita freshwater withdrawals showed a consistent downward trend since 2015, decreasing by 7 percent until 2022. In 2022, sub-Saharan Africa recorded the lowest per capita annual withdrawals at 89.5 m<sup>3</sup> per person, down from 100.4 m<sup>3</sup> in 2015 and representing a 11 percent reduction. Important decreases in per capita withdrawals were also observed in Central Asia (the region with the largest per capita freshwater withdrawals), where these dropped by 20 percent (from 1 765 million m<sup>3</sup> in 2015 to 1 417 million m<sup>3</sup> in 2022), and in Southern Asia, with a 9 percent reduction (Figure 6).

► **FIGURE 5. TOTAL ANNUAL FRESHWATER WITHDRAWAL PER REGION (1 000 MILLION M<sup>3</sup>) (2015 AND 2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC BY 4.0.

► **FIGURE 6. TOTAL ANNUAL FRESHWATER WITHDRAWAL PER CAPITA IN 2015 AND 2022 (M3/INHABITANT) (2015 AND 2022)**



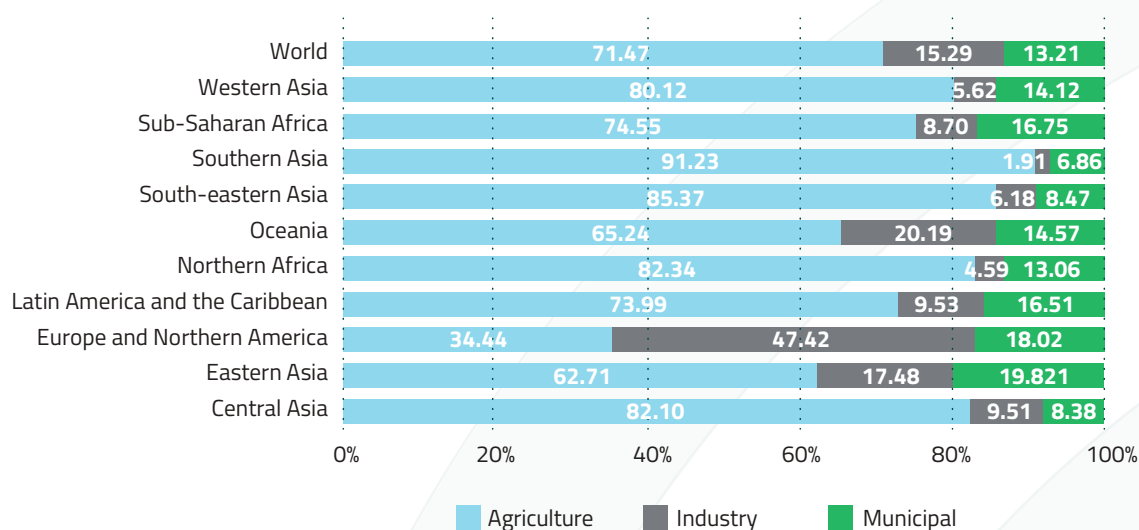
Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC BY 4.0.

## Freshwater withdrawals by economic sector

Agriculture remained by far the largest user of water, accounting for 71 percent of global freshwater withdrawals in 2022. In the same year, the industrial and service sectors accounted for 15 percent and 13 percent, respectively. Compared to 2015, global freshwater withdrawals decreased slightly in both agriculture (by 0.44 percent) and industry (by 0.8 percent), while the service sector saw an increase of 1.25 percent.

Regions with the highest reliance on agricultural freshwater withdrawals included Southern Asia (91 percent), South-eastern Asia (85 percent), Northern Africa (82 percent), Central Asia (82 percent) and Western Asia (80 percent). In contrast, Europe and Northern America reported much lower agricultural water use (34 percent), but together accounted for the largest share of fresh water withdrawals for industry (47 percent) and services (18 percent) (Figure 7).

► **FIGURE 7. PROPORTION OF FRESH WATER WITHDRAWAL OF EACH ECONOMIC SECTOR OVER THE TOTAL FRESHWATER WITHDRAWAL PER REGION (2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

In 2022, 66 countries allocated 76 percent or more of their total freshwater withdrawals to agriculture. Among these, Afghanistan, the Lao People's Democratic Republic, Mali, Nepal, Somalia and the Sudan dedicated over 95 percent of their extracted fresh water resources to the sector (see Figure 8). An additional 54 countries allocated between 51 and 75 percent of their freshwater withdrawals to agricultural use, while 81 countries dedicated less than 50 percent to the sector.

► **FIGURE 8. PERCENTAGE OF AGRICULTURAL FRESHWATER WITHDRAWAL OVER THE TOTAL FRESHWATER WITHDRAWAL (2022)**



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line approximately represents the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet 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.

Sources: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0. QGIS (Quantum Geographic Information System) Development Team. 2025. QGIS 3.44 Solothurn. [Accessed 28 June 2025]. <https://qgis.org>. Licence: CC-BY-4.0.

## Freshwater withdrawals by source

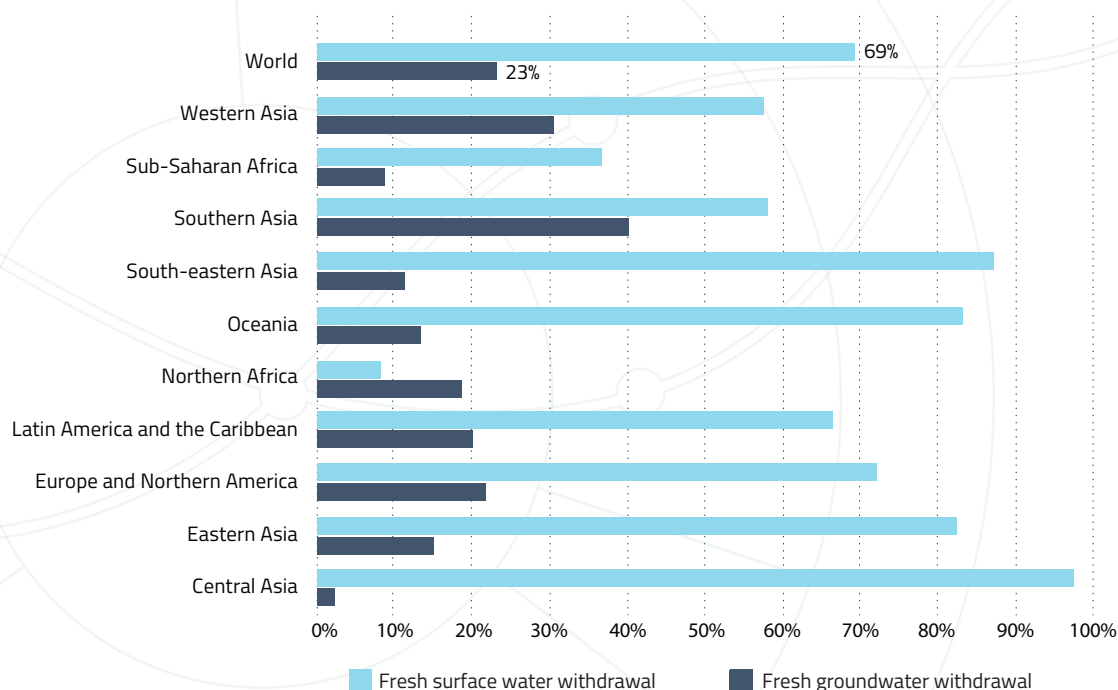
Globally, in 2022, 69 percent of total freshwater withdrawals came from surface water sources, while 23 percent were drawn from groundwater. Compared to 2015, fresh surface water withdrawals grew marginally by 0.7 percent and fresh groundwater withdrawals rose by 0.5 percent over the same period.

For all world regions, except for sub-Saharan Africa and Northern Africa, surface water represented more than 50 percent of their total freshwater withdrawals (Figure 9). In Central Asia, surface water made up 98 percent of the total withdrawals, followed by South-eastern Asia (87 percent) and Southern Asia and Oceania (84 percent each). On the other hand, Southern Asia, followed by Europe and Northern America and Latin America and the Caribbean were the regions where fresh groundwater represented between 40 and 20 percent of the total freshwater withdrawn.

Western Asia recorded the largest increase in fresh surface water withdrawals, rising by 84 percent between 2015 and 2022. Sub-Saharan Africa and Oceania also saw notable increases of 31 percent and 27 percent, respectively. In contrast, Central Asia experienced the most significant decline, with fresh surface water withdrawals decreasing by 9 percent over the same period.

Since 2015, fresh groundwater withdrawals observed a major increase in sub-Saharan Africa by 61 percent, followed by Latin America and the Caribbean, with a 15 percent rise. On the other hand, significant declines were noted in Oceania (33 percent) and Eastern Asia (14 percent).

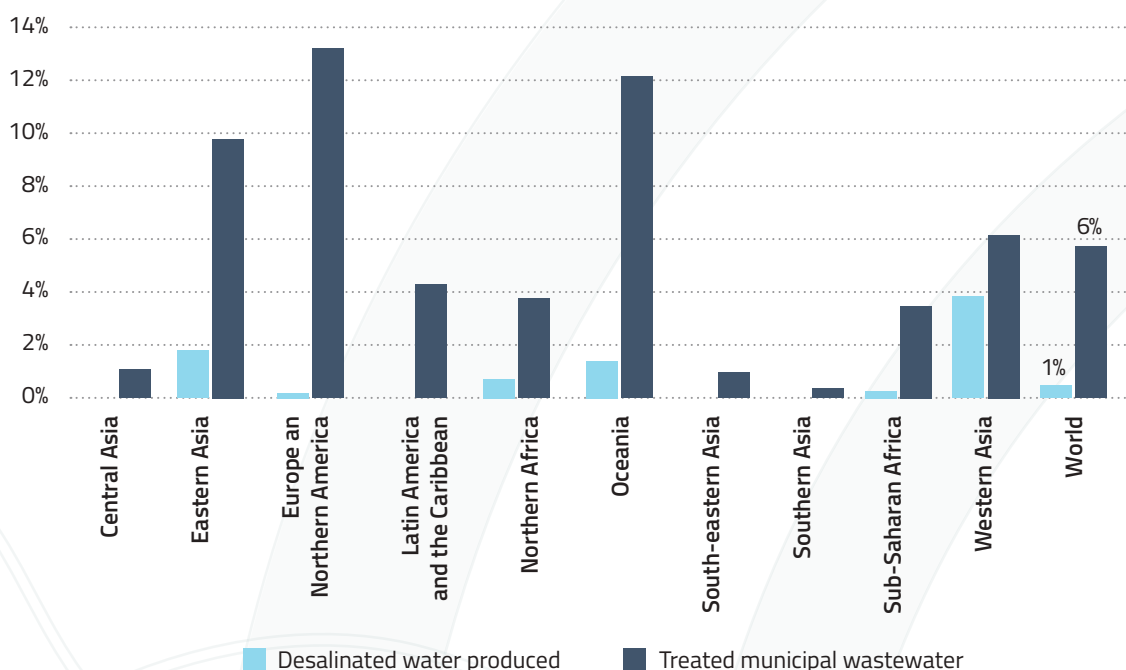
► **FIGURE 9. FRESHWATER WITHDRAWALS BY SOURCE PER REGION (2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

Non conventional water sources – such as desalinated water and wastewater – accounted for 0.6 percent and 6 percent, respectively, of total water use by countries in 2022. Regionally, Europe and Northern America were the largest users of treated municipal wastewater, with 13 percent of their total water withdrawals sourced from this type of reuse. Oceania (12 percent) and Eastern Asia (10 percent) were other major users. On the other hand, desalinated water represented about 4 percent of total water use in Western Asia, 2 percent in Eastern Asia and 1.5 percent in Oceania in 2022 (Figure 10).

► **FIGURE 10. USE OF NON-CONVENTIONAL WATER PER REGION (2022)**



Source: **FAO (Food and Agriculture Organization of the United Nations)**. 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.



