Access to Drinking Water 1

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Year: 2025

UN SDG 6: Clean Water and Sanitation

Ensure availability and sustainable management
of water and sanitation for all.

UNITED NATIONS
SDGs

Overview

The Sustainable Development Goals (SDGs) are an **ongoing global call to action** to end poverty, ensure **prosperity** and **peace** for all people, and **protect** our planet.

There are **17 goals** relating to poverty, health, education, basic services, inequality, climate, peace, and partnership.

SUSTAINABLE DEVELOPMENT GOALS

About the Project

- In this project, access to safe and affordable drinking water is investigated by focusing on inequalities in service levels between different countries and regions.

- Data from the WHO/UNICEF Joint Monitoring Programme for water supply, sanitation, and hygiene (JMP) is used.

- The data was analyzed using Google Sheets. Insights were gathered and questions answered regarding access to safe and affordable drinking water.

Data Overview

The JMP dataset estimates household **access to drinking water services** between 2000 and 2020 to assess progress toward achieving the sixth SDG.

Estimates on the use of water (2000 – 2020)		
Country or area The specific country or area the values are estimated for.	**Year** The specific year the values are estimated for.	
Population The estimated population size in thousands for the specific country and year.	**% Urban** The estimated percentage share of the population living in urban areas.	**Service levels** The estimated national, rural, and urban percentage share of a specific level of access to drinking water services.

Data Overview

The dataset uses **service ladders** to benchmark and compare **access to drinking water** across different countries. The ladder defines five different service levels.

Service level	Definition
Safely managed	Drinking water from an improved source that is **accessible on premises**, available when needed, and **free from** fecal and priority chemical **contamination**.
Basic	Drinking water from an improved source, provided **collection time is not more than 30 minutes** for a round trip, including queue time.
Limited	Drinking water from an improved source, for which **collection time exceeds 30 minutes** for a round trip, including queue time.
Unimproved	Drinking water from an **unprotected** dug **well** or unprotected **spring**.
Surface water	Drinking water **directly from** a river, dam, lake, pond, stream, canal, or irrigation canal.

What to do

There are **two parts** to this integrated project. You need to import and clean data, create new features and visualizations, interpret the results, and answer the multiple-choice questions.

In part one, we'll answer questions like:

- How do the world population estimates **compare** to the provided dataset populations?
- How does the urban population share **compare** to the rural population?
- What is the **tendency** and **spread** of the different water access features?
- How do these **measures** of water access compare across different types of areas?
- What does the **national access** to water look like based on national **population** size?
- What does **urban access** to water look like based on urban **population** size?
- What does the rural access look like?
- What is the effect of **national population size** and **urbanization** on **GNI** and **water access**?