

6

CLEAN WATER AND SANITATION



MODEL UNITED NATIONS

SOCOMUN XXVIII

FRESHMAN #6

TOPIC: IMPROVING WATER QUALITY



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Freshman #6 Improving Water Quality

Hello, my name is Kendall Saeger. I will be one of your co-chairs at SOCOMUN this year. I am a sophomore at SMCHS, and this is my second year involved in MUN. I enjoy MUN because it has taught me how to debate and work well with others. I have learned how to take my ideas and relate them to other people's ideas so that we can work together to create new stronger solutions. It has also helped me to greatly improve my public speaking skills. I have also learned how to research an issue so that I can find ways to tackle the issue at hand and clearly communicate my ideas with others. These are both very important skills that have helped me in many other aspects of my life. Outside of MUN, I am a varsity cross country runner and a captain of the track team. I also am a swim coach in the summers and enjoy art.

I hope my fellow chair and I make SOCOMUN an amazing learning experience of all of you, as you begin your career in MUN. We will open debate and you will all have the opportunity to be added to the speaker's list. Every delegate is encouraged to give a speech to share their solutions regarding the topic. You can motion for an informal consultation where you will be allowed to move about the room and have open debate with other delegates so that you can continue to elaborate on your ideas and hear the other delegates' ideas. Make sure that your solutions coincide with your country's policy, however I encourage you to come up with your own creative solutions to this complex issue. If you have any questions at all, please email me at socomunfresh6@gmail.com. Don't be afraid to ask for help, because I remember being a freshman at SOCOMUN. I hope that I can help you all figure this out along the way. I look forward to meeting all of you!

I am your rapporteur from SMCHS Freya Howcroft. I am continuing MUN for the second year and have really enjoyed it. It has taught me a lot about public speaking, which has not always been one of my strong suits. Outside of MUN, I do cross country and track. I also do karate and one fun fact about me is that I am from England, so you all enjoy my accent when I meet you in committee. I am so excited to be apart of SOCOMUN and hope that we can make it a very enjoyable experience for all of you.

Background:

UN Secretary General, Ban Ki-moon, said that, "The seventeen Sustainable Development Goals (SDGs) are our shared vision of humanity and a social contract between the world's leaders and the people." They SDGs were adopted unanimously by 193 Heads of State and other top leaders at the summit at UN Headquarters in New York. He also said that "they are a to-do list for people and planet, and a blueprint for success." The SDGs are goals and plans for bettering the world as a whole by fighting hunger, poverty, disease, inequality, climate change, and more. Leaders and organizations as a whole have worked for years in order to come closer to achieving these goals, however efforts must continue to be furthered if we are to attain these goals in the timeframe they have laid out.



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SDG number 6 is clean water and sanitation. The UN hopes to provide universal access to safe and affordable drinking water by 2030. In order to do so, they have laid out a variety of objectives that they hope will help in worldwide efforts. This SDG Fund works with partners on many aspects of water and sanitation, such as infrastructure, governance, health, education, environmental protection, and gender equality. According to the UN, it is also vital that we protect and restore water-related ecosystems, for instance forests, mountains, wetlands, and rivers. It is also crucial to combat drought and desertification if we are to meet our goals.

About 71% of the earth's surface is covered in water. There are about 332,500,000 cubic miles of water on earth and in the atmosphere. The oceans consist of around 96.5% of the earth's water. Though there is water in the air, rivers, lakes, underground, and frozen at the poles, this freshwater only accounts for 2.5% of the world's water. However, only 1% of freshwater is easily accessible, so really 0.007% of earth's water is fresh and accessible for our use. As population grows, our water continues to be polluted, and climate change affects all of the earth's ecosystems, water scarcity is a major issue. Water scarcity affects over 40% of people around the world. About 2.1 billion people gained access to improved water sanitation since 1990, however now 780 million people do not have access to an improved water source and 2.5 billion people do not have access to improved sanitation. The results of poor sanitation and contaminated water can be detrimental to the health of those living in these conditions.

A lack of clean water and sanitation has many negative affects on their lives, including being more prone to diseases. Every day, almost 1000 children die every day, 361000 children a year, due to diarrheal diseases. Many people who lack these basic necessities suffer because of water-born diseases. For example, arsenicosis which is caused by long-term exposure to a low concentration of arsenic in drinking-water causes hardened lesions on the skin and can even lead to skin, lung, bladder, and kidney cancer. It is estimated that over 200 million people worldwide are consuming too much arsenic and are at risk of arsenicosis. Another disease that spreads rapidly, especially in areas of conflict and natural disaster, is cholera. Cholera is a bacterial infection of the intestinal tract that causes diarrhea and without treatment can cause extreme dehydration leading to death. Over 120,000 cases were reported in 2002 and now there are 1.3 million to 4 million cases every year, showing extreme growth in the past two decades. Fluorosis is a bone disease caused by the consumption of a high concentration of fluorine, which can be prevalent in water. Estimates say that tens of millions of people consume an excess amount of fluorine, which may be a result of poor water standards, even in developed nations. Worm diseases also have the ability to spread rapidly when water quality is poor, for example guinea worm disease, also known as Dracunculiasis, which causes debilitating ulcers. Also, intestinal worms or helminths, such as roundworm and whipworm are estimated to affect about $\frac{1}{4}$ of the people in the world. Even malaria could be better prevented if there is less standing water, which is caused by poor drainage and uncovered water tanks, because mosquitos thrive in these unsanitary conditions. Poor water quality also puts people with HIV and AIDs at very great risk because their immune systems are not able to fight off pathogens that could be in their water sources. All people are at risk because of poor water quality and unless action is taken millions more lives could be unnecessarily taken because of the lack of this imperative resources.



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Regarding clean water and sanitation, the UN has taken action in order to push for widespread access to these basic human rights. An action plan was laid out in 1977 at the United Nations Water Conference, and also recognized water as a right for all people of all economic situations, in all countries. Later, in 1989 at the Convention on the Rights of the Child, they wrote Article 24(2), which states that all state parties must work to combat disease and malnutrition through many different policies, especially through those regarding clean water and proper hygiene. The UN has continually reiterated this statement in many different resolutions, including Resolution 7/22 of the Human Rights Council in 2008 and again in 2009, Resolution A/RES/64/292 at the UN General Assembly, and in Resolution A/HRC/RES/15/9 from the Human Rights Council in 2010. Though the UN has been calling upon nations to take action and have recommended policies that they believe will help, more work clearly needs to be done as there are over 700 million people lacking in this basic human right.

Possible Solutions

When writing your solutions try to work through all aspects of the solution. I recommend thinking of the who, what, when, where, and why. Who will be carrying out this solution? What exactly do you want to do? Try to come up with a step by step plan that can be carried out. When will it start and how long will this take? It is good to have long-term and short-term solutions. Where will you begin and where are you working towards? And finally, why would anyone want to do this? How will your solution help? Try to explain your solution in a way so that there is no question as to what you want to do, how you want to do it, and what the effects will be.

The following are possible solutions that could be implemented in order to improve water quality world-wide, however I encourage that you come up with your own solutions and work with the other delegates in order to build upon the solutions to form resolutions. Try to relate your solutions to the situation in your country, however, be sure to be creative and come up with original solutions. I would recommend that you do not just Google “improving water quality solutions” and use the first one that comes up. Committee is much more interesting if every delegate comes with their own original solutions, because then I don’t have to listen to 30 of the same speeches. Also, keep funding in mind because the UN does have to pay for these solutions.

First off, finding ways to provide people with drinkable water is crucial to solving this issue. You could consider building wells, aqueducts, desalination plants, or even harnessing water from the atmosphere. This new technology is being tested by collaborators at the Massachusetts Institute of Technology and University of California, Berkeley. This atmospheric water generator in development currently can harness around 3 liters of water daily for every kilogram of absorber. This device is entirely solar-powered, and scientists say that this technology will only improve over time. It is good to look into new technologies like this, however it is also important to consider the cost and how you will facilitate the distribution of such devices. Working with NGO’s can often be a good solution for some funding and providing volunteers. Additionally, for methods like desalination, these plants would have to be located on the coast, so not every solution will be practical in every geographic location. Furthermore, a small handheld device might be better in an area of conflict or that has recently hit by disaster, however you may need to research the most practical one economically. Lifestraws have been commonly used



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because of their effectiveness in filtering water for a relatively low cost. This handheld device uses a combination of mesh filters, active carbon, and iodine-impregnated beads to remove particles and bacteria present in the water. Costing under \$2 to produce, it is very economically practical and can filter 4000 L of water, which is enough for one person for an entire year.

Another aspect of this issue to consider is preventing the pollution of our natural water sources. Preventing pollution of water sources would increase the amount of water available for people to drink or use for farming, bathing, and so on. However, “In developing countries, 70 percent of industrial wastes are dumped untreated into waters, polluting the usable water supply. On average, 22 million tons of fertilizers and chemicals are used each year” (National Geographic). Many countries rely on agriculture to develop their economy, and therefore are concerned more with producing cash crops than they are keeping their water supply pristine. Enticing these countries to put restrictions and regulations on the amount of pesticides used or the chemicals that they are dumped into the environment may be difficult if they are heavily reliant on certain products to keep their economy stable.

Finally, education and awareness are viable solutions. Educating those who do not have a clean and reliable water source on where to get their water, or how they can receive help, will allow for them to act in order to prevent the spread of diseases. Also, many bacteria can be killed in high temperatures, so if people in rural areas boil their water, they will be able to kill off these pathogens. People can be educated about this issue with the use of volunteer and awareness can be spread through newspapers, advertisements, commercials, the radio, and more. These methods of communication could also be used to educate the remainder of the population on how that they can help join the fight. Anyone can donate and others can volunteer in order to help those in need. I hope that these solutions have helped you in your brainstorm. Again, please build upon these and don't be afraid to come up with your own original solutions.

Questions to Consider:

(Use these as a guide to research but they will not need to be answered on the day of the conference.)

1. Other than those stated above, what actions has the UN taken in attempt to combat poor water quality? Which UN bodies are active in this topic?
2. What is your country's policy and how would they want to act?
3. Which of the solutions above would you want to build off of and which would you revise?
4. How can you provide water to those in areas of conflict, natural disaster, and poverty?
5. How can you help refugees to have access to clean water?
6. How will you fund your solutions and who will be carrying them out?
7. What NGOs are involved in clean water and sanitation? What have they done in the past to help those who are in need?
8. Who would your country be willing to work with? In other words, who might your country form a resolution group with?



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Goal 6 Targets. Ensure availability and sustainable management of water and sanitation for all

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

6.b Support and strengthen the participation of local communities in improving water and sanitation management

MUN Impact

We hope that you learn a lot about Model UN at our conference. We also hope that you learn about the world we live in and want to make that world a better place for everyone. Consider taking the next step and becoming a part of the MUN Impact Program

<http://munimpact.org/>

To see what MUN Impact is doing related to SDG #6 look here <http://munimpact.org/sdg-6/>



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