



ANKU COLLEGE MODEL UNITED NATIONS 2020

COMMITTEE: ECOSOC

**ISSUE: REGULATING THE AMOUNT OF DRINKABLE WATER
AROUND THE GLOBE**

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POSITION: PRESIDENT CHAIR

Esteemed delegates,

I would like to greet you all with a warm welcome! My name is Serdar, I am 18 years old and I am a student at Hacettepe University. It is an honour for me to be serving as you chair in this session of ACMUN. I hope this conference will be much fun and valuable to you all. This is a guide I have prepared for one of the topics of our committee. As you know, our committee aims to solve some of the world's greatest economic, social, and cultural conflicts. In that regard, each title you will be discussing is of importance to humanity. You are expected to work together as delegates to come up with plausible solutions. In this process, you will make use of the different bodies and organs of the United Nations as well as governmental and non-governmental organisations. This report will guide you in forming an understanding regarding the issue so that you can produce fruitful debates. Although I believe the report will suffice, I have put additional links for anyone interested in learning more about the topic. Please make sure you read the reports for the other titles of our committee as well. I wish you all a fantastic conference and look forward to seeing you in the committee!

Yours Sincerely

Serdar E. Comez

INTRODUCTION

Clean drinking water and sanitation are crucial for the wellbeing of humanity. Consequently, Resolution 64/292 of the United Nations General Assembly has accepted the access to clean drinking water as an essential human right.¹ Poor infrastructure and economic disadvantage lead to diseases related to lack of clean water, which end up taking the lives of many, including children. While there has been an improvement in the drinking sources in the last decades, it is still estimated that 3 in 10 people lack access to safely managed drinking water services.² Hence, providing access to clean water and helping improve sanitation facilities remain important items in the United Nations. It is no surprise, then, that the 6th Sustainable Development Goal, set out in 2015 is Clean Water and Sanitation. In this committee, delegates are expected to come up with solutions to this issue with specific emphasis on developing countries in Asia and Africa.



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¹ https://www.un.org/waterforlifedecade/human_right_to_water.shtml

² <https://www.un.org/sustainabledevelopment/water-and-sanitation/>

³ <https://wsimag.com/science-and-technology/27987-clean-drinking-water>

DEFINITION OF KEY TERMS

Delegates must have a comprehensive understanding of the issue they are dealing at hand. The following terms are of great importance regarding the scope of the issue.

Sufficient: It is not only access to clean water that is required but also an abundant amount. It has been estimated by the World Health Organisation (WHO) that an individual needs 50-100 litres of water per day.⁴

Safe: The water supplied must be free of any threats to the health of the individual consuming it. These threats include pathogenic micro-organisms, chemical and radiological hazards. While the degree of safety may be set out by local and national organisations, *the World Health Organization (WHO) Guidelines for Drinking-water Quality* may be used for reference.³

Acceptable: The water provided should be acceptable in taste, colour and odour. Furthermore, cultural expectations and needs of individuals are to be considered.³

Physically Accessible: The water sources provided should be in the proximity of households. WHO states that water sources should be no more than 1km away from households and that collection time should be 30 minutes at maximum.³

Affordable: Clean drinking water should be within the financial reach of everyone. *United Nations Development Programme (UNDP)* states that water costs should not exceed 3% of the house income.³

OVERVIEW

Sustainable Development Goal 6.1 is tracked with the indicator of “safely managed drinking water services”. In 2017, 5.3 billion people on the planet used safely managed drinking water services. This means that this group of people had access to clean drinking water nearby at any time of need. However, safe and clean water was not as easily accessible for the remaining 2.2 billion people. Of these people, 1.4 billion people had *basic* access to water, meaning they had to spend about 30 minutes on a round trip. 206 million people had *limited* access, meaning it took them more than 30 minutes to collect water. 435 million people collected water from unprotected wells and

⁴ https://www.un.org/waterforlifedecade/human_right_to_water.shtml

144 million people collected water from sources such as ponds, lakes and rivers.⁵ The latter group of people are presented with a significant challenge since water from the aforementioned sources is untreated and therefore, carries a risk of spreading disease. The difference in the figures mentioned arises not only from geographical differences but also from economic background.

