**GECMUN 6:** CREATE!



ACCESS TO CLEAN WATER CHAIR REPORT

> MINJU LEE SERENA JEON RILEY PARK

# LETTER FROM THE CHAIRS

Greetings Honorable Delegates,

Welcome to the GECMUN 6 conference!

We are Minju Lee, Serena Jeon, and Riley Park from Korea International School Jeju. It is our honor and privilege to serve all of you as chairs of the World Health Organization committee for the GECMUN 6 conference. It is our second time participating in GECMUN and we are extremely delighted to share wonderful experiences and memories with you here on Jeju island. Our WHO committee will discuss health-related issues through fruitful discussions in which we will be examining the status quo and then seeking to form new policies in order to support the access to clean water in the world. Completing research on the solutions made in the past and investigations about your country's stance will prepare you well for this meeting.

As delegates in the past, we fully understand the pressure that you may feel, but we wish to reassure you that this will be a wonderful opportunity to learn if you are prepared, open-minded, willing to ask questions, and think quickly on your feet. With your passionate participation, we anticipate it to be a truly memorable experience! As your chairs, we will also promise you that we will put in our best effort to make this conference encouraging, inclusive, and enjoyable. Once again, thank you for your interest in MUN and the WHO committee.

Please do not hesitate to contact us at any time via email; we, the chairs, are always here to help you out!

Sincerely, Minju Lee (mjlee21@kis.ac) Serena Jeon (srjeon21@kis.ac) Riley Park (esolpark22@kis.ac)

# **INTRODUCTION TO COMMITTEE**

In 2010, the UN General Assembly explicitly recognized the human right to water and sanitation noting that everyone has the right to sufficient, continuous, safe, acceptable, physically accessible, and affordable water for personal domestic use. According to World Health Organization Report 2014, 785 million people around the globe lack basic drinking-water service, including 144 million people who are dependent on surface water. As the population of the world increases, an overwhelming demand for water in desert climates (e.g. Libya, Western Sahara) has resulted in a shortage of water, eventually leading to human health and environmental problems. Under this agenda, the WHO committee will be discussing new realistic long-term and short-term policies and modifying present policies to ameliorate the accessibility to clean water of the world.

# **PAST ACTIONS**

The World Health Organization has a role of improving the world's environment. The WHO especially aims to improve access to clean water. Along with other UN agencies, WHO has published a guideline known as Water, Sanitation, Hygiene and Health (WASH) which provides analysis of the current WASH status of each country and its relation to public health for health professionals.

Beyond WHO, the United Nation itself has also been working on the accessibility of clean water and sanitation. For instance, the UN's Millennium Development Goals declared in 2015 includes clean water and sanitation that aims towards universal access to safe water and restoring water-related ecosystems by 2030. Furthermore, on 28 July 2010, the General Assembly recognized that access to water and hygiene is a crucial human right and called upon an action for international organizations and states to provide financial support for developing countries to build technologies for clean water and

sanitation (GA Resolution 64/292). Finally, the Open Working Group has created a global goal of ensuring availability to clean water and sanitation in the Sustainable Development Goals (SDGs) in 2014.

Other organizations beside the UN have put effort to reduce the barriers to provide services for people who lack accessibility to clean water. The UN Agencies have cooperated with many NGOs and professional organizations around the world that work for technologies, financial support, and government systems that allows for more access to clean water. AquaFed, Water.org, and others are few examples of some organizations recognized by the UN.

Despite these efforts, lack of access to clean water still impacts people in a harmful manner. Developing countries lack political systems and technology to obtain the ground water, while dry climates, like deserts, need financial support to buy clean water for its growing population.

# AGENDA INFORMATION

### WHAT IS CLEAN WATER

Clean water is also known as drinking water, which is defined as water that is considered to be safe to drink and use in agriculture (World Health Organization). According to World WildLife, 2.7% of the water on Earth are considered to be fresh water that people can drink, but only 1% of this fresh water is accessible to people.

### **STATUS QUO**

According to the 2017 WHO Report, 2.2 billion people, including 206 million people with limited services that require more than 30 minutes to collect water and 144 million people collecting untreated surface water from lakes, are living without safely managed services when it comes to drinking-water services like Libya and Yemen. Currently, the World Health Organization created Joint Monitoring Programme 2017 presents indicators and baseline estimates for drinking water, sanitation and hygiene targets within the Sustainable Development Goals. Through this program, the organization introduced the indicators of safely managed drinking water and sanitation services that go beyond the use of improved facilities, to include consideration of the quality of services provided.