## IRRIGATION

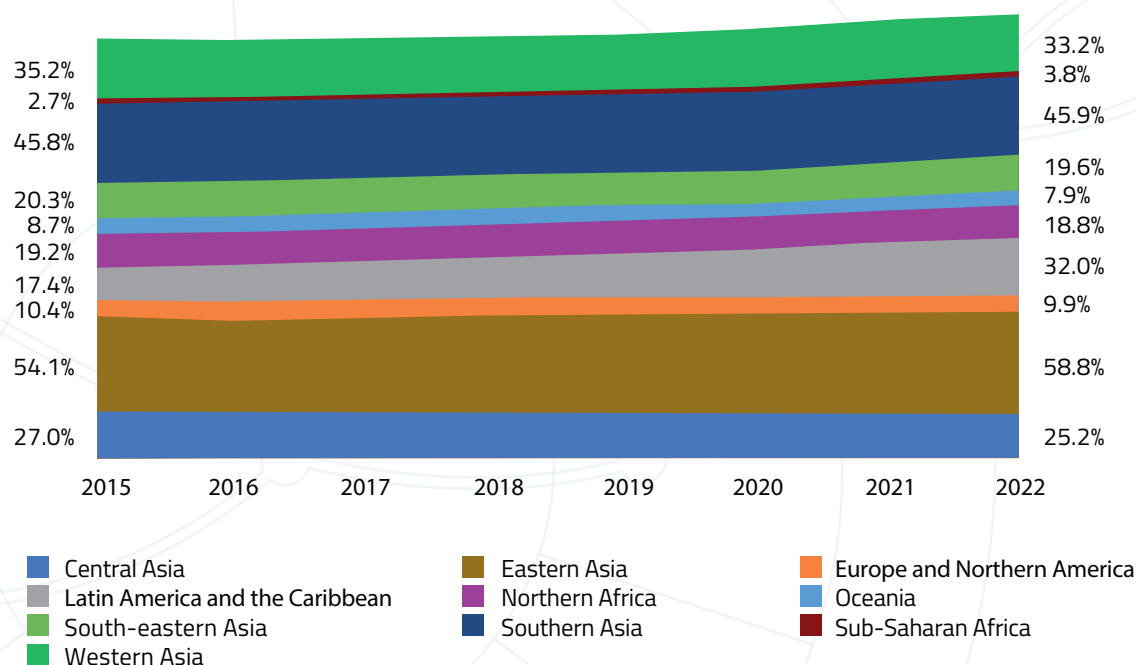
In 2022, the total area equipped for irrigation represented 23 percent of global cultivated land, an increase of 1.66 percent compared to 2015, when the share stood at 21.5 percent.

Southern Asia had the highest proportion of cultivated land equipped with irrigation infrastructure, covering 46 percent of its total cultivated area in 2022, followed by Latin America and the Caribbean (32 percent) and Central Asia (25 percent). In contrast, sub-Saharan Africa had the lowest share, with only 3.8 percent of its cultivated land equipped for irrigation in the same year.

Since 2015, Latin America and the Caribbean experienced the most significant growth in irrigated areas, with the share of cultivated land equipped for irrigation increasing from 17.4 percent in 2015 to 32 percent in 2022. In contrast, Western Asia and Central Asia saw a decline in irrigated land, with decreases of 1.96 percent and 1.78 percent respectively over the same period (Figure 11).

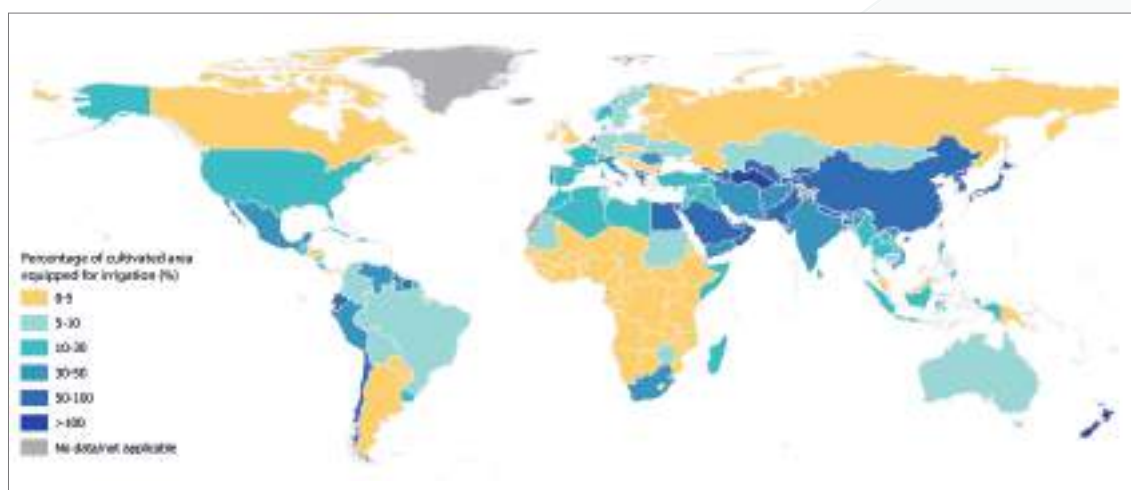
At the national level, Bahrain, Egypt, Saudi Arabia, Suriname, and Uzbekistan reported the highest irrigation coverage in 2022, each with over 90 percent of their cultivated land equipped with irrigation infrastructure. On the other end of the spectrum, 35 countries – primarily in sub-Saharan Africa – had less than 1 percent of their cultivated land under irrigation (Figure 12).

► **FIGURE 11. PERCENTAGE OF THE CULTIVATED AREA EQUIPPED FOR IRRIGATION PER REGION (2015–2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

► **FIGURE 12. PERCENTAGE OF GLOBAL CULTIVATED AREA EQUIPPED FOR IRRIGATION (2022)**



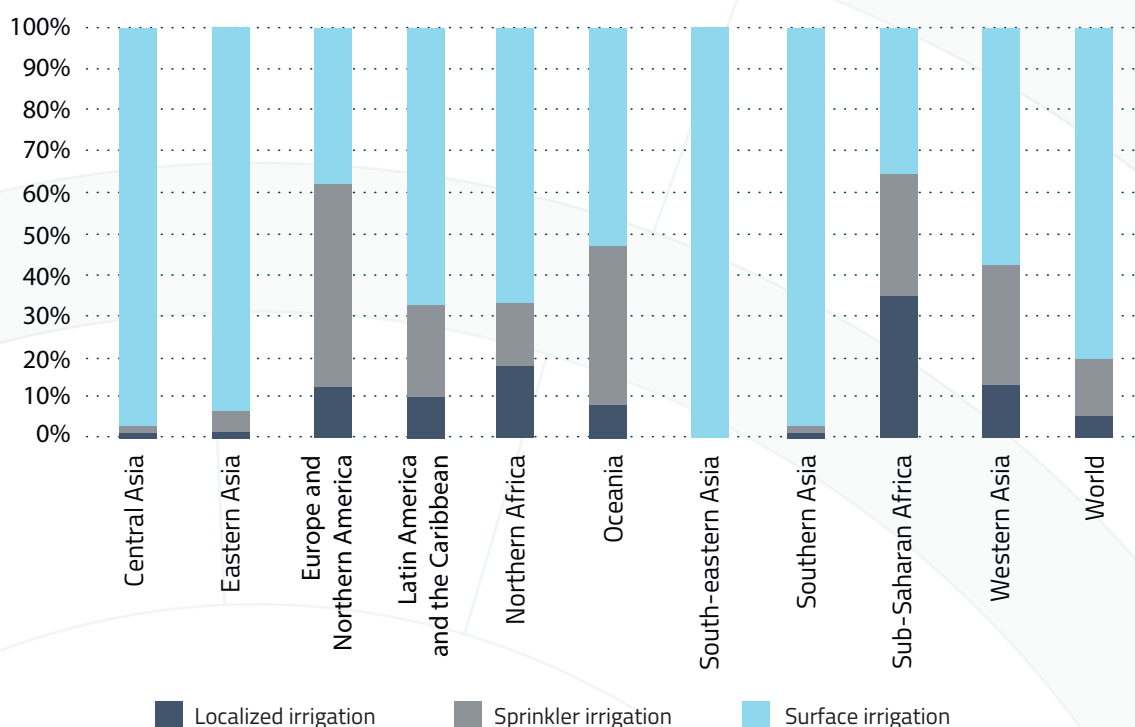
Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line approximately represents the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between 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.

Sources: FAO (Food and Agriculture Organization of the United Nations). 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.  
 QGIS (Quantum Geographic Information System) Development Team. 2025. *QGIS 3.44* Solothurn. [Accessed 28 June 2025]. <https://qgis.org>. Licence: CC-BY-4.0.

Surface irrigation was the most widely used method globally in 2022, accounting for 77 percent of the total area under full control irrigation, followed by sprinkler irrigation, covering 13 percent, and localized irrigation, at 5 percent. Surface irrigation was most prevalent in South-eastern Asia (99 percent), Central Asia (97 percent) and Eastern and Southern Asia (94 percent each). Sprinkler irrigation had primarily been adopted in Europe and Northern America, where it accounted for 45 percent of the area equipped for full control irrigation, and in Oceania, with 39 percent. Localized irrigation was most commonly used in sub-Saharan Africa, where it represented 33 percent of the equipped area in 2022 (Figure 13).

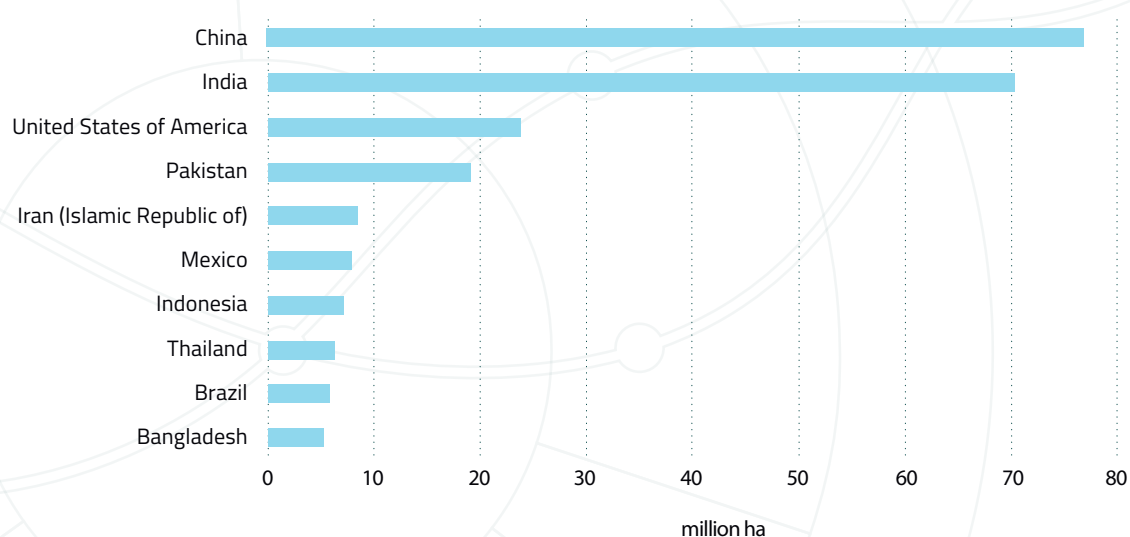
China and India were the countries with the largest area equipped with full control irrigation, with over 70 million hectares (ha) of their territory equipped with the required infrastructure (Figure 14).