Contaminated drinking water poses a threat to health due to the transmission of certain diseases. Hepatitis A, for instance, is a virus transmitted through faecal-oral route and, in rare cases, causes liver failure and death. It has been found out that drinking water-associated cases of Hepatitis A have decreased throughout the years, along with the introduction of childhood vaccination.⁶ However, considering that 1 in 5 children lack access to life-saving vaccines in Africa⁷, there is a significant risk for the transmission of certain diseases in developing nations.

Lack of quality in sanitation services may also cause disease in ways other than allowing for viral transmission. Research done on drinking water in Northeast Iran has shown that levels of arsenic and toxic heavy metals may be above the safety limit for children in some cases.⁸ It is stated that ingestion of certain heavy metal impurities in drinking water may carry carcinogenic risk. Therefore, it is crucial to carefully detect levels of these elements in drinking water and ensure that they are below the safety limit.

Another research on access to drinking water was carried out in Cameroon, a country in Central Africa. The findings show that 53.69% of households rode between 1km and 5km to collect water, which is above the recommended WHO limit. 85,50% of households did not use a water treatment method, which is an alarmingly high percentage. Furthermore, 54.52% of households discharged domestic wastes into the street.⁹ These figures present a rather great challenge since there is a big public issue at hand for most of the population.

⁵ <https://www.who.int/news-room/fact-sheets/detail/drinking-water>

⁶ Barrett CE, Pape BJ, Benedict KM, et al. Impact of Public Health Interventions on Drinking Water-Associated Outbreaks of Hepatitis A — United States, 1971–2017. *MMWR Morb Mortal Wkly Rep* 2019;68:766–770. DOI: [http://dx.doi.org/10.15585/mmwr.mm6835a4external icon](http://dx.doi.org/10.15585/mmwr.mm6835a4external%20icon).

⁷ <https://www.afro.who.int/news/1-5-children-africa-do-not-have-access-life-saving-vaccines>

⁸ Alidadi, H., Tavakoly Sany, S., Zarif Garaati Oftadeh, B. et al. Health risk assessments of arsenic and toxic heavy metal exposure in drinking water in northeast Iran. *Environ Health Prev Med* 24, 59 (2019). <https://doi.org/10.1186/s12199-019-0812-x>

⁹ The Pan African Medical Journal. 23/07/2019 ;33:244. doi:10.11604/pamj.23/07/2019 .33.244.17974

Another research was done in Southeast Ethiopia regarding diarrhoea and children under the age of five. As stated in the research, diarrhoea is the leading cause of morbidity and mortality among less than 5 years old children globally and it contributes to the deaths of approximately one million children every year. The results of the research indicate the source of drinking water as one of the causes of diarrhoea.¹⁰

On February 29 of the year 2019, there was a cholera outbreak in the Bulambuli District of Eastern Uganda. Research was done to investigate the scope of the disease and its mode of transmission. Results showed that the outbreak was caused by drinking contaminated water from Cheptui River.¹¹ It was recommended by the researchers to boil and treat the water, and distribute chlorine tablets. Construction of additional borehole pumps was suggested as a long term solution. It was also stated that the appearance of cholera cases gradually decreased along with preventive measures and stopped by the 6th of April. This shows us that by taking the correct preventive measures, it is quite possible to reduce the risk of disease.

It is stated by the WHO that in 2017, over 220 million people required preventive treatment for schistosomiasis – an acute and chronic disease caused by parasitic worms contracted through exposure to infested water.¹²

It is possible to list many more disease and researches on outbreaks. However, the point has been made clear: lack of clean drinking water poses a great challenge to public health and the number of cases can be reduced drastically by taking preventive measures. These measures will not only reduce the number of diseased individuals but also the number of unfortunate death cases.