## CAUSES FOR THE LACK OF CLEAN WATER

There are three main causes for the lack of clean water. The first cause is water pollution, which is a result of pesticides and fertilizers used in industrial activities. The bacteria produced by human activities are also how ground water could be polluted. The second cause for lack of clean water is agricultural activities. Currently, 70% of the accessible freshwater is used to water the crops that support the growing population. However, inefficient irrigation systems have caused 60% of the used water to be wasted. This resulted in lakes and rivers to dry out, as irrigation systems often bring water from lakes or rivers to their field. Mass producers of crops such as India, United States, and China are the countries that are impacted the most. Lastly, exponential population growth of the world has increased the demand for clean water.

## **CONSEQUENCES OF UNCLEAN WATER - DISEASES**

According to a study published in The Lancet, water pollution led to 1.8 million deaths in 2015. Every year, unclean water makes about 1 billion people sick (NRDC). Especially the population in low-income countries are at stake as they reside close to polluting industries. Lack of medical supplies and insufficient knowledge regarding hazardous consequences of unsafe water are examples of the barriers that block the complete cure of these diseases. The major cause of illness from drinking contaminated water is waterborne pathogens, in the form of disease-causing bacteria and viruses from human and animal wastes. These pathogens mostly cause infectious diseases including typhoid, giardiasis, amoebiasis, ascariasis, and hookworm. The chemicals from polluted water also are pivotal components that badly impact the humans' body. Well-known chemicals include pesticides, chlorinated solvents, petroleum chemicals, mercury, dioxins, and etc. Once these chemicals enter humans' bodies, they may lead to various health issues including hormone disruption, liver and

kidney damage, altered brain function, and even cancer. Every year, thousands of Americans get sick by Legionnaires' disease, a severe form of pneumonia which is contracted from water sources such as cooling towers and piped water (NRDC).

### **CONSEQUENCES OF UNCLEAN WATER - ENVIRONMENT**

Different types of water pollution bring different consequences on the environment. Pollution from industries, for instance, often carry many harmful compounds like heavy metals. These metals accumulate in lakes and riverbanks, contaminating the whole habitats of marine life. As those creatures get exposed to chemicals, the consumers of those lives also get badly affected. This means that the rest of the whole food chain will be negatively influenced by the chemicals from industrial processes. When living organisms get exposed to those harmful compounds, their ability to reproduce and life span might get influenced, leading to disruption of the aquatic community structure.

Marine environment is also polluted by solid debris (e.g. plastic bags, soda cans) from humans. These can suffocate, and even starve aquatic animals. For instance, animals accidentally ingest small plastic straws, which interrupt their digestive system. It has turned out that about 100 million marine animals die each year from ocean debris (Sea Turtle Conservancy). Another consequence is eutrophication; it occurs when the increase in aerobic algae causes the reduction of oxygen level in water. This leads to the suffocation of marine species, eventually creating the "dead zones," where the water cannot contain lives anymore. These devastating impacts from water pollution are impairing millions of marine species, and as humans consume those organisms and water, all of this would return to us.

## **POSSIBLE SOLUTIONS**

## **INVOLVE EXISTING NGOS**

Try reaching out for the NGOs all around the world that already exist for the same issue. In regards to water accessibility and sanitation, there are already NGOs who are working with the UN as a partner. Some of the well-known NGOs are AquaFed, Water.org, and Wateraid. It is easier to develop on an already ongoing process than to create a totally new one. Research about which NGOs are putting on efforts and if any of them seems to match with your country's stance, try reaching out for collaboration and elaborate upon its current efforts.

#### **REGULATE THE ORIGINS OF WATER POLLUTION**

Human activities are one major cause of water pollution, whether by individuals or a group of people. Especially for the latter, the industrial and agricultural waste, created by human activity contains pesticides and fertilizers that pollutes the water. Extracting One way to resolve water pollution would be regulating them, but for this, considerations on the later effects to humans should be taken. First of all, are humans aware of their actions' impact on the environment? Not only that, how could the committee regulate the industrial waste effectively?

### **TECHNOLOGICAL AIDS**

Lack of accessibility to modern technology is one of the major reasons why nations have difficulties when using clean water. According to Horizon 2020 calls, European Union funded Africa with water sanitation tools such as Solar Powered Water Filtration, Drinkable Book, Zero Mass Water, or LifeStraw. These devices are relatively cheap compared to Water Sanitation Factory, therefore, could be practical alternative short-term solutions. Furthermore, other ways to obtain clean water is through drilling groundwater. By the investigations of hydrologists, people could predict possible areas that have groundwater and use a drill to dig it out. Currently, the deep drilling technology allows the drill to dig over 12,000 meters below the surface. Due to this, areas that lack surface water such as Southern Madagascar and dry deserts are using this method to access clean water.

## **REFER TO WATER, SANITATION, HYGIENE AND HEALTH (WASH)**

It is one solution to bring the guideline which was published by WHO along with other UN agencies, which can be strengthened by adjusting a portion. As this is a worldwide issue, solutions should be able to embrace different conditions of all members of the United Nations.

## **FINANCIAL SUPPORT**

In order for all countries to take any actions, money would be needed. Therefore, it is vital for developing countries to receive financial support. Countries must come up with realistic solutions in regards to who will pay for the expenses required in the solution. One possible solution for this issue may be raising funds. Identify how the funds are being used in different nations. Are they receiving fiscal aid from outer NGOs? Are there sufficient monitoring systems like the Ministry of Foreign Affairs that assures that the funds are being used in the right place? It is important to investigate the route of the money in order to prevent the funds from being misused.

# **QUESTIONS TO CONSIDER**

- What are the major causes of water pollution in your nation? Worldwide?
- Are there any current actions or policies being taken for better access to clean water in your nation? If so, how can they be elaborated in order to fix unsolved issues?
- Are there any historical endeavours or precedents that could be adapted to best fit with the needs of today?
- Considering that each country has different circumstances, how can your nation's current actions be applied to other countries?
- Which industries contribute the most to water pollution? How could the committee work on regulating them at a domestic or international level?
- Should certain countries be prioritized over others? If so, how would the committee involve every delegate into action?
- Which sources would be available for the financial support? How would their credibility be proven?
- What kinds of NGOs are currently working on to resolve this issue? How can their methods or organization be elaborated to fix unsolved issues?

# **BIBLIOGRAPHY**

Academies, N. (2007, September 1). Safe Drinking Water Is Essential. Reports from the

National Academies. <u>https://www.koshland-science-museum.org/water/html/en/Sources/Fossil-Water-in-</u> Libya.html

Action on... Water, Sanitation and Hygiene (WASH) | 2015 UN-Water Annual International Zaragoza Conference. Water and Sustainable Development: From Vision to Action. 15-17 January 2015. (n.d.). Retrieved January 4, 2020, from <u>https://www.un.org/waterforlifedecade/</u> waterandsustainabledevelopment2015/water sanitation hygiene.shtml

### Clean Water Act. (2019). In Wikipedia.

https://en.wikipedia.org/w/index.php?title=Clean\_Water\_Act&oldid=929838036

Dangers of water Pollution. (n.d.). Water Pollution. Retrieved January 8, 2020, from https://www.water-pollution.org.uk/dangers-of-water-pollution/

Denchak, M. (2018, May 14). Water Pollution: Everything You Need to Know. NRDC. Retrieved January 8, 2020, from <u>https://www.nrdc.org/stories/water-pollution-everything-you-need-know</u>

Dinka, M. O. (2018, March 21). Safe Drinking Water: Concepts, Benefits, Principles and Standards. Retrieved January 5, 2020, from https://www.intechopen.com/books/water-challenges-of-anurbanizing-world/safe-drinking-water-concepts-benefits-principles-and-standards.

IMSD International Master in Sustainable Development and Corporate Responsibility. (n.d.). Retrieved January 5, 2020, from \_https://www.eoi.es/blogs/imsd/water-scarcity-the-main-causes/.\_\_\_\_

- International Decade for Action "Water for Life" 2005-2015. Focus Areas: The human right to water and sanitation. (n.d.). Retrieved January 4, 2020, from <u>https://www.un.org/waterforlifedecade/human\_right\_to\_water.shtml</u>
- Martin. (n.d.). Water and Sanitation. United Nations Sustainable Development. Retrieved January 5, 2020, from <u>https://www.un.org/sustainabledevelopment/water-and-sanitation/</u>

Plastic Straws—The Truth. (n.d.). Turtle Savers™. Retrieved January 8, 2020, from <u>https://www.turtlesavers.uk/blogs/news/plastic-straws-the-truth</u>

Progress on drinking water, sanitation and hygiene. (2018, February 22). Retrieved January 8, 2020, from <u>https://www.who.int/water\_sanitation\_health/publications/jmp-2017/en/</u>.

Serele, C. (n.d.). Improving Access to Safe Water in Southern Madagascar. Retrieved January 8, 2020, from <u>https://www.unicef.org/innovation/stories/improving-safe-water-access-madagascar</u>.

- UN-Water. (n.d.). Partners. UN-Water. Retrieved January 4, 2020, from https://www.unwater.org/about-unwater/partners/
- Water Pollution Diseases | Environmental Pollution Centers. (n.d.). Retrieved January 4, 2020, from <u>https://www.environmentalpollutioncenters.org/water/diseases/</u>
- WHO | Key terms. (n.d.). WHO. Retrieved January 5, 2020, from <u>http://www.who.int/water\_sanitation\_health/monitoring/jmp2012/key\_terms/en/</u>
- WHO | Water sanitation and health. (n.d.). Retrieved January 5, 2020, from https://www.who.int/water\_sanitation\_health/en/