► **FIGURE 13. AREA EQUIPPED FOR FULL CONTROL IRRIGATION, BY IRRIGATION METHOD USED PER REGION (2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

► **FIGURE 14. TOP 10 COUNTIES WITH LARGEST AREA EQUIPPED FOR FULL CONTROL IRRIGATION (2022)**



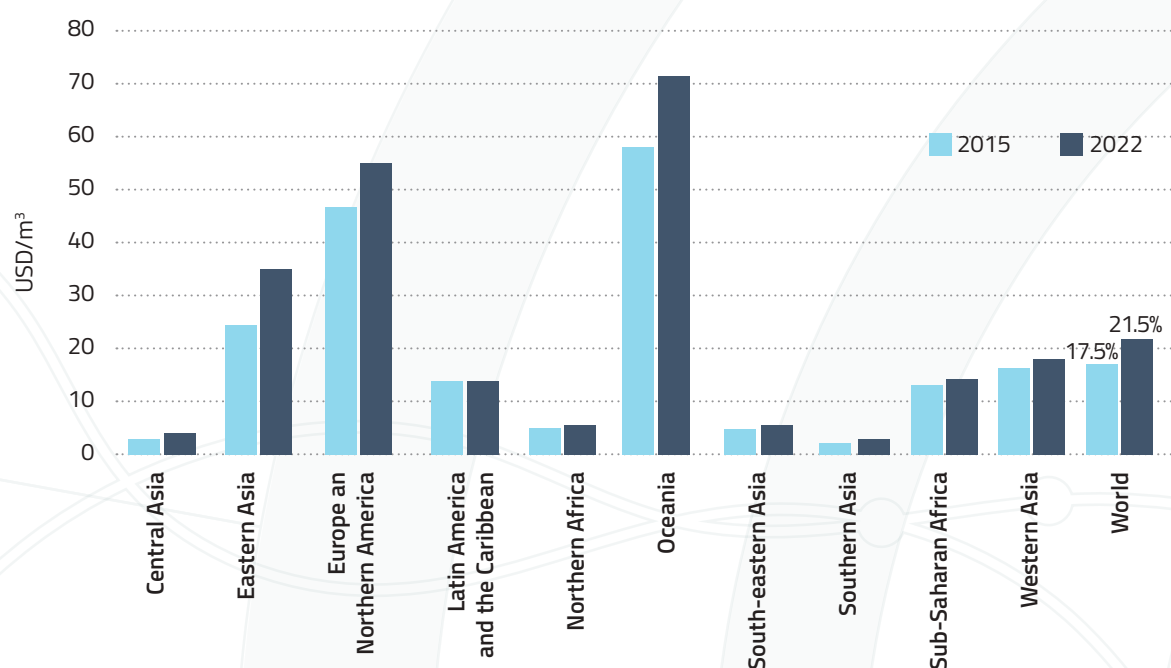
Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

## AGRICULTURAL WATER AND SUSTAINABLE DEVELOPMENT GOAL (SDG) TARGET 6.4

### Sustainable Development Goal (SDG) Indicator 6.4.1: Change in water use efficiency over time

Globally, water use efficiency (WUE) rose from 17.47 USD/m<sup>3</sup> in 2015 to 21.50 USD/m<sup>3</sup> in 2022, marking a 23 percent efficiency increase (Figure 15). Oceania and Europe and Northern America remained the most water efficient regions, with WUE levels of 71.71 USD/m<sup>3</sup> and 54.64 USD/m<sup>3</sup>, respectively (Figure 16). However, Eastern, Central and Southern Asia recorded the highest growth in WUE between 2015 and 2022, with increases of 51.32 percent, 46.25 percent and 34.13 percent respectively. In contrast, Latin America and the Caribbean experienced a slight decline in WUE, decreasing by 0.47 percent over the same period.

► **FIGURE 15. WATER USE EFFICIENCY (USD/M<sup>3</sup>) PER REGION (2015 AND 2022)**



Note: USD = United States Dollar.

Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

► **FIGURE 16. GLOBAL WATER USE EFFICIENCY (WUE) (2022)**

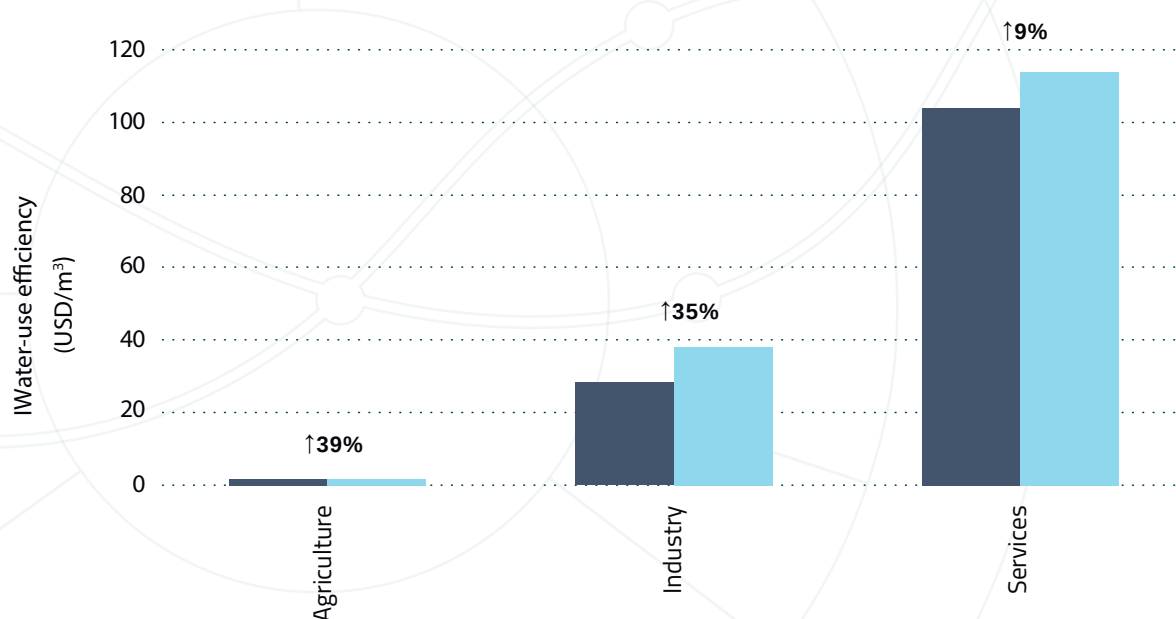


Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line approximately represents the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between 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.

Sources: FAO (Food and Agriculture Organization of the United Nations). 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0. QGIS (Quantum Geographic Information System) Development Team. 2025. *QGIS 3.44 Solothurn*. [Accessed 28 June 2025]. <https://qgis.org>. Licence: CC-BY-4.0.

At the sectoral level, agriculture exhibited the lowest WUE among economic sectors. In 2022, the global average WUE for agriculture was 0.69 USD/m<sup>3</sup>, significantly lower than that of the industrial sector (38.43 USD/m<sup>3</sup>) and the service sector (114.45 USD/m<sup>3</sup>). However, agriculture recorded the largest improvement in WUE over the period from 2015 to 2022, increasing from 0.50 USD/m<sup>3</sup> to 0.69 USD/m<sup>3</sup>, a 38 percent increase. In comparison, the industrial sector saw a 34.87 percent rise, and the service sector improved by 9 percent during the same period (Figure 17).

► **FIGURE 17. WATER USE EFFICIENCY BY ECONOMIC SECTOR (2022)**

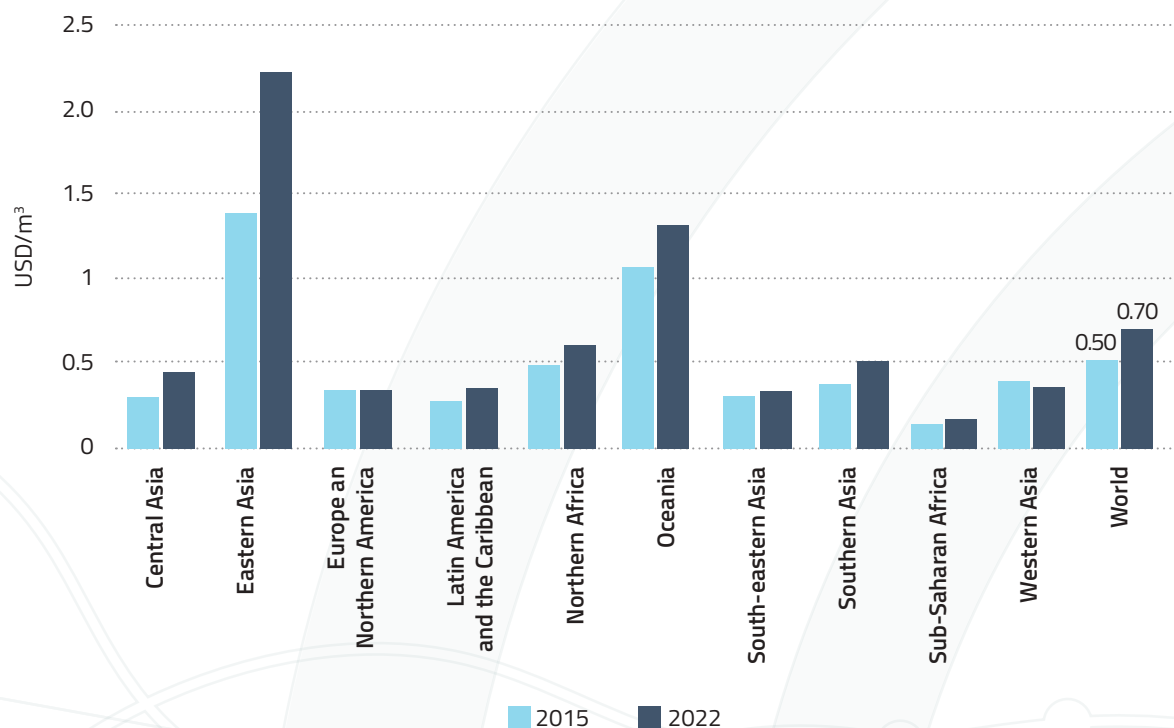


Source: FAO (Food and Agriculture Organization of the United Nations). 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.



In the agricultural sector, Eastern, Central and Southern Asia recorded the largest increases in WUE between 2015 and 2022, with gains of 62.4 percent, 50.55 percent and 49.59 percent, respectively. In contrast, Western Asia was the only region to experience a decline in WUE for the sector, with a drop of 11.43 percent, with the indicator falling from 0.39 USD/m<sup>3</sup> in 2015 to 0.34 USD/m<sup>3</sup> in 2022. Europe and Northern America showed the smallest improvement, with agricultural WUE increasing by just 1.6 percent over the same period (Figure 18).