¹⁰ Workie, G.Y., Akalu, T.Y. & Baraki, A.G. Environmental factors affecting childhood diarrheal disease among under-five children in Jamma district, South Wello zone, Northeast Ethiopia. *BMC Infect Dis* 19, 804 (2019). <https://doi.org/10.1186/s12879-019-4445-x>

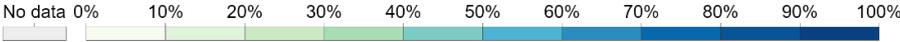
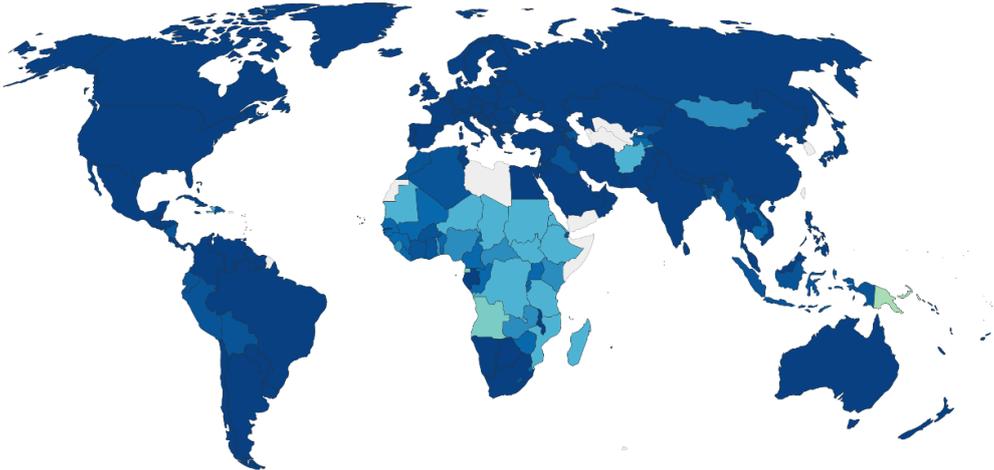
¹¹ Okello, P.E., Bulage, L., Rioplexus, A.A. et al. A cholera outbreak caused by drinking contaminated river water, Bulambuli District, Eastern Uganda, March 2016. *BMC Infect Dis* 19, 516 (2019). <https://doi.org/10.1186/s12879-019-4036-x>

¹² <https://www.who.int/news-room/fact-sheets/detail/drinking-water>

Maps and Graphs¹³

Share of the population with access to improved drinking water, 2015

An improved drinking water source includes piped water on premises (piped household water connection located inside the user's dwelling, plot or yard), and other improved drinking water sources (public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection).

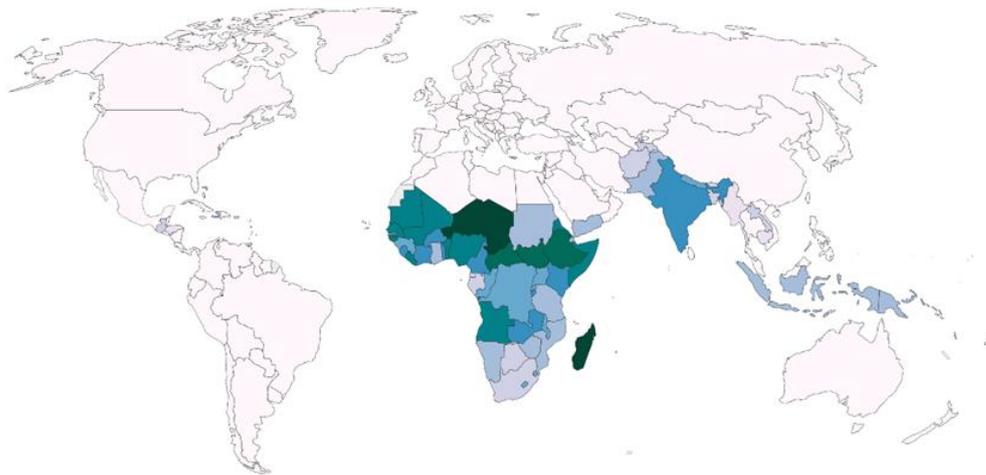


Source: World Bank – WDI

OurWorldInData.org/water-access-resources-sanitation/ • CC BY

¹³ Hannah Ritchie and Max Roser (2020) - "Clean Water". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/water-access' [Online Resource]

