

**Committee:** GC1

**Issue:** The issue of water borne diseases, diseases transmitted through water supplies, occurring in third world countries

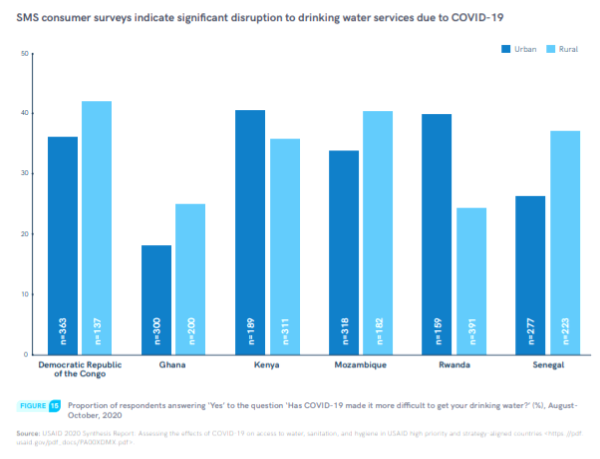
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### **The Introduction:**

Water and sanitation is a right as stated in 2010 by the UN General Assembly. Whether it is utilized for drinking, home use, food production, or recreation, safe and readily available water is critical for public health. Improved water supply and sanitation, as well as better management of water resources, can help countries thrive economically and reduce poverty. A global research conducted in 2017 revealed that 5.1 billion people used safely managed services and 1.4 billion people used at least basic services. Whereas there were 206 million people who used *limited* services, 435 million people taking water from unprotected wells, springs and 144 million people collecting untreated surface water from lakes, ponds, rivers and streams. This data underlined that 29 percent of our population is face to face with crucial diseases. Experts predict that by 2025 half of the world will live in water-stressed areas which will lead to a worse management of water sources. Therefore it is crucial to recognize the serious issue.

### **Background Information:**

The global water crisis is one of the greatest challenges that the world faces today. While substantial progress has been made in increasing access to clean drinking water and sanitation, billions of people still lack these basic services. Worldwide, one in three people do not have access to safe drinking water, two out of five people do not have a basic hand-washing facility like soap and water, and more than 673 million people still practice open defecation. The COVID-19 pandemic has demonstrated the critical importance of sanitation, hygiene and adequate access to clean water for preventing and containing diseases. According to the World Health Organization, handwashing is one of the most effective actions you can take to reduce the spread of pathogens and prevent infections, including the COVID-19 virus. Yet billions of people still lack safe water sanitation. In 2017, 5.3 billion people used safely managed drinking water



services where water sources were available when needed, and free from contamination. The remaining 2.2 billion people without safely managed services in 2017 included, 1.4 billion people with *basic* services, meaning an improved water source located within a round trip of 30 minutes; 206 million people with *limited* services, or an improved water source requiring more than 30 minutes to collect water, 435 million people taking water from unprotected wells and springs, 144 million people collecting untreated surface water from lakes, ponds, rivers and streams. Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhea, dysentery, hepatitis A, typhoid, and polio. Absent, inadequate, or inappropriately managed water and sanitation services expose individuals to preventable health risks. This is particularly the case in health care facilities where both patients and staff are placed at additional risk of infection and disease when water, sanitation, and hygiene services are lacking. Even patients staying in hospitals mostly get infected because of the dirty tap water. Therefore, an estimated amount of 829,000 people die each year from diarrhea as a result of unsafe drinking-water, sanitation, and hand hygiene. Organizations took actions as solutions to this worldwide problem. WHO confirmed on 2 April 2019, the arrival of 884,953 doses of cholera vaccine to support the humanitarian response in Beira, the most affected area hit by the Tropical Cyclone Idai, in Mozambique. The vaccination campaign was expected to start on 3 April, and studies would continue to control the spread of cholera. And the UN General Assembly explicitly recognized the human right to water and sanitation in 2010 as everyone has the right to sufficient, continuous, safe, physically accessible, and affordable water for personal and domestic use.

### **Major Parties Involved:**

**Ethiopia:** Ethiopia is considered to have one of the worst records of access to clean water. In Ethiopia, 60 to 80 percent of communicable diseases are attributed to limited access to safe water and inadequate sanitation and hygiene services. Diarrhea is the leading cause of under-five mortality in Ethiopia, accounting for 23 per cent of all under-five deaths – more than 70,000 children a year. Only 17 percent of people practice improved hygiene behaviors and live in healthy environments. It is estimated that almost 60 percent of the population in Ethiopia lacks basic access to safe drinking water.

**Papua New Guinea:** In Papua New Guinea, 51 percent of the population has significant access to safe drinking water while 87% of the population does not have the opportunity to benefit from basic sanitation services, meaning they do not have a toilet of their own.

**The Republic of Chad:** The WHO/UNICEF Joint Monitoring Program (JMP) reports that 61 per cent of people in Chad are without basic water access and 67 per cent of the country is

practicing open defecation. More than half of the population does not have adequate water access

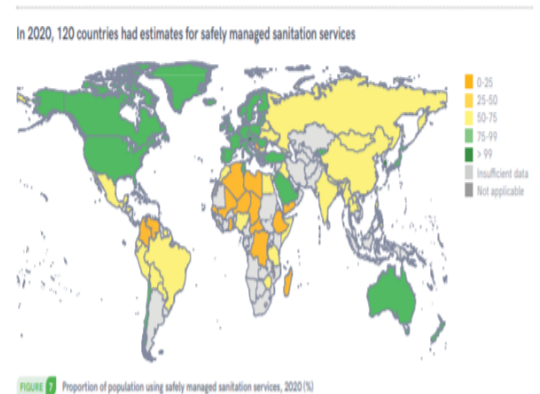
**Uganda:** Half of the population in Uganda does not have access to a clean water source in less than 30 minutes walking distance. The people mostly depend on drinking water from unsafe water resources far away from their living areas

**Democratic Republic of Congo (DRC):** In the DRC, only 43 per cent of the population has access to clean water while among the poorest regions of the country only 15 per cent can benefit from clean water.

**UNICEF:** Considering the United Nations' 6<sup>th</sup> Sustainable Development Goal, which is to *Ensure the access to water and sanitation for all*, UNICEF collaborates with many international organizations (such as WHO), governments and volunteers in order to assure the access to clean water to everyone on a global scale.

**WHO:** World Health Organization (WHO), considers the sanitation and safe consumption of water as a priority for the prevention of almost 20 percent of the mortality rates globally, based on the defecation and unsafe water based diseases. Thus, they operate worldwide with the support of the volunteers and the collaboration of the UN alongside many governments and NGOs.

**UN Water Programme:** United Nations Water Program (UNWP) is a formation that forms and needs new partnerships and collaborations on a daily basis for ensuring the safe access to clean water and to reduce the rates of water-borne diseases world-wide. They have actively helped in placing water and sanitation at the heart of recent milestone agreements such as the *2030 Agenda for Sustainable Development* and the *2015 Paris Agreement*.



**JMP:** The WHO/UNICEF Joint Monitoring Program (JMP) focuses on inequalities, assesses progress made at national, regional and global levels in reducing inequalities. It includes in depth analysis of inequalities between and within countries and identifies the populations most at risk of being left behind. Also, the JMP website allows visitors to interactively access the full dataset and download individual country files which include all of the data used to produce the estimates thus, raises public awareness and accessibility on the issue furthermore.

**Third World Countries:** Even though only the ones with the worst records on the specific issue were involved in this section, almost all of the third-world countries that are highly related to the issue at hand can be considered as major parties involved.

Below there are some useful links that can be used for further information on the section

<https://www.unwater.org/what-we-do/inform-policies/>

<https://www.unicef.org/ethiopia/water-sanitation-and-hygiene-wash>

<https://lifewater.org/blog/how-many-countries-dont-have-clean-water-top-10-list-and-facts/>

### **The Timeline of Events:**

Event	Date	Description
Project of the United States Agency for International Development.	1988	The acronym "WASH" was used from about 1988 onwards as an abbreviation for the "Water and Sanitation for Health"
Outbreak of Cholera	1831 - 1867	Many people used river water as their source of drinking water after sewage was allowed to come into contact with drinking water and contaminating it. Therefore the disease spread with ease.
Waterborne disease outbreaks reported in the United States	1920 - 2002	Approximately 1,870 events associated with drinking water, an average of 22.5 per year, with 883,806 illnesses, for an average of 10,648 cases per year.
World Water Day	1993	The UN General Assembly designates 22 March as World Water Day.
UN Water	2003	UN-Water is established, endorsed by the successor to the ACC: the UN System Chief Executives Board for Coordination.

UN made water a human right	July 28, 2010	The United Nations General Assembly explicitly recognized water and sanitation as a human right and acknowledged that water and sanitation are essential to the realization of all human rights.
“Water For Sustainable Development”	2018 - 2028	On 1 January 2016, the <u>17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development</u> — adopted by world leaders in September 2015 at an <u>historic UN Summit</u> — officially came into force. They referred to this movement as an “ <u>International Decade for Action</u> ”

### **Key Terms:**

Water Borne Disease: Waterborne diseases are infections caused by tiny organisms such as viruses and bacteria that are consumed through contaminated water or contact with excrement.

Clean Water: Clean water is water that is clean for all domestic use.

Sanitation: The promotion of hygiene and prevention of disease by maintenance of sanitary conditions

Water Supplies: a source, means, or process of supplying water (as for a community) usually including reservoirs, tunnels, and pipelines.

Water Services: all services including the provision of water intended for human consumption

## Previous Attempts to Solve the Issue:

- WHO produced and continues producing a series of water quality guidelines, including on drinking-water, safe use of wastewater, and safe recreational water environments. The water quality guidelines are based on managing risks, and since 2004 the *Guidelines for drinking-water quality* promote the Framework for Safe Drinking-water. WHO has also supported countries to implement the drinking-water quality guidelines through the development of practical guidance materials and provision of direct country support,
- WHO works closely with UNICEF in a number of areas concerning water and health, including on water, sanitation, and hygiene in health care facilities. In 2015 the two agencies jointly developed WASH FIT (Water and Sanitation for Health Facility Improvement Tool), an adaptation of the water safety plan approach. WASH FIT aims to guide small, primary health care facilities in low- and middle-income settings through a continuous cycle of improvement through assessments, prioritization of risk, and definition of specific, targeted actions,
- As mentioned before, UN-Water's Members and Partners have helped place water and sanitation at the heart of recent milestone agreements such as the [2030 Agenda for Sustainable Development](#) and the [2015 Paris Agreement](#) within the [UN Convention Framework on Climate Change](#). UN-Water also seeks to reflect the importance of sanitation and water in the [2015-2030 Sendai Framework for Disaster Risk Reduction](#), and the [2015 Addis Ababa Action Agenda on Financing for Development](#). These landmark agreements have created a global framework that is intrinsically connected and mutually reinforcing,
- In December 2017 UN Member States adopted United Nations General Assembly resolution 71/222 on an [International Decade for Action on 'Water for Sustainable Development' 2018-2028](#). The Water Action Decade will accelerate efforts towards meeting water-related challenges, including limited access to safe water and sanitation, increasing pressure on water resources and ecosystems, and an exacerbated risk of droughts and floods.

SDG6 global targets	SDG6 global indicators	Custodian agencies <sup>1</sup>
6.1 Drinking water	6.1.1 Safely managed drinking water services	WHO, UNICEF
6.2 Sanitation and hygiene	6.2.1a Safely managed sanitation services 6.2.1b Basic handwashing services	WHO, UNICEF
6.3 Wastewater and water quality	6.3.1 Wastewater safely treated 6.3.2 Good ambient water quality	WHO, UN-Habitat, UNSD UNEP
6.4 Water use and water scarcity	6.4.1 Water use efficiency 6.4.2 Level of water stress	FAO FAO
6.5 Water resources management	6.5.1 Integrated water resources management 6.5.2 Transboundary basin area with water cooperation	UNEP UNECE, UNESCO-IHP
6.6 Water ecosystems	6.6.1 Water-related ecosystems	UNEP, Ramsar Convention
6.a Cooperation	6.a. Water and sanitation-related official development assistance	WHO, OECD
6.b. Participation	6.b. Participation of local communities in water and sanitation management	WHO, OECD

FIGURE 13 SDG6 global targets and indicators

<sup>1</sup> Coordinated by the UN-Water Integrated Monitoring Initiative for SDG6 (IMI-SDG6), including the United Nations Environment Programme (UNEP), United Nations Human Settlements Programme (UN-Habitat), United Nations Children's Fund (UNICEF), Food and Agriculture Organization of the United Nations (FAO), United Nations Economic Commission for Europe (UNECE), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO) and World Meteorological Organization (WMO).

- UNICEF collaborated with several governments such as on the ONE WASH National Programme, a sector-wide and multi-sectoral approach to WASH programming, which took place in Ethiopia,
- Progress has been made in several countries which have the worst records of clean water, sanitation and water-borne diseases. Regarding the data provided by *Lifewater Organization*, in Ethiopia, in 2005, 62 percent of Ethiopians were defecating outside, now open defecation has fallen to 22 per cent,
- In Papua New Guinea, since 2005, basic access to safe water has improved, from 34.5 percent in 2005, to 41 percent in 2017. Similar progresses were made in almost all the countries with the worst records of water-borne diseases,

### **Possible Solutions:**

- Ensure the water is visibly clean and free from sand and all types of bacteria. Filter the water to get rid of all visible dirt.
- Make sure to drink only clean and safe water. For instance either portable water or water filtered through water purifiers. Tap water tends to carry most of the water borne diseases.
- Get water purifying devices in particular; filters, RO units, etc., regularly serviced and maintained. Instead of getting bottled water, get water purifiers for your house.
- Citizens should make sure to take vaccinations for immunization against preventable diseases that can be caused by diseases transmitted through water such as Cholera, Typhoid, Hepatitis A and Polio.
- Creation of funds for the issue would probably make the efforts more efficient and faster
- Collaboration between related NGOs and member state's governments could be beneficial

## **Useful Links:**

<https://www.un.org/sustainabledevelopment/water-and-sanitation/>

<https://www.who.int/news-room/fact-sheets/detail/drinking-water>

<https://lifewater.org/blog/how-many-countries-dont-have-clean-water-top-10-list-and-facts/>

<https://www.who.int/news-room/fact-sheets/detail/drinking-water#:~:text=Contaminated%20water%20and%20poor%20sanitation,A%2C%20typhoid%2C%20and%20polio.>

<https://www.unicef.org/ethiopia/water-sanitation-and-hygiene-wash>

<https://lifewater.org/blog/ethiopia-water-crisis/>

[https://www.who.int/water\\_sanitation\\_health/wwdrchap6p1\\_3.](https://www.who.int/water_sanitation_health/wwdrchap6p1_3.)

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<https://www.unwater.org/app/uploads/2021/07/jmp-2021-wash-households-LAUNCH-VERSION.pdf>

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