► **FIGURE 18. WATERWATER USE EFFICIENCY IN THE AGRICULTURAL SECTOR PER REGION (2015 AND 2022)**



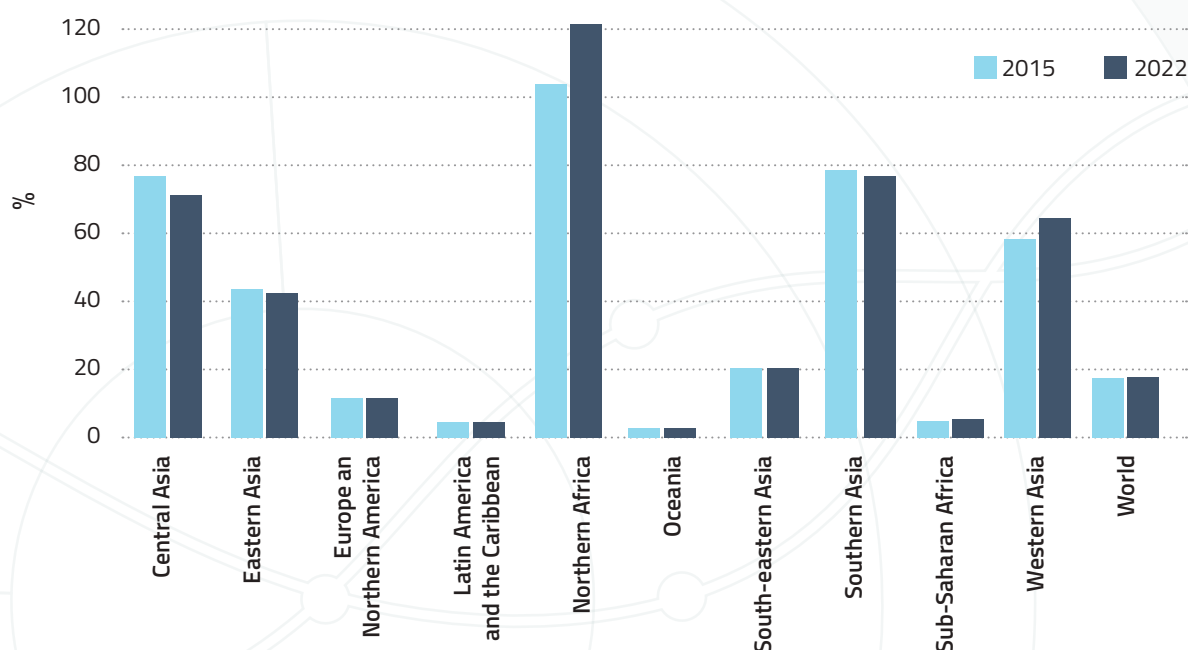
Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

## Sustainable Development Goal (SDG) Indicator 6.4.2: Level of water stress

In 2022, global water stress levels reached 18 percent. However, there were many regional variations. Northern Africa and Southern Asia displayed critical levels of water stress at 121 percent and 76.7 percent respectively, and high levels of water stress were observed in Central Asia (70.2 percent) and Western Asia (65.1 percent) placing enormous pressure on people, economies and ecosystems. Conversely, Europe and North America (12.3 percent), Latin America and the Caribbean (5.7 percent), Oceania (3.2 percent), South-eastern Asia (20.6 percent) and sub-Saharan Africa (6.3 percent) presented low levels of water stress.

An upward trend in water stress levels was observed since 2015 in some regions, with Northern Africa, Western Asia and Oceania experiencing the most significant increases, rising by 15.6 percent, 12.9 percent and 12.3 percent, respectively, between 2015 and 2022. In contrast, Central Asia recorded a notable decrease, with water stress falling from 76.8 percent in 2015 to 70.2 percent in 2022, representing a reduction of 8.6 percent. Eastern Asia, Southern Asia and Europe and Northern America also eased pressure on water resources, with reductions of 3.3 percent, 1.7 percent and 0.8 percent, respectively (Figure 19).

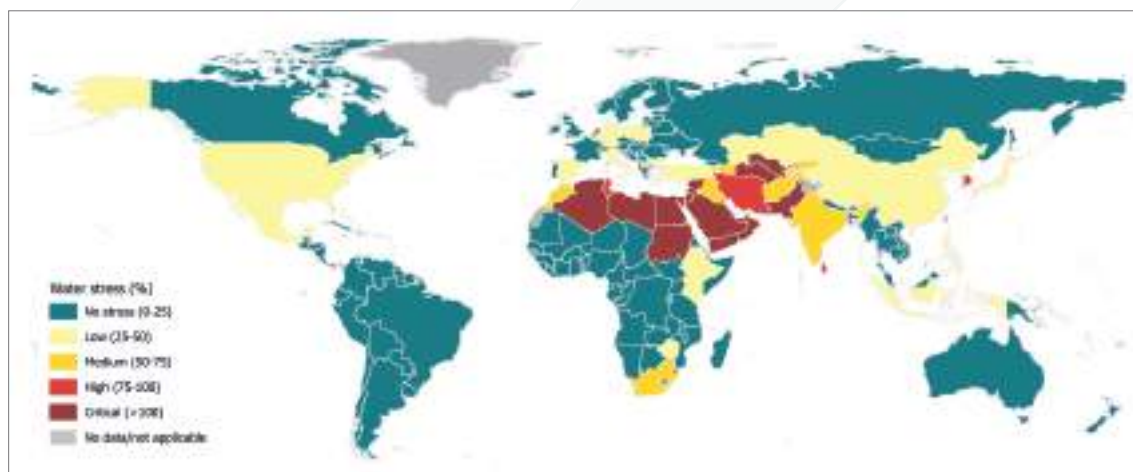
► **FIGURE 19. WATER STRESS PER REGION (2015 AND 2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

Globally, 18 countries experienced critical levels of water stress in 2022, where total water withdrawals across all sectors exceeded 100 percent of their renewable freshwater resources. An additional eight countries faced high water stress, with withdrawals ranging between 75 and 100 percent. Among the most severely affected were Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates, where water stress levels ranged from 431 percent to an alarming 3 851 percent in the same year (see Figure 20 and Figure 21). More than 733 million people live in countries with high and critical water stress, accounting for almost 10 percent of the global population.

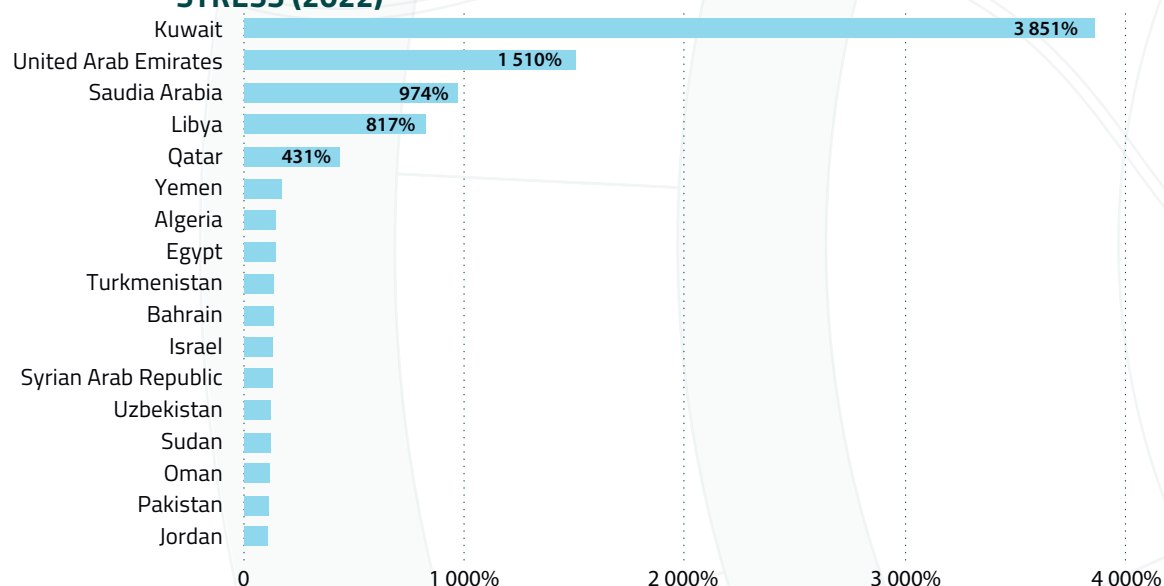
**FIGURE 20. GLOBAL WATER STRESS (2022)**



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line approximately represents the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet 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.

Sources: FAO (Food and Agriculture Organization of the United Nations). 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0. QGIS (Quantum Geographic Information System) Development Team. 2025. *QGIS 3.44 Solothurn*. [Accessed 28 June 2025]. <https://qgis.org>. Licence: CC-BY-4.0.

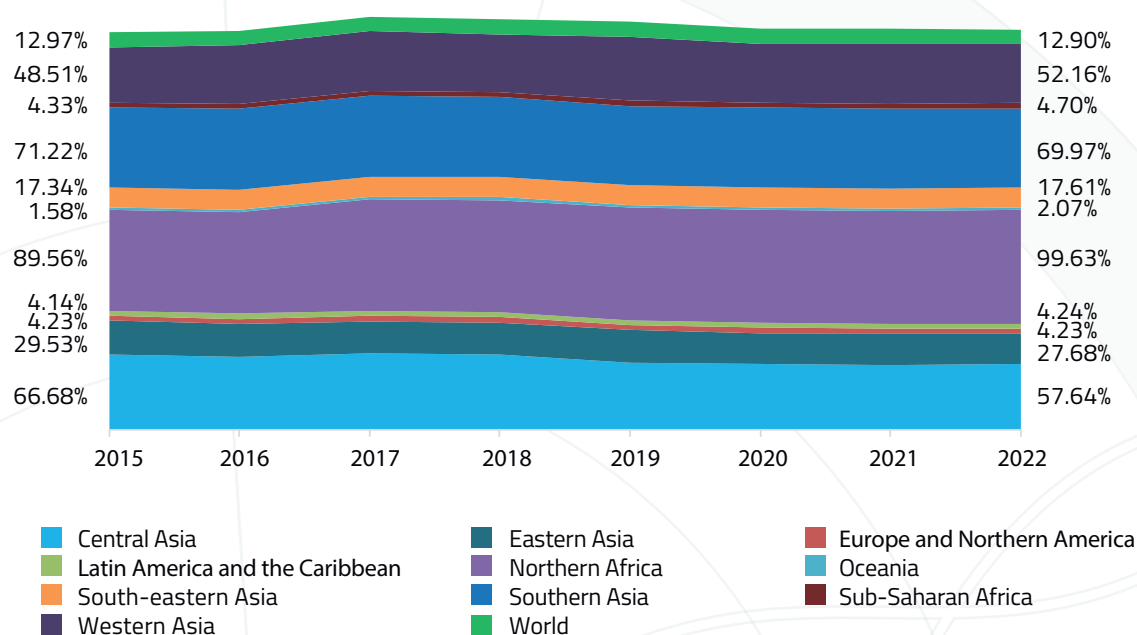
**FIGURE 21. COUNTRIES FACING CRITICAL AND HIGH LEVELS OF WATER STRESS (2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

As of 2022, agriculture remained the largest contributor to global water stress, accounting for 72 percent of total withdrawals, followed by the industrial sector at 15 percent and the service sector at 13 percent. In 2022, Northern Africa was the region with the largest contributions from the agriculture sector to total water scarcity (99.6 percent), followed by Southern Asia (70 percent), Central Asia (57.6 percent) and Western Asia (52.2 percent). Since 2015, the agricultural sector slightly reduced its pressure on water resources by 0.58 percent. Noticeable improvements were observed in Central Asia (-13.55 percent), Eastern Asia (-6.27 percent) and Southern Asia (-1.73 percent) (Figure 22). However, water stress levels surged in Oceania and Northern Africa, rising by 31.4 percent and 11.3 percent, respectively, over the same period.

**FIGURE 22. AGRICULTURAL SECTOR CONTRIBUTION TO WATER STRESS PER REGION (2015–2022)**



Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC-BY-4.0.

# SOURCES

**FAO (Food and Agriculture Organization of the United Nations).** 2025a. *AQUASTAT – FAO’s Global Information System on Water and Agriculture*. [Accessed on 26 May 2025]. [www.fao.org/aquastat/en/](http://www.fao.org/aquastat/en/). Licence: CC BY 4.0.

**FAO.** 2025b. *AQUASTAT Dissemination System*. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC BY 4.0.

**FAO.** 2025c. *Welcome to the Names of Countries and Territories (NOCS)*. In: FAO. Rome. [Cited 1 September 2025]. <https://www.fao.org/nocs/en/>

**UNSD (United Nations Statistics Division).** 2025. *Standard country or area codes for statistical use (M49) – Geographic Regions*. In: *UNStats*. New York, USA. [Cited 1 September 2025]. <https://unstats.un.org/unsd/methodology/m49/>

# APPENDIX 1

## List of countries and regions

Table A1.1 presents the composition of geographical regions used by UNSD in its publications and databases (UNSD, 2025).

Table A1.1. Countries and geographic region for statistical use (M49)

| Country                | Region             |
|------------------------|--------------------|
| Afghanistan            | Southern Asia      |
| Albania                | Southern Europe    |
| Algeria                | Northern Africa    |
| Angola                 | Sub-Saharan Africa |
| Argentina              | South America      |
| Armenia                | Western Asia       |
| Australia              | Oceania            |
| Austria                | Western Europe     |
| Azerbaijan             | Western Asia       |
| Bahrain                | Western Asia       |
| Bangladesh             | Southern Asia      |
| Belarus                | Eastern Europe     |
| Belgium                | Western Europe     |
| Belize                 | South America      |
| Benin                  | Sub-Saharan Africa |
| Bermuda                | North America      |
| Bolivia                | South America      |
| Bosnia and Herzegovina | Southern Europe    |
| Botswana               | Sub-Saharan Africa |
| Brazil                 | South America      |
| Bulgaria               | Eastern Europe     |
| Burundi                | Sub-Saharan Africa |
| Cabo Verde             | Sub-Saharan Africa |
| Cambodia               | South-eastern Asia |



| Country                          | Region             |
|----------------------------------|--------------------|
| Cameroon                         | Sub-Saharan Africa |
| Canada                           | North America      |
| Central African Republic         | Sub-Saharan Africa |
| Chad                             | Sub-Saharan Africa |
| Chile                            | South America      |
| Colombia                         | South America      |
| Congo                            | Sub-Saharan Africa |
| Costa Rica                       | Central America    |
| Croatia                          | Southern Europe    |
| Cyprus                           | Western Asia       |
| Czechia                          | Eastern Europe     |
| Democratic Republic of the Congo | Sub-Saharan Africa |
| Denmark                          | Northern Europe    |
| Djibouti                         | Sub-Saharan Africa |
| Dominica                         | Caribbean          |
| Dominican Republic               | Caribbean          |
| Ecuador                          | South America      |
| Egypt                            | Northern Africa    |
| El Salvador                      | Central America    |
| Estonia                          | Northern Europe    |
| Eswatini                         | Sub-Saharan Africa |
| Faroe Islands                    | Northern Europe    |
| Fiji                             | Melanesia          |
| Finland                          | Northern Europe    |
| France                           | Western Europe     |
| Gabon                            | Sub-Saharan Africa |
| Gambia                           | Sub-Saharan Africa |
| Georgia                          | Western Asia       |
| Germany                          | Western Europe     |
| Ghana                            | Sub-Saharan Africa |
| Greece                           | Southern Europe    |
| Guatemala                        | Central America    |
| Guinea                           | Sub-Saharan Africa |
| Guinea Bissau                    | Sub-Saharan Africa |

| Country                          | Region             |
|----------------------------------|--------------------|
| Guyana                           | South America      |
| Hungary                          | Eastern Europe     |
| Iceland                          | Northern Europe    |
| India                            | Southern Asia      |
| Indonesia                        | South-eastern Asia |
| Iraq                             | Western Asia       |
| Iran (Islamic Republic of)       | Southern Asia      |
| Ireland                          | Northern Europe    |
| Israel                           | Western Asia       |
| Italy                            | Southern Europe    |
| Jamaica                          | Caribbean          |
| Japan                            | Eastern Asia       |
| Jordan                           | Western Asia       |
| Kazakhstan                       | Central Asia       |
| Kenya                            | Sub-Saharan Africa |
| Kuwait                           | Western Asia       |
| Lao People's Democratic Republic | South-eastern Asia |
| Latvia                           | Northern Europe    |
| Lebanon                          | Western Asia       |
| Lesotho                          | Sub-Saharan Africa |
| Liberia                          | Sub-Saharan Africa |
| Liechtenstein                    | Western Europe     |
| Lithuania                        | Northern Europe    |
| Luxembourg                       | Western Europe     |
| Madagascar                       | Sub-Saharan Africa |
| Malawi                           | Sub-Saharan Africa |
| Malaysia                         | South-eastern Asia |
| Maldives                         | Southern Asia      |
| Mali                             | Sub-Saharan Africa |
| Malta                            | Southern Europe    |
| Mauritius                        | Sub-Saharan Africa |
| Mexico                           | Central America    |
| Mongolia                         | Eastern Asia       |
| Morocco                          | Northern Africa    |

| Country                      | Region             |
|------------------------------|--------------------|
| Mozambique                   | Sub-Saharan Africa |
| Namibia                      | Sub-Saharan Africa |
| Nepal                        | Southern Asia      |
| Netherlands (Kingdom of the) | Western Europe     |
| New Zealand                  | Oceania            |
| Nicaragua                    | Central America    |
| Niger                        | Sub-Saharan Africa |
| Nigeria                      | Sub-Saharan Africa |
| North Macedonia              | Southern Europe    |
| Norway                       | Northern Europe    |
| Palestine                    | Western Asia       |
| Oman                         | Western Asia       |
| Pakistan                     | Southern Asia      |
| Panama                       | Central America    |
| Paraguay                     | South America      |
| Peru                         | South America      |
| Philippines                  | South-eastern Asia |
| Poland                       | Eastern Europe     |
| Portugal                     | Southern Europe    |
| Qatar                        | Western Asia       |
| Republic of Korea            | Eastern Asia       |
| Republic of Moldova          | Eastern Europe     |
| Romania                      | Eastern Europe     |
| Russian Federation           | Eastern Europe     |
| Rwanda                       | Sub-Saharan Africa |
| Saint Lucia                  | Caribbean          |
| Sao Tome et Principe         | Sub-Saharan Africa |
| Saudi Arabia                 | Western Asia       |
| Senegal                      | Sub-Saharan Africa |
| Serbia                       | Southern Europe    |
| Seychelles                   | Sub-Saharan Africa |
| Sierra Leone                 | Sub-Saharan Africa |
| Singapore                    | South-eastern Asia |

| Country                     | Region             |
|-----------------------------|--------------------|
| Slovakia                    | Eastern Europe     |
| Slovakia                    | Eastern Europe     |
| Slovenia                    | Southern Europe    |
| South Africa                | Sub-Saharan Africa |
| South Sudan                 | Sub-Saharan Africa |
| Spain                       | Southern Europe    |
| Sri Lanka                   | Southern Asia      |
| Sweden                      | Northern Europe    |
| Switzerland                 | Western Europe     |
| Tajikistan                  | Central Asia       |
| Thailand                    | South-eastern Asia |
| Togo                        | Sub-Saharan Africa |
| Tonga                       | Polynesia          |
| Tunisia                     | Northern Africa    |
| Turkey                      | Western Asia       |
| Uganda                      | Sub-Saharan Africa |
| Uruguay                     | South America      |
| Ukraine                     | Eastern Europe     |
| United Arab Emirates        | Western Asia       |
| United Kingdom              | Northern Europe    |
| United Republic of Tanzania | Sub-Saharan Africa |
| United States of America    | North America      |
| Uzbekistan                  | Central Asia       |
| Vanuatu                     | Oceania            |
| Viet Nam                    | South-eastern Asia |
| Zambia                      | Sub-Saharan Africa |
| Zimbabwe                    | Sub-Saharan Africa |

Source: **UNSD (United Nations Statistics Division)**. 2025. Standard country or area codes for statistical use (M49) – Geographic Regions. In: *UNStats*. New York, USA. [Cited 1 September 2025]. <https://unstats.un.org/unsd/methodology/m49/>

# APPENDIX 2

## Glossary

**Total water resources:** National long term annual averages of renewable water resources.

**Total water withdrawal:** Annual quantity of water withdrawn for agricultural, industrial and municipal purposes. It includes water from renewable freshwater resources, over abstraction of renewable groundwater, fossil groundwater withdrawal, direct use of agricultural drainage water and (treated) wastewater, and desalinated water. It does not include stream uses, which are characterized by a very low net consumption rate, such as recreation, navigation, hydropower, and inland capture fisheries.

**Agricultural water withdrawal:** Annual quantity of self supplied water (own use and not for distribution, as opposed to supplied to other economic units) withdrawn for irrigation, livestock and aquaculture purposes. It includes water from renewable freshwater resources, over abstraction of renewable groundwater, fossil groundwater withdrawal, direct use of agricultural drainage water and (treated) wastewater, and desalinated water. Water for the dairy and meat industries and industrial processing of harvested agricultural products is included under industrial water withdrawal.

**Industrial water withdrawal (including for cooling of thermoelectric plants):** Annual quantity of water withdrawn for industrial uses. It includes water from renewable freshwater resources, over abstraction of renewable groundwater, withdrawal of fossil groundwater, and potential use of desalinated water or direct use of (treated) wastewater. This sector refers to self supplied industries not connected to the public distribution network. The ratio between net consumption and withdrawal is estimated at less than 5 percent. It includes water for the cooling of thermoelectric plants, but it does not include hydropower.

**Municipal water withdrawal:** Annual quantity of water withdrawn primarily for the direct use by the population. It includes water from renewable freshwater resources, potential over abstraction of renewable groundwater, withdrawal of fossil groundwater and desalinated water, or direct use of treated wastewater. It is usually computed as the total water withdrawn by the public distribution network. It can include that part of the industries which is connected to the municipal network. The ratio between net consumption and the withdrawn water can vary from 5 to 15 percent in urban areas and from 10 to 50 percent in rural areas.

**Freshwater withdrawal:** Represents the sum of surface water withdrawal and groundwater withdrawal.

**Surface water withdrawal:** Annual gross amount of water extracted from rivers, lakes and reservoirs. It includes withdrawal of fresh renewable surface water resources.

**Groundwater withdrawal:** Annual gross amount of water extracted from aquifers. It includes the withdrawal of renewable groundwater, water extracted from deep fossil aquifers (non renewable water) and potential over abstraction of renewable groundwater. It can also include secondary freshwater sources if used to recharge the aquifer.

**Non conventional water resources:** Annual desalinated water produced, direct use of treated municipal wastewater and direct use of agricultural drainage water.

**Irrigated area:** Area equipped to provide water to crops. It includes areas equipped for full control irrigation, equipped lowland areas and areas equipped for spate irrigation.

**Water use efficiency (SDG Indicator 6.4.1):** This indicator measures water use efficiency over time by all economic activities, focusing on agriculture (excluding the portion generated by rainfed agriculture), manufacturing, construction, mining, energy, services and water collection, treatment and supply.

**Level of water stress (SDG Indicator 6.4.2):** This indicator measures the level of water stress, by providing an estimate of the pressure exerted by all economic sectors on the country's renewable freshwater resources.



# APPENDIX 3

## Data tables (2022)

Table A3.1 presents the key indicators used to measure and illustrate the pressure that different economic activities place on water resources across countries.