Share of deaths from unsafe water sources, 2017



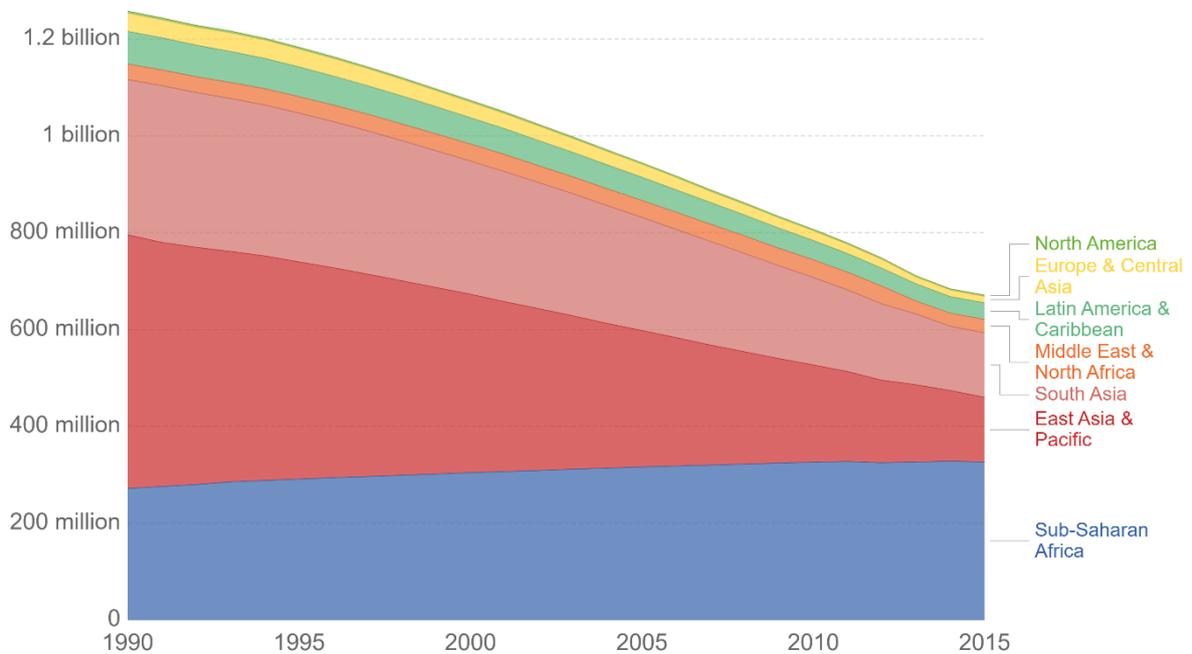
Source: IHME, Global Burden of Disease

OurWorldInData.org/water-access • CC BY

Number of people without access to an improved drinking water source



An improved drinking water source includes piped water on premises (piped household water connection located inside the user's dwelling, plot or yard), and other improved drinking water sources (public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection).