Table A3.1. Key variables to measure pressure on water resources by country (2022)

| Countries           | Total annual renewable water resources per capita (m <sup>3</sup> /inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m <sup>3</sup> ) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|---------------------|---------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Afghanistan         | 1 609.95                                                                  | 98.17                                                            | 0.83                                                           | 1.00                                                    | 20.28                                                                | 39.85                                       | –32.44                              | 54.76                               |
| Albania             | 10 680.41                                                                 | 70.89                                                            | 1.38                                                           | 27.73                                                   | 0.80                                                                 | 52.17                                       | 43.61                               | 4.79                                |
| Algeria             | 256.55                                                                    | 67.43                                                            | 1.65                                                           | 30.92                                                   | 10.29                                                                | 16.05                                       | –6.84                               | 144.81                              |
| Andorra             | 3 959.60                                                                  | –                                                                | –                                                              | –                                                       | –                                                                    | 19.84                                       | –                                   | –                                   |
| Angola              | 4 164.44                                                                  | 20.78                                                            | 33.95                                                          | 45.27                                                   | 0.71                                                                 | 1.50                                        | –10.56                              | 1.87                                |
| Antigua and Barbuda | 560.10                                                                    | 15.65                                                            | 21.74                                                          | 62.61                                                   | 0.00                                                                 | 7.69                                        | 16.49                               | 8.46                                |
| Argentina           | 19 297.08                                                                 | 73.93                                                            | 10.59                                                          | 15.48                                                   | 37.69                                                                | 2.48                                        | –1.83                               | 10.46                               |
| Armenia             | 2 696.75                                                                  | 77.47                                                            | 4.88                                                           | 17.64                                                   | 3.07                                                                 | 30.92                                       | 48.05                               | 61.97                               |
| Australia           | 18 777.92                                                                 | 66.89                                                            | 18.59                                                          | 14.52                                                   | 11.62                                                                | 6.24                                        | 23.05                               | 4.67                                |
| Austria             | 8 571.73                                                                  | 5.24                                                             | 93.31                                                          | 1.45                                                    | 3.14                                                                 | 7.19                                        | 52.34                               | 8.68                                |
| Azerbaijan          | 3 368.04                                                                  | 92.24                                                            | 4.61                                                           | 3.15                                                    | 13.03                                                                | 62.77                                       | –2.43                               | 57.53                               |
| Bahamas             | 1 760.84                                                                  | –                                                                | –                                                              | –                                                       | –                                                                    | 9.09                                        | –                                   | 133.71                              |
| Bahrain             | 75.65                                                                     | 33.31                                                            | 3.25                                                           | 63.44                                                   | 0.16                                                                 | 90.98                                       | 11.80                               | –                                   |
| Bangladesh          | 7 244.05                                                                  | 87.82                                                            | 2.15                                                           | 10.04                                                   | 35.87                                                                | 57.27                                       | 59.64                               | 5.72                                |

| Countries                        | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|----------------------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Barbados                         | 283.37                                                       | 67.65                                                            | 7.65                                                           | 24.69                                                   | 0.07                                                    | 67.94                                       | -3.14                               | 87.50                               |
| Belarus                          | 6 311.84                                                     | 27.23                                                            | 30.41                                                          | 42.43                                                   | 1.41                                                    | 0.46                                        | 5.15                                | 4.66                                |
| Belgium                          | 1 571.92                                                     | 0.85                                                             | 84.11                                                          | 15.04                                                   | 4.30                                                    | 2.72                                        | -9.30                               | 52.83                               |
| Belize                           | 53 966.28                                                    | 67.72                                                            | 20.99                                                          | 11.29                                                   | 0.10                                                    | 2.69                                        | 14.53                               | 1.26                                |
| Benin                            | 1 917.95                                                     | 25.21                                                            | 12.82                                                          | 61.97                                                   | 0.13                                                    | 0.56                                        | 54.44                               | 0.98                                |
| Bhutan                           | 99 882.96                                                    | 94.08                                                            | 0.89                                                           | 5.03                                                    | 0.34                                                    | 36.84                                       | 28.91                               | 1.41                                |
| Bolivia (Plurinational State of) | 47 527.75                                                    | 87.08                                                            | 1.45                                                           | 11.47                                                   | 0.36                                                    | 9.40                                        | 22.66                               | 0.20                                |
| Bosnia and Herzegovina           | 11 701.19                                                    | -                                                                | -                                                              | -                                                       | 0.31                                                    | 0.27                                        | -                                   | 2.07                                |
| Botswana                         | 5 016.62                                                     | 27.97                                                            | 11.39                                                          | 60.64                                                   | 0.21                                                    | 1.43                                        | 12.57                               | 2.23                                |
| Brazil                           | 41 116.20                                                    | 60.84                                                            | 15.01                                                          | 24.13                                                   | 67.94                                                   | 8.99                                        | -2.67                               | 1.50                                |
| Brunei Darussalam                | 18 666.14                                                    | 5.76                                                             | -                                                              | 164.67                                                  | 0.09                                                    | 10.00                                       | -                                   | 3.47                                |
| Bulgaria                         | 3 120.48                                                     | 13.35                                                            | 71.26                                                          | 15.39                                                   | 5.44                                                    | 3.77                                        | 29.80                               | 40.24                               |
| Burkina Faso                     | 599.76                                                       | 51.43                                                            | 2.65                                                           | 45.92                                                   | 0.82                                                    | 0.63                                        | 41.63                               | 7.82                                |
| Burundi                          | 941.06                                                       | 79.26                                                            | 5.36                                                           | 15.39                                                   | 0.28                                                    | 1.30                                        | 20.30                               | 10.19                               |
| Cabo Verde                       | 577.21                                                       | 38.99                                                            | 2.12                                                           | 58.89                                                   | 0.18                                                    | 6.99                                        | -5.93                               | 59.68                               |
| Cambodia                         | 27 677.46                                                    | 94.00                                                            | 1.51                                                           | 4.49                                                    | 2.18                                                    | 5.84                                        | 45.27                               | 1.04                                |
| Cameroon                         | 10 246.89                                                    | 67.71                                                            | 9.61                                                           | 22.68                                                   | 1.09                                                    | 0.33                                        | 27.35                               | 1.56                                |
| Canada                           | 74 752.86                                                    | 10.69                                                            | 75.81                                                          | 13.49                                                   | 36.13                                                   | 3.16                                        | 9.21                                | 3.72                                |
| Central African Republic         | 27 657.69                                                    | 0.55                                                             | 16.55                                                          | 82.90                                                   | 0.07                                                    | 0.01                                        | 16.95                               | 0.34                                |
| Ecuador                          | 24 820.61                                                    | 81.43                                                            | 5.54                                                           | 13.04                                                   | 9.92                                                    | 73.08                                       | -26.70                              | 6.78                                |

| Countries         | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|-------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Barbados          | 283.37                                                       | 67.65                                                            | 7.65                                                           | 24.69                                                   | 0.07                                                    | 67.94                                       | -3.14                               | 87.50                               |
| Belarus           | 6 311.84                                                     | 27.23                                                            | 30.41                                                          | 42.43                                                   | 1.41                                                    | 0.46                                        | 5.15                                | 4.66                                |
| El Salvador       | 4 182.91                                                     | 72.79                                                            | 4.87                                                           | 22.35                                                   | 1.94                                                    | 3684.39                                     | 66.33                               | 12.09                               |
| Equatorial Guinea | 14 416.05                                                    | 5.05                                                             | 15.15                                                          | 79.79                                                   | 0.02                                                    | –                                           | –                                   | 0.1                                 |
| Eritrea           | 2 145.51                                                     | 94.50                                                            | 0.17                                                           | 5.33                                                    | 0.58                                                    | 3.12                                        | –                                   | 11.18                               |
| Estonia           | 9 485.29                                                     | 0.41                                                             | 94.19                                                          | 5.39                                                    | 1.21                                                    | 0.38                                        | –                                   | 13.05                               |
| Eswatini          | 3 700.01                                                     | 94.19                                                            | 1.94                                                           | 3.87                                                    | 1.07                                                    | 25.56                                       | 13.10                               | 77.56                               |
| Ethiopia          | 973.01                                                       | 91.84                                                            | 0.48                                                           | 7.68                                                    | 10.55                                                   | 4.65                                        | 63.64                               | 32.26                               |
| Europe            | 9 073.03                                                     | 29.25                                                            | 44.15                                                          | 26.28                                                   | 281.54                                                  | 7.65                                        | 15.60                               | 8.28                                |
| Faroe Islands     | –                                                            | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Fiji              | 31 052.12                                                    | 58.89                                                            | 11.31                                                          | 29.80                                                   | 0.08                                                    | 2.89                                        | 4.67                                | 0.30                                |
| Finland           | 19 751.14                                                    | 35.73                                                            | 46.41                                                          | 17.86                                                   | 3.00                                                    | 3.17                                        | -5.44                               | 7.11                                |
| France            | 3 183.59                                                     | 10.30                                                            | 68.13                                                          | 21.58                                                   | 24.43                                                   | 14.44                                       | 23.79                               | 21.38                               |
| Gabon             | 68 291.76                                                    | 28.97                                                            | 10.14                                                          | 60.89                                                   | 0.14                                                    | 0.90                                        | 12.63                               | 0.50                                |
| Gambia            | 3 034.36                                                     | 38.58                                                            | 20.87                                                          | 40.55                                                   | 0.10                                                    | 0.48                                        | 38.46                               | 2.21                                |
| Georgia           | 16 688.70                                                    | 33.55                                                            | 27.41                                                          | 39.04                                                   | 1.29                                                    | 32.21                                       | 69.18                               | 4.21                                |
| Germany           | 1 831.45                                                     | 4.17                                                             | 54.30                                                          | 41.53                                                   | 25.79                                                   | 6.68                                        | 25.64                               | 35.35                               |
| Ghana             | 1 695.37                                                     | 73.06                                                            | 6.49                                                           | 20.46                                                   | 1.45                                                    | 0.42                                        | 39.66                               | 6.31                                |
| Greece            | 6 569.04                                                     | 80.47                                                            | 2.78                                                           | 16.75                                                   | 10.05                                                   | 53.38                                       | 6.43                                | 20.33                               |
| Grenada           | 1 710.67                                                     | 14.89                                                            | 0.00                                                           | 85.11                                                   | 0.01                                                    | 5.21                                        | –                                   | 7.05                                |
| Guatemala         | 7 166.68                                                     | 56.74                                                            | 18.14                                                          | 25.12                                                   | 3.32                                                    | 12.33                                       | 26.21                               | 5.74                                |
| Guinea            | 16 079.53                                                    | 67.42                                                            | 6.74                                                           | 25.84                                                   | 0.89                                                    | 1.46                                        | 34.43                               | 1.37                                |

| Countries                  | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|----------------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Guinea Bissau              | 14 913.12                                                    | 75.79                                                            | 6.26                                                           | 17.95                                                   | 0.18                                                    | 3.50                                        | 85.23                               | 1.50                                |
| Guyana                     | 329 829.35                                                   | 94.34                                                            | 1.41                                                           | 4.24                                                    | 1.44                                                    | 31.85                                       | 304.17                              | 3.30                                |
| Haiti                      | 1 218.92                                                     | 83.38                                                            | 3.52                                                           | 13.10                                                   | 1.45                                                    | 7.01                                        | –3.57                               | 13.38                               |
| Holy See                   | –                                                            | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Honduras                   | 8 807.83                                                     | 73.30                                                            | 7.09                                                           | 19.60                                                   | 1.61                                                    | 4.52                                        | 21.10                               | 4.62                                |
| Hungary                    | 10 739.02                                                    | 11.05                                                            | 75.66                                                          | 13.29                                                   | 4.69                                                    | 5.27                                        | 10.89                               | 8.11                                |
| Iceland                    | 446 949.70                                                   | 0.11                                                             | 71.15                                                          | 28.75                                                   | 0.29                                                    | –                                           | 23.95                               | 0.39                                |
| India                      | 1 340.58                                                     | 90.41                                                            | 2.23                                                           | 7.36                                                    | 647.50                                                  | 41.89                                       | 39.49                               | 66.49                               |
| Indonesia                  | 7 239.88                                                     | 85.21                                                            | 4.10                                                           | 10.69                                                   | 222.64                                                  | 14.81                                       | 28.34                               | 29.70                               |
| Iran (Islamic Republic of) | 1 530.81                                                     | 92.18                                                            | 1.18                                                           | 6.65                                                    | 92.95                                                   | 49.46                                       | 2.12                                | 81.29                               |
| Iraq                       | 2 039.00                                                     | 73.47                                                            | 10.65                                                          | 15.88                                                   | 42.42                                                   | 64.57                                       | –4.83                               | 59.58                               |
| Ireland                    | 10 176.09                                                    | 2.37                                                             | 31.79                                                          | 66.10                                                   | 1.67                                                    | 0.00                                        | 11.54                               | 8.05                                |
| Israel                     | 195.54                                                       | 46.63                                                            | 4.02                                                           | 38.39                                                   | 1.50                                                    | 47.41                                       | 10.94                               | 129.67                              |
| Italy                      | 3 208.70                                                     | 50.22                                                            | 22.75                                                          | 27.03                                                   | 33.78                                                   | 0.04                                        | 5.08                                | 29.77                               |
| Jamaica                    | 3 812.06                                                     | 17.06                                                            | 9.50                                                           | 73.43                                                   | 1.34                                                    | 24.39                                       | 78.75                               | 12.38                               |
| Japan                      | 3 440.07                                                     | 66.67                                                            | 16.35                                                          | 16.98                                                   | 79.70                                                   | 66.90                                       | 2.23                                | 36.64                               |
| Jordan                     | 83.24                                                        | 51.65                                                            | 3.34                                                           | 45.02                                                   | 0.95                                                    | 29.82                                       | 1.97                                | 105.20                              |
| Kazakhstan                 | 5 411.14                                                     | 56.75                                                            | 23.85                                                          | 19.40                                                   | 24.97                                                   | 5.41                                        | 3.13                                | 34.63                               |
| Kenya                      | 565.87                                                       | 80.21                                                            | 7.51                                                           | 12.28                                                   | 4.03                                                    | 2.86                                        | 4.77                                | 33.24                               |
| Kiribati                   | –                                                            | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Kuwait                     | 4.36                                                         | 62.27                                                            | 1.86                                                           | 35.86                                                   | 0.77                                                    | 121.29                                      | –7.67                               | 3 850.50                            |
| Kyrgyzstan                 | 3 395.45                                                     | 92.69                                                            | 4.39                                                           | 2.92                                                    | 7.71                                                    | 74.91                                       | 19.62                               | 50.04                               |

| Countries                        | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|----------------------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Lao People's Democratic Republic | 44 119.55                                                    | 95.92                                                            | 2.31                                                           | 1.77                                                    | 7.35                                                    | 28.02                                       | 33.73                               | 4.79                                |
| Latvia                           | 18 574.60                                                    | 29.07                                                            | 17.58                                                          | 53.35                                                   | 0.17                                                    | 0.09                                        | 18.85                               | 1.02                                |
| Lebanon                          | 783.88                                                       | 38.04                                                            | 48.91                                                          | 13.04                                                   | 1.81                                                    | 32.22                                       | -33.21                              | 58.79                               |
| Lesotho                          | 1 321.90                                                     | 8.68                                                             | 45.66                                                          | 45.66                                                   | 0.04                                                    | 0.61                                        | -12.50                              | 2.57                                |
| Liberia                          | 43 176.49                                                    | 8.43                                                             | 36.60                                                          | 54.97                                                   | 0.15                                                    | 0.30                                        | -2.15                               | 0.26                                |
| Libya                            | 96.90                                                        | 83.19                                                            | 4.80                                                           | 12.01                                                   | 5.72                                                    | 19.51                                       | -10.76                              | 817.14                              |
| Liechtenstein                    | 0                                                            | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Lithuania                        | 8 697.45                                                     | 19.56                                                            | 29.28                                                          | 45.54                                                   | 0.30                                                    | 0.19                                        | 66.64                               | 2.17                                |
| Luxembourg                       | 5 357.31                                                     | 1.03                                                             | 3.83                                                           | 91.18                                                   | 0.05                                                    | 0.00                                        | 11.34                               | 3.96                                |
| Madagascar                       | 11 071.96                                                    | 95.89                                                            | 1.19                                                           | 2.91                                                    | 13.46                                                   | 23.10                                       | 17.49                               | 11.26                               |
| Malawi                           | 840.11                                                       | 85.94                                                            | 3.52                                                           | 10.55                                                   | 1.36                                                    | 3.75                                        | 35.55                               | 17.50                               |
| Malaysia                         | 16 716.87                                                    | 45.65                                                            | 29.90                                                          | 24.45                                                   | 6.71                                                    | 4.85                                        | 27.11                               | 3.44                                |
| Maldives                         | 57.24                                                        | 4.55                                                             | 5.08                                                           | 94.92                                                   | 0.00                                                    | 0.00                                        | –                                   | 15.67                               |
| Mali                             | 5 200.97                                                     | 97.86                                                            | 0.08                                                           | 2.06                                                    | 5.19                                                    | 4.30                                        | 49.33                               | 8.00                                |
| Malta                            | 95.61                                                        | 34.53                                                            | 1.62                                                           | 63.85                                                   | 0.04                                                    | 41.61                                       | 60.00                               | 72.60                               |
| Marshall Islands                 | –                                                            | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Mauritania                       | 2 338.16                                                     | 90.58                                                            | 2.36                                                           | 7.07                                                    | 1.35                                                    | 9.78                                        | 35.48                               | 13.25                               |
| Mauritius                        | 2 155.74                                                     | 47.87                                                            | 1.58                                                           | 50.55                                                   | 0.63                                                    | 18.09                                       | 6.43                                | 22.97                               |
| Mexico                           | 3 591.30                                                     | 76.30                                                            | 8.86                                                           | 14.84                                                   | 89.80                                                   | 33.34                                       | 1.30                                | 44.95                               |
| Monaco                           | 0.00                                                         | 0                                                                | 0                                                              | 100                                                     | 0.01                                                    | –                                           | –                                   | –                                   |
| Mongolia                         | 10 277.57                                                    | 54.26                                                            | 35.94                                                          | 9.80                                                    | 0.46                                                    | 7.71                                        | 13.71                               | 3.40                                |
| Montenegro                       | –                                                            | 0.31                                                             | 94.20                                                          | 5.50                                                    | 2.21                                                    | 17.23                                       | -22.07                              | –                                   |

| Countries                    | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|------------------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Morocco                      | 776.87                                                       | 87.78                                                            | 2.03                                                           | 10.19                                                   | 10.57                                                   | 16.36                                       | 26.10                               | 50.75                               |
| Mozambique                   | 6 648.04                                                     | 73.05                                                            | 1.70                                                           | 25.25                                                   | 1.47                                                    | 1.98                                        | 16.71                               | 1.75                                |
| Myanmar                      | 21 723.77                                                    | 88.56                                                            | 1.49                                                           | 9.95                                                    | 33.23                                                   | 16.88                                       | 29.72                               | 5.80                                |
| Namibia                      | 13 811.30                                                    | 71.48                                                            | 6.62                                                           | 21.90                                                   | 0.10                                                    | 0.93                                        | -4.57                               | 0.31                                |
| Nauru                        | 847.39                                                       | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Nepal                        | 7 073.76                                                     | 98.14                                                            | 0.31                                                           | 1.55                                                    | 9.50                                                    | 58.18                                       | 29.08                               | 8.31                                |
| Netherlands (Kingdom of the) | 5 082.54                                                     | 3.22                                                             | 70.25                                                          | 26.53                                                   | 8.23                                                    | 50.15                                       | 19.75                               | 16.66                               |
| New Zealand                  | 63 721.15                                                    | 64.95                                                            | 23.98                                                          | 11.08                                                   | 9.88                                                    | 122.18                                      | 23.31                               | 8.05                                |
| Nicaragua                    | 24 443.39                                                    | 85.04                                                            | 0.05                                                           | 14.91                                                   | 1.27                                                    | 5.09                                        | 21.93                               | 2.22                                |
| Niger                        | 1 345.21                                                     | 91.02                                                            | 1.50                                                           | 7.48                                                    | 2.58                                                    | 0.57                                        | -7.56                               | 11.02                               |
| Nigeria                      | 1 282.54                                                     | 44.17                                                            | 15.75                                                          | 40.08                                                   | 12.47                                                   | 0.74                                        | 3.95                                | 9.67                                |
| Niue                         | 0.00                                                         | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| North Macedonia              | 3 477.82                                                     | 6.40                                                             | 1.45                                                           | 14.06                                                   | 2.17                                                    | 28.03                                       | -76.64                              | 52.55                               |
| Norway                       | 72 020.22                                                    | 31.42                                                            | 39.82                                                          | 28.76                                                   | 2.69                                                    | 11.02                                       | 17.08                               | 2.04                                |
| Oman                         | 295.97                                                       | 80.78                                                            | 12.43                                                          | 6.79                                                    | 1.63                                                    | 105.86                                      | 6.20                                | 116.71                              |
| Pakistan                     | 1 012.72                                                     | 93.98                                                            | 0.76                                                           | 5.26                                                    | 179.30                                                  | 64.59                                       | 34.93                               | 109.99                              |
| Palau                        | 0.00                                                         | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Palestine                    | 157.77                                                       | 35.43                                                            | 8.30                                                           | 56.28                                                   | 0.34                                                    | 25.53                                       | -10.32                              | 48.11                               |
| Panama                       | 31 654.44                                                    | 36.83                                                            | 0.51                                                           | 62.66                                                   | 1.21                                                    | 4.78                                        | 32.18                               | 0.90                                |
| Papua New Guinea             | 78 505.02                                                    | 0.26                                                             | 42.74                                                          | 57.00                                                   | 0.39                                                    | 0.00                                        | –                                   | 0.13                                |
| Paraguay                     | 57 358.49                                                    | 78.62                                                            | 6.38                                                           | 15.00                                                   | 2.41                                                    | 2.93                                        | 14.29                               | 1.84                                |
| Peru                         | 56 154.61                                                    | 81.45                                                            | 6.43                                                           | 12.12                                                   | 25.92                                                   | 41.62                                       | 36.57                               | 4.83                                |



| Countries                        | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|----------------------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Philippines                      | 4 203.07                                                     | 74.63                                                            | 14.94                                                          | 10.43                                                   | 91.04                                                   | 18.88                                       | 27.44                               | 27.83                               |
| Poland                           | 1 576.11                                                     | 13.02                                                            | 65.49                                                          | 21.49                                                   | 9.39                                                    | 5.20                                        | 41.38                               | 32.49                               |
| Portugal                         | 7 430.11                                                     | 55.43                                                            | 29.66                                                          | 14.91                                                   | 6.13                                                    | 30.44                                       | 24.17                               | 12.32                               |
| Puerto Rico                      | 2 190.70                                                     | 3.47                                                             | 72.22                                                          | 24.31                                                   | 0.88                                                    | 33.29                                       | -7.36                               | 19.54                               |
| Qatar                            | 20.05                                                        | 33.31                                                            | 4.30                                                           | 62.39                                                   | 0.25                                                    | 55.01                                       | -7.09                               | 431.03                              |
| Republic of Korea                | 1 346.01                                                     | 58.93                                                            | 16.43                                                          | 24.64                                                   | 29.20                                                   | 58.17                                       | 17.89                               | 85.22                               |
| Republic of Moldova              | 4 036.20                                                     | 6.89                                                             | 73.06                                                          | 20.05                                                   | 0.85                                                    | 11.41                                       | 25.62                               | 12.56                               |
| Romania                          | 11 061.33                                                    | 36.25                                                            | 48.34                                                          | 15.41                                                   | 8.15                                                    | 36.79                                       | 8.01                                | 7.63                                |
| Russian Federation               | 31 085.64                                                    | 28.76                                                            | 44.79                                                          | 26.46                                                   | 64.82                                                   | 3.10                                        | 4.79                                | 4.12                                |
| Rwanda                           | 974.29                                                       | 60.07                                                            | 1.66                                                           | 38.27                                                   | 0.61                                                    | 0.53                                        | 28.52                               | 20.20                               |
| Saint Kitts and Nevis            | 513.82                                                       | 1.28                                                             | 0.00                                                           | 98.72                                                   | 0.01                                                    | 0.49                                        | -                                   | 50.83                               |
| Saint Lucia                      | 1 678.03                                                     | 70.86                                                            | 0.00                                                           | 29.14                                                   | 0.04                                                    | 31.35                                       | -                                   | 14.30                               |
| Saint Vincent and the Grenadines | 979.95                                                       | 0.00                                                             | 0.02                                                           | 99.98                                                   | 0.01                                                    | 9.56                                        | -                                   | 7.90                                |
| Samoa                            | 0.00                                                         | -                                                                | -                                                              | -                                                       | -                                                       | -                                           | -                                   | -                                   |
| Sao Tome and Principe            | 9 633.02                                                     | 62.59                                                            | 1.47                                                           | 35.94                                                   | 0.04                                                    | 17.47                                       | -                                   | 1.88                                |
| Saudi Arabia                     | 74.59                                                        | 81.56                                                            | 5.39                                                           | 13.05                                                   | 23.38                                                   | 90.14                                       | 4.97                                | 974.17                              |
| Senegal                          | 2 207.79                                                     | 91.31                                                            | 0.05                                                           | 8.64                                                    | 3.06                                                    | 3.07                                        | 15.41                               | 16.28                               |
| Serbia                           | 23 883.80                                                    | 8.29                                                             | 77.92                                                          | 13.79                                                   | 5.09                                                    | 1.94                                        | 16.86                               | 5.74                                |
| Seychelles                       | 0.00                                                         | 6.57                                                             | 27.74                                                          | 65.69                                                   | 0.01                                                    | 16.77                                       | 32.19                               | -                                   |
| Sierra Leone                     | 19 331.13                                                    | 21.54                                                            | 26.15                                                          | 52.31                                                   | 0.21                                                    | 1.68                                        | 26.68                               | 0.50                                |
| Singapore                        | 106.20                                                       | 0.00                                                             | 45.07                                                          | 54.93                                                   | 0.20                                                    | 2.79                                        | -                                   | 33.26                               |

| Countries            | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|----------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Slovakia             | 9 153.70                                                     | 5.83                                                             | 39.84                                                          | 54.33                                                   | 0.56                                                    | 1.92                                        | 11.96                               | 2.43                                |
| Slovenia             | 15 066.93                                                    | 0.41                                                             | 77.99                                                          | 21.64                                                   | 0.83                                                    | 14.07                                       | 37.64                               | 5.59                                |
| Solomon Islands      | 57 229.48                                                    | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Somalia              | 825.75                                                       | 99.48                                                            | 0.06                                                           | 0.45                                                    | 3.30                                                    | 17.71                                       | 40.61                               | 24.53                               |
| South Africa         | 823.20                                                       | 59.40                                                            | 23.16                                                          | 17.44                                                   | 21.11                                                   | 38.58                                       | –3.56                               | 67.60                               |
| South Sudan          | 4 491.35                                                     | 36.47                                                            | 34.19                                                          | 29.33                                                   | 0.66                                                    | 0.77                                        | 0.08                                | 4.23                                |
| Spain                | 2 331.25                                                     | 65.33                                                            | 18.95                                                          | 15.71                                                   | 29.02                                                   | 22.41                                       | 21.10                               | 43.25                               |
| Sri Lanka            | 2 312.24                                                     | 87.36                                                            | 6.42                                                           | 6.22                                                    | 12.95                                                   | 24.03                                       | 7.32                                | 90.79                               |
| Sudan                | 765.44                                                       | 96.19                                                            | 0.28                                                           | 3.53                                                    | 26.94                                                   | 8.73                                        | 16.60                               | 118.66                              |
| Suriname             | 158 866.69                                                   | 70.00                                                            | 22.00                                                          | 8.00                                                    | 0.62                                                    | 97.02                                       | –8.89                               | 3.95                                |
| Sweden               | 16 591.44                                                    | 4.93                                                             | 61.27                                                          | 33.80                                                   | 2.48                                                    | 6.38                                        | 33.87                               | 3.58                                |
| Switzerland          | 6 084.95                                                     | 9.24                                                             | 37.09                                                          | 53.67                                                   | 1.70                                                    | 12.33                                       | 14.55                               | 6.50                                |
| Syrian Arab Republic | 748.01                                                       | 87.53                                                            | 3.67                                                           | 8.80                                                    | 13.96                                                   | 24.64                                       | –5.81                               | 124.36                              |
| Tajikistan           | 2 151.79                                                     | 74.53                                                            | 16.26                                                          | 9.21                                                    | 10.60                                                   | 68.83                                       | 50.91                               | 69.94                               |
| Thailand             | 6 114.28                                                     | 90.37                                                            | 4.85                                                           | 4.78                                                    | 57.31                                                   | 28.26                                       | 11.95                               | 23.01                               |
| Timor Leste          | 5 999.44                                                     | 91.38                                                            | 0.17                                                           | 8.45                                                    | 1.17                                                    | 18.10                                       | 46.34                               | 28.27                               |
| Togo                 | 1 617.21                                                     | 34.08                                                            | 2.83                                                           | 63.09                                                   | 0.22                                                    | 0.28                                        | 37.39                               | 3.39                                |
| Tokelau              | –                                                            | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Tonga                | –                                                            | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Trinidad and Tobago  | 2 566.98                                                     | 4.36                                                             | 33.64                                                          | 62.00                                                   | 0.34                                                    | 14.89                                       | –17.32                              | 20.33                               |
| Tunisia              | 380.80                                                       | 75.54                                                            | 1.73                                                           | 22.73                                                   | 3.86                                                    | 8.95                                        | 12.82                               | 98.11                               |
| Turkmenistan         | 3 425.22                                                     | 92.75                                                            | 4.64                                                           | 2.61                                                    | 26.25                                                   | 120.65                                      | 63.67                               | 135.21                              |

| Countries                          | Total annual renewable water resources per capita (m3/inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m3) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (2015–2022) (%) |
|------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|
| Tuvalu                             | 0.00                                                         | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Türkiye                            | 2 430.55                                                     | 86.93                                                            | 2.01                                                           | 11.06                                                   | 64.47                                                   | 14.93                                       | 20.94                               | 47.89                               |
| Uganda                             | 1 270.27                                                     | 40.66                                                            | 7.85                                                           | 51.49                                                   | 0.64                                                    | 0.12                                        | 24.42                               | 5.83                                |
| Ukraine                            | 4 270.04                                                     | 21.13                                                            | 44.84                                                          | 34.02                                                   | 4.86                                                    | 6.42                                        | 71.09                               | 6.30                                |
| United Arab Emirates               | 14.65                                                        | 51.18                                                            | 1.14                                                           | 47.68                                                   | 2.26                                                    | 63.10                                       | 19.16                               | 1 509.93                            |
| United Kingdom                     | 2 156.08                                                     | 14.05                                                            | 12.00                                                          | 73.95                                                   | 8.42                                                    | 3.76                                        | 6.49                                | 14.35                               |
| United Republic of Tanzania        | 1 487.67                                                     | 89.35                                                            | 0.48                                                           | 10.17                                                   | 5.18                                                    | 2.34                                        | 45.68                               | 12.96                               |
| United States of America           | 8 985.93                                                     | 39.66                                                            | 47.20                                                          | 13.14                                                   | 444.29                                                  | 15.96                                       | 16.22                               | 28.16                               |
| Uruguay                            | 50 782.78                                                    | 77.19                                                            | 13.39                                                          | 9.42                                                    | 4.51                                                    | 15.05                                       | 0.72                                | 12.05                               |
| Uzbekistan                         | 1 398.73                                                     | 92.13                                                            | 2.70                                                           | 5.17                                                    | 42.90                                                   | 97.04                                       | 82.49                               | 123.03                              |
| Vanuatu                            | 31 944.19                                                    | –                                                                | –                                                              | –                                                       | –                                                       | –                                           | –                                   | –                                   |
| Venezuela (Bolivarian Republic of) | 46 964.14                                                    | 73.85                                                            | 3.51                                                           | 22.64                                                   | 22.62                                                   | 31.98                                       | –68.55                              | 7.54                                |
| Viet Nam                           | 8 869.52                                                     | 94.78                                                            | 3.75                                                           | 1.47                                                    | 81.86                                                   | 39.28                                       | 49.16                               | 18.13                               |
| Yemen                              | 54.94                                                        | 90.74                                                            | 1.82                                                           | 7.43                                                    | 3.57                                                    | 46.86                                       | –23.00                              | 169.76                              |
| Zambia                             | 5 200.23                                                     | 73.28                                                            | 8.27                                                           | 18.45                                                   | 1.57                                                    | 4.06                                        | 22.33                               | 2.84                                |
| Zimbabwe                           | 1 244.63                                                     | 87.20                                                            | 1.66                                                           | 11.14                                                   | 4.91                                                    | 6.87                                        | –25.01                              | 46.09                               |

Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>.  
Licence: CC BY 4.0.

Table A3.2 present the key indicators used to measure and illustrate the pressure that different economic activities place on water resources across geographic regions.

Table A3.2. Key variables to measure pressure on water resources by geographic region (2022)

| Regions                         | Total annual renewable water resources per capita (m <sup>3</sup> /inhab) | Agricultural water withdrawal as % of total water withdrawal (%) | Industrial water withdrawal as % of total water withdrawal (%) | Municipal water withdrawal as % of total withdrawal (%) | Total annual freshwater withdrawal (10 <sup>9</sup> m <sup>3</sup> ) | Cultivated area equipped for irrigation (%) | SDG Indicator 6.4.1 (2015–2020) (%) | SDG Indicator 6.4.2 (%) |
|---------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------|-------------------------------------|-------------------------|
| Central Asia                    | 2 883.13                                                                  | 82.10                                                            | 9.51                                                           | 8.38                                                    | 112.42                                                               | 25.24                                       | 46.25                               | 70.21                   |
| Eastern Asia                    | 2 049.33                                                                  | 62.71                                                            | 17.48                                                          | 19.82                                                   | 686.50                                                               | 58.75                                       | 3.00                                | 44.15                   |
| Europe and Northern America     | 11 042.21                                                                 | 34.44                                                            | 47.42                                                          | 18.02                                                   | 761.96                                                               | 9.96                                        | 15.32                               | 12.29                   |
| Latin America and the Caribbean | 21 200.39                                                                 | 73.99                                                            | 9.53                                                           | 16.51                                                   | 354.18                                                               | 32.01                                       | -0.48                               | 5.73                    |
| Northern Africa                 | 564.53                                                                    | 82.34                                                            | 4.59                                                           | 13.06                                                   | 134.88                                                               | 18.78                                       | 18.23                               | 120.99                  |
| Oceania                         | 36 591.02                                                                 | 65.24                                                            | 20.19                                                          | 14.57                                                   | 21.97                                                                | 7.99                                        | 22.25                               | 3.17                    |
| South-eastern Asia              | 7 636.91                                                                  | 85.37                                                            | 6.18                                                           | 8.47                                                    | 503.78                                                               | 19.55                                       | 26.41                               | 20.62                   |
| Southern Asia                   | 1 226.34                                                                  | 91.23                                                            | 1.91                                                           | 6.86                                                    | 998.69                                                               | 45.86                                       | 34.13                               | 76.70                   |
| Sub-Saharan Africa              | 3 263.98                                                                  | 74.55                                                            | 8.70                                                           | 16.75                                                   | 105.84                                                               | 3.75                                        | 7.39                                | 6.30                    |
| Western Asia                    | 1 251.58                                                                  | 80.12                                                            | 5.62                                                           | 14.12                                                   | 175.09                                                               | 33.24                                       | 7.66                                | 65.11                   |
| World                           | 5 326.34                                                                  | 71.47                                                            | 15.29                                                          | 13.21                                                   | 3 855.32                                                             | 23.12                                       | 23.05                               | 18.04                   |

Source: FAO (Food and Agriculture Organization of the United Nations). 2025. AQUASTAT Dissemination System. [Accessed on 26 May 2025]. <https://data.apps.fao.org/aquastat/?lang=en>. Licence: CC BY 4.0.

## CONTACT INFORMATION

Land and Water Division

<https://www.fao.org/land-water/home/en/>

<https://www.fao.org/aquastat/en/>

---

**Food and Agriculture Organization of the United Nations**  
Rome, Italy