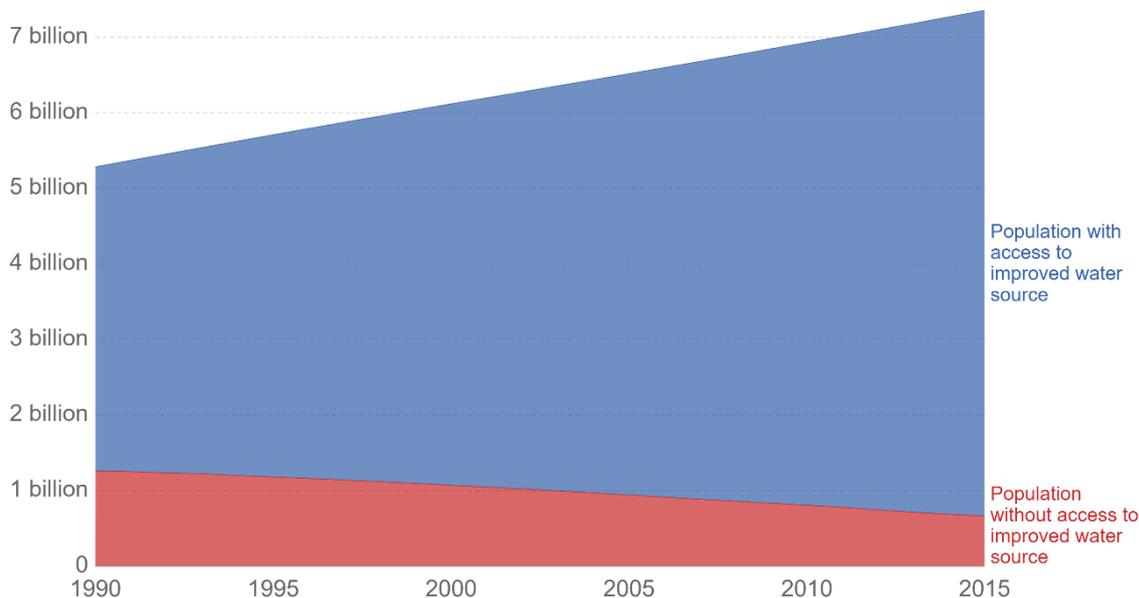


Source: Our World in Data based on World Bank, World Development Indicators OurWorldInData.org/water-access-resources-sanitation/ • CC BY

Number of people with and without access to an improved water source, World



The absolute number of people with and without access to an improved water source. An improved drinking water source includes piped water on premises (piped household water connection located inside the user's dwelling, plot or yard), and other improved drinking water sources (public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection).



Source: OurWorldinData based on World Bank, World Development Indicators OurWorldInData.org/water-access-resources-sanitation/ • CC BY

Evaluation of Other Issues:

Energy Production

An issue that is very much related to water is energy production. The IEA estimates global water withdrawals for energy production in 2010 at 583 billion m^3 (15% of global water withdrawals). Furthermore, 90% of global power generation is water-intensive and approximately 15–18 billion m^3 of freshwater resources are contaminated by fossil fuel production per year.¹⁴ Therefore, changing the methods of energy production will consequently have impacts on both the environment and the amount of quality of the drinking water we have.

Climate Change

Research done carried out on the drinking water from natural sources in Bangladesh has shown a link between climate change and the quality of drinking water. Due to rising sea levels, cyclones and storms, there has been an increase in the salinity of drinking water, beyond the recommended limits.¹⁵

¹⁴ “The United Nations World Water Development Report 2014: Water and Energy; Facts and Figures.” Unesdoc.unesco.org, UNESCO, 2014, unesdoc.unesco.org/ark:/48223/pf0000226961.

¹⁵ Aneire Ehmar Khan, Andrew Ireson, Sari Kovats, Sontosh Kumar Mojumder, Amirul Khusru, Atiq Rahman, and Paolo Vineis, 2011: Drinking Water Salinity and Maternal Health in Coastal Bangladesh: Implications of Climate Change. Environmental Health Perspectives 119:9 CID: <https://doi.org/10.1289/ehp.1002804>

Increasing Population in Asia and the Pacific

The Asia-Pacific region hosts 61% of the world's population and the number of people living in the region is expected to reach 5 billion by 2050. Asia's per capita freshwater availability remains half of the global average and almost 380 million people do not have access to safe drinking water.¹² Combined with the threat of a rapidly increasing population, these numbers are part of a great challenge.

Women

In many countries, women are given the responsibility of collecting water. It has been reported that women in Africa and Asia walk on average 6km to collect water.¹⁶ Besides being physically draining, this is rather time-consuming. Improving access to water would hence help women take more responsibility in social life and work in developing countries by freeing them of the burden of walking long distances for long periods to collect water.

Children and Education

Children also participate in collecting water. This takes up time, which could be much better used to build their future.¹⁷ By having access to clean drinking water nearby, children will have more time to spend on their education and youthful activities. Additionally, diseases caused by infected water sources prevent children from going to school, which is preventable by implementing water sanitation.

RELEVANT ACTORS AND BODIES:

UN Water

UN Water is the main organisation responsible for coordinating over 30 UN organisations involved in water and sanitation. UN Water aims to support member states the mission of providing clean water for all. Its activities are carried out in the following ways:¹⁸

1. Inform Policies
2. Monitor and Report

¹⁶ https://www.un.org/waterforlifedecade/human_right_to_water.shtml

¹⁷ <https://www.charitywater.org/global-water-crisis/education>

¹⁸ <https://www.unwater.org/about-unwater/>

3. Inspire Action

United Nations Development Programme (UNDP)

The United Nations Development Programme is concerned with the planet, people, and prosperity. In this regard, they have developed what is called Sustainable Development Goals. Clean water and sanitation for all are a part of the goals to be reached by 2030.¹⁹

World Health Organisation (WHO)

Since drinking water contaminated by chemicals, pathogenic micro-organisms and radiological residues carries a significant risk for public health, this matter is much relevant to the World Health Organisation. WHO carries out its activities by initiating programmes and projects, as well as producing technical information. *Guidelines for Drinking Water Quality* published by the WHO also serve as standards for preventive measures.²⁰

United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO is also involved in the mission of helping everyone have access to clean and safe water. They carry out the World Water Assessment Programme (UNESCO WWAP), which calls for an integrated approach to human health and water source management. They publish factual reports on the issue, called World Water Development Reports.²¹

United Nations International Children's Emergency Fund (UNICEF)

UNICEF sees access to clean water and sanitation as an essential right for children. They have planned out their goals as water, sanitation and hygiene (WASH). UNICEF believes in supporting intersectoral approaches, that is water and hygiene-related programmes integrated with other sectoral programmes such as education, health, and nutrition.²²

TREATIES AND INITIATIVES:

¹⁹ <https://www.tr.undp.org/content/turkey/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation.html>

²⁰ https://www.who.int/topics/drinking_water/en/

²¹ <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/facts-and-figures/water-supply-sanitation-and-health/>

²² https://www.unicef.org/wes/index_43084.html

ECOSOC General Comment No. 15

Adopted in November 2002, this is a comprehensive document that deals with the issue from different perspectives. The argument for the right to water is made and its significance is explained in detail. The acceptance of access to safe and clean water as a human right is presented in its historical context, citing the Convention on the Elimination of All Forms of Discrimination against Women and the Convention on the Rights of the Child. The following extract, implying the importance of sanitation is taken from the document:

29. Ensuring that everyone has access to adequate sanitation is not only fundamental for human dignity and privacy, but is one of the principal mechanisms for protecting the quality of drinking water supplies and resources.²³

However, it is seen that while this document presents a comprehensive argument, it has not been enough to suggest solutions for people deprived of the right to water.

The General Assembly Resolution Resolution 64/292

Adopted on July 28, 2010, this resolution is a crucial document released by the United Nations on the issue of water and sanitation. The following extract is taken from the resolution:²⁴

1. Recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights
2. Calls upon States and international organizations to provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all;
3. Welcomes the decision by the Human Rights Council to request that the independent expert on human rights obligations related to access to safe drinking water and sanitation submit an annual report to the General Assembly,¹³ and encourages her to continue working on all aspects of her

²³ https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf

²⁴ <https://undocs.org/A/RES/64/292>

mandate and, in consultation with all relevant United Nations agencies, funds and programmes, to include in her report to the Assembly, at its sixty-sixth session, the principal challenges related to the realization of the human right to safe and clean drinking water and sanitation and their impact on the achievement of the Millennium Development Goals.

2030 Agenda for Sustainable Development

The first target of Sustainable Development Goal 6 is to achieve universal and equitable access to safe and affordable drinking water for everyone.²⁵

Delegates are expected to have an understanding of the previous actions taken regarding the issue. Their goal then is to build upon the previous agreements and documents by implementing new solutions and suggesting novel methods for change.

TIMELINE OF MAJOR EVENTS²⁶

Date	Description
March 1977	The Action Plan from <i>the United Nations Water Conference</i> recognised water as a right for the first time.
January 1992	<i>The International Conference on Water and Sustainable Development</i> was carried out in Dublin.
September 1994	In the Programme of Action of <i>the UN International Conference on Population and Development</i> , access to water and sanitation was once again accepted as a right.
December 1999	Article 10 of the <i>UN General Assembly Resolution A/Res/54/175</i> "The Right to Development" states that clean water is a fundamental human right
November 2002	<i>General Comment 15</i> interprets the 1966 International Covenant on Economic, Social and Cultural Rights (ICESCR) confirming the right to water in international law.
July 2005	<i>Draft Guidelines for the Realization of the Right to Drinking Water and Sanitation</i> are released. These Guidelines do not legally define the right to water and sanitation, but rather guide government policy makers, international agencies and members of civil society working in the water and sanitation sector.

²⁵ <https://sustainabledevelopment.un.org/sdg6#targets>

²⁶ https://www.un.org/waterforlifedecade/pdf/human_right_to_water_and_sanitation_milestones.pdf

October 2009	<i>Human Rights Council Resolution 12/8</i> is accepted. The consultation of an independent expert is acknowledged. The Human Rights Council recognizes that States must address and eliminate discrimination concerning access to sanitation for the first time, and urges them to address effectively inequalities in this area.
July 2010	<i>UN General Assembly Resolution A/RES/64/292</i> calls upon states and international organisations to provide financial resources, help capacity-building and technology transfer to help countries, in particular developing countries, to provide safe, clean, accessible and affordable drinking water and sanitation for all.
September 2015	The United Nations adopts <i>Sustainable Development Goals</i> , the sixth of which states water and sanitation for all.

POSSIBLE SOLUTIONS

It is observed that in most of the previous UN resolutions and documents, there has been a focus on the legal aspect of access to water. It is obvious that more effort is needed in providing direct help to developing nations as opposed to simply accepting that water is a basic human right. Measures for saving water in agriculture and irrigation may provide developing countries with some level of relief. Options for recycling wastewater may be questioned as well. Additionally, energy production and its methods may be questioned as a factor that causes loss of water. Climate change and population growth control are also related issues that may be discussed by the delegates. Delegates must keep in mind to tackle the issue from different perspectives: Sufficiency, acceptability, safety, affordability, and physical accessibility. For instance, measures for implementing standard water pricing may be discussed with regards to affordability. Setting up water treatment facilities in local communities as well as introducing water storage and treatment methods for households may be useful ideas for dealing with the physical accessibility and safety of water. The goal should be to

help developing nations and their citizens become self-sustaining. Furthermore, governmental and non-governmental organizations may be called to question since the activity of UN bodies does not seem to be sufficient. Methods of reaching people in poverty and people in geographically unfavourable areas may be a part of the discussion. Finally, technological and scientific advancements will be an important part of the solution since such advances will help increase both the amount and the quality of drinking water.

USEFUL LINKS AND RESOURCES

https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf

<https://undocs.org/A/RES/64/292>

<https://www.unwater.org/>

<https://ourworldindata.org/water-access>

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1971–2017. MMWR Morb Mortal Wkly Rep 2019;68:766–770. DOI: <http://dx.doi.org/10.15585/mmwr.mm6835a4external>

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- <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/facts-and-figures/water-supply-sanitation-and-health/>
- <https://sustainabledevelopment.un.org/sdg6#targets>
- <https://undocs.org/A/RES/64/292>
- <https://www.afro.who.int/news/1-5-children-africa-do-not-have-access-life-saving-vaccines>
- <https://www.charitywater.org/global-water-crisis/education>
- <https://www.tr.undp.org/content/turkey/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation.html>
- <https://www.un.org/sustainabledevelopment/water-and-sanitation/>
- <https://wsimag.com/science-and-technology/27987-clean-drinking-water>
- https://www.un.org/waterforlifedecade/human_right_to_water.shtm
- https://www.un.org/waterforlifedecade/pdf/human_right_to_water_and_sanitation_milestones.pdf
- https://www.unicef.org/wes/index_43084.html
- <https://www.unwater.org/about-unwater/>
- <https://www.who.int/news-room/fact-sheets/detail/drinking-water>

- https://www.who.int/topics/drinking_water/en/
- https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf