MACMUN 2022

WHO

Background Guide

Welcome Letter from the Chairs

Dear delegates,

Welcome to the seventh iteration of McMaster Model United Nations (MACMUN)! My name is Ibreez Asaria (he/him) and joining me on the Dais is Mackenzie Bennett (she/her). I am completing my second year in the Honours Bachelor of Health Sciences (BHSc) Program and in my spare time, I like to craft ceramics, take photos of Canadian geese, and play table tennis. Mackenzie is in her third year of the Honours Justice Political Philosophy and Law program and is interested in environmental and human rights law. It is our utmost pleasure to serve as Chairs of the World Health Organization (WHO) for the 2022 conference.

Alongside our brilliant Crisis Analysts, Amisha Parmar and Ayesha Yousuf, we sincerely hope you will come out of this year's conference with an in-depth understanding of how health systems function locally and globally and the associated challenges with thinking of health as a right. Although the conference will be taking place virtually this year due to safety concerns, both Mackenzie and I are confident that your experiences with Model United Nations will be impactful and inspiring.

The topics we bring to you below were brainstormed with a great deal of curiosity which stemmed from questions we had about a world post-COVID. We chose not to include a topic about global pandemics largely because of how hackneyed it is for us both as students and as critical thinkers, and instead opted to choose topics where you can make loose connections to the spreading of disease and epidemiology. Both Mackenzie and I hope that this Background Guide serves to guide you through these complex and topical issues.

Committee Mandate

The goal of the World Health Organization (WHO) is to build a better, healthier future for people on a global scale. The organization is headquartered in Geneva, Switzerland and is comprised of 194 member states. The WHO was founded on April 7, 1948, a date celebrated globally as "World Health Day."[1] In 1945, diplomats met in San Francisco and agreed that there was insufficient collaboration between countries to control the spread of dangerous diseases across the world. Together, they decided on the need for a global organization overseeing global health. This eventually culminated in the creation of the WHO.

Currently, the organization has six regional offices and a Secretariat that works synergistically with governments and other partners, ensuring the highest attainable health for all peoples. The WHO strives to combat infectious diseases, like Zika, influenza, and human immunodeficiency virus (HIV), and noncommunicable ones, such as cancer and heart disease. It also aims to facilitate access to adequate air, food, and water. Other work by the organization includes the maintenance of the quality and availability of critical medicines and vaccines. By looking at health trends and emerging public health threats, it always seeks new opportunities to improve public health.

The WHO hires top experts to examine critical health issues and identify the best solutions. From there, they deliver and implement the strongest recommendations. In this manner, it helps prepare countries for health emergencies by determining necessary actions when emergencies strike, such as the Ebola epidemic in West Africa. Its goal is reflected in the following statement: "No country or person should miss out on the opportunity to live a healthy life in all aspects."

The WHO has six leadership priorities, aimed towards accelerating the new Sustainable Development Goals (SDGs) for health:

I. Advancing universal health coverage;

II. Achieving health-related development goals;

III. Addressing the challenges of noncommunicable diseases (NCDs) and mental health, violence, injuries, and disabilities;

IV. Ensuring that all countries can detect and respond to acute public health threats under the International Health Regulations;

V. Increasing access to quality, safe, efficacious, and affordable medical products (medicines, vaccines, diagnostics and other health technologies); and

VI. Addressing the social, economic, and environmental determinants of health as a means to reducing health inequalities between countries.

Topic A: Right to Health

Introduction:

The World Health Organization places health as the central idea of Sustainable Development Goal (SDG) 3. This goal outlines 13 targets in its aim to "ensure healthy lives and promote wellbeing for all at all ages." This includes working toward universal healthcare access for all people, regardless of age, sex, race, language, or other factors. Discrimination made on these or other grounds is linked to the marginalization of specific groups, which can make them more vulnerable to poverty and ill health. Not surprisingly, traditionally discriminated against and marginalized groups often bear a disproportionate share of health problems. This is due to limited access to health services and a greater likelihood of being unable to access safe drinking water. SDG 3 also aims to ensure that all people receive equitable access to health services.

Women often fall victim to gender bias and violence in the health system and society at large. Across the globe, women are granted limited power over their sexual and reproductive health. Although women are affected by many of the same health condition as men, due to different standards of treatment compounded with their demanding roles as caregiver which limit their ability to access health supports, even if they are locally and financially affordable. Women who are members of other socially marginalized groups such as refugee or internally displaced women, women living in slums and suburban setting, Indigenous women, and women living with disabilities or HIV/AIDS are at a greater risk of facing discrimination in the healthcare system.

SDG 3 seeks to “ensure universal access to sexual and reproductive health-care services” by way of several programs.

Another main target of this SDG is achieving universal health coverage. This may look different for each nation, but it is defined by the WHO as meaning “that all people have access to the health services they need, when and where they need them, without financial hardship.” Even if adequate health services and support exist, financial barriers often restrict who can access them.

According to the WHO, over 930 million people spend at least 10% of their household income on health care. (https://www.who.int/health-topics/universal-health-coverage#tab=tab_1). When considering the many social determinants of health, our socioeconomic status is among the most influential, especially in vulnerable or isolated communities. This is why the WHO has emphasized universal health coverage over the last few decades. Universal health coverage is described as a condition where “all people have access to the health services they need, when and where they need them, without financial hardship” (https://www.who.int/health-topics/universal-health-coverage#tab=tab_1). Included in this definition is health promotion and prevention of disease, palliative care, and treatment. Evidently, good health and well-being are connected to many areas of our daily living.

However, the right to health is much more complex than simply ensuring access to quality health services. For instance, the right to health is not the same as the right to be healthy. Outlined in the joint report issued by the Office of the United Nations High Commissioner for Human Rights and WHO, “a common misconception is that the State has to guarantee us good health” (https://www.ohchr.org/documents/publications/factsheet31.pdf). As one might imagine, an individual’s well-being is shaped by several factors that are outside the direct control and purview of States, such as our genetic make-up. This is why our universal definition of the right to health is instead, “the right to the highest attainable standard of physical and mental health” (https://www.ohchr.org/documents/publications/factsheet31.pdf). Using this definition, one can conclude that the right to health must involve a framework for addressing issues that hinder any community’s ability to reach the highest possible standard of health. One such framework is Scotland’s PANEL principles outlined below.

Figure 1. Scotland's PANEL Framework for Implementing Health-related Human Rights

Based on the principles of **P**articipation, **A**ccountability, **N**on-Discrimination, Equality and **E**mpowerment, and **L**egality, this framework outlines what must be prioritized when implementing and promoting human rights in practice. As Scotland's National Action Plan for Human Rights states, "a human rights based approach empowers people to know and claim their rights" (https://www.scottishhumanrights.com/media/1885/shrc_case_studies_report_updated_proof_03.pdf). When we consider health as a right, we must also understand that Member States have differing domestic laws and in some cases, vastly different priorities when it comes to being accountable for ineffective health actions. In this topic, we encourage you to think about how existing legal frameworks function to facilitate the highest standard of care possible, and where some of the shortcomings lie.

History:

While our international rights and freedoms can be traced back to the 1948 Universal Declaration of Human Rights, the right to health was instead articulated in the 1946 constitution of the WHO. The preamble states that, "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being…" (https://www.wma.net/what-we-do/human-rights/right-to-health/). It then specifies that this fundamental right should be upheld "without distinction of race, religion, political belief, economic or social condition" (https://www.who.int/governance/eb/who_constitution_en.pdf). By setting the condition that health should be at the "highest" standard possible, the WHO effectively established the basis for global health governance and oversight. However, as the 1948 declaration was coming off the back of World War II, it reflected the optimism and excitement for the future of international trade and governance. This meant that careful consideration for health-related human rights needed more time to come into practice in law. In fact, it was in the 1960s, during the Cold War, where human rights, including the right to health, were dissected further (https://pubmed.ncbi.nlm.nih.gov/18368018/).

Human rights were split into two International Covenants during this time. On one hand, there were Civil and Political Rights, and on the other, Economic, Social, and Cultural Rights (https://pubmed.ncbi.nlm.nih.gov/18368018/). The right to the "highest" standard of health as mentioned in the WHO Constitution was placed in the latter Covenant, although, it was understood that other rights, such as security or protection from torture and inhumane treatment (embodied in the Civil or Political Rights Covenant) were necessary to achieve this. A predominant reason for this division of rights was the tension between diverging political forces, and how they viewed human rights enforcement within the context of their economies (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)33141-6/fulltext). Many liberal economies maintained that civil and political rights were easily enforceable, unlike social and cultural rights, and hence, the best way to promote the right to health is through individual efforts and market forces (https://pubmed.ncbi.nlm.nih.gov/18368018/). Through this divergence, the WHO proclaimed itself apolitical. This, in turn, created uncertainty in the political landscape to advance public health rights (https://www.hhrjournal.org/2018/09/alma-ata-at-40-a-milestone-in-the-evolution-of-the-right-to-health-and-an-enduring-legacy-for-human-rights-in-global-health/). Evidently, the right to health is a topic that must be studied by emphasizing political, economic, social, and cultural perspectives given the numerous historical challenges in establishing international health governance.

A major step forward for reaffirming the right to health, in particular, came about in 1978 through the Declaration of Alma-Ata. At the International Conference on Primary Health Care on September 6, 1978, both the WHO and UNICEF convened with 134 Member States to discuss the relationship between human rights and wellbeing (https://www.hhrjournal.org/2018/09/alma-ata-at-40-a-milestone-in-the-evolution-of-the-right-to-health-and-an-enduring-legacy-for-human-rights-in-global-health/). By unpacking various determinants of health and evaluating multisectoral policies in which health-related human rights can be established, the conference concluded in the Declaration of Alma-Ata. This was significant because the WHO already sought to expand a strategy known as Health for All, which was aimed at highlighting the socio-economic necessities for the advancement of primary health care (https://www.hhrjournal.org/2018/09/alma-ata-at-40-a-milestone-in-the-evolution-of-the-right-to-health-and-an-enduring-legacy-for-human-rights-in-global-health/). The Declaration strengthened the Health for All initiative by obligating states to reassess the costs, accessibility, and community aspects of healthcare. Ultimately; however, many governments proved incapable of implementing appropriate policies until the AIDS pandemic in the 1980s during which momentum grew behind universal access to healthcare (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)33141-6/fulltext). This momentum grew over the decade and culminated in the 1989 Convention on the Rights of the Child, which affirmed the right to health for children (https://www.hhrjournal.org/2018/09/alma-ata-at-40-a-milestone-in-the-evolution-of-the-right-to-health-and-an-enduring-legacy-for-human-rights-in-global-health/).

Current Situation:

1. *Discrimination and the Right to Health*
    a. *The International Covenant on Economic, Social and Cultural Rights identify the following non-exhaustive grounds of discrimination: race, colour, sex, language, religion, political or other opinion, national or social origin, property, disability, birth or other status. According to the Committee on Economic, Social and Cultural Rights, "other status" may include health status (e.g., HIV/AIDS) or sexual orientation. States have an obligation to prohibit and eliminate discrimination on all grounds and ensure equality to all in relation to access to health care and the underlying determinants of health. The International Convention on the Elimination of All Forms of Racial Discrimination (art. 5) also stresses that States must prohibit and eliminate racial discrimination and guarantee the right of everyone to public health and medical care.*
2. *Maternal Health Discrimination*
3. *The Right to Health of Migrant Workers*
4. *Universal Healthcare*
    a. ○ Understanding health as a human right creates a legal obligation on states to ensure access to timely, acceptable, and affordable health care of appropriate quality as well as to providing for the underlying determinants of health, such as safe and potable water, sanitation, food, housing, health-related information and education, and gender equality (https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health). However, the way in which states choose to uphold the right to health can differ. The WHO defines universal healthcare as "Universal health coverage means that all people have access to the health services they need, when and where they need them, without financial hardship. It includes the full range of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care." (https://www.who.int/health-topics/universal-health-coverage#tab=tab_1)

Focus Questions:

1. What responsibilities do member states have to prevent and reduce discrimination as it pertains to one's access to health care?
2. How can we ensure that the frameworks we use to validate progress in attaining the right to health are accurate, effective, and unbiased?
3. What kind of national, regional, and international actions are required to ensure access to safe and affordable healthcare?

Topic B: Sanitation

Introduction:

Having access to basic sanitation and hygiene makes a drastic impact not only on an individual basis but also on the development of countries and civilization itself. Basic sanitation is defined as "having access to facilities for the safe disposal of human waste (feces and urine), as well as having the ability to maintain hygienic conditions, through services such as garbage collection, industrial/hazardous waste management, and wastewater treatment and disposal"..[1] Currently, only 68% of the world has access to basic sanitation and out of that only, 39% have access to safely managed sanitation such as water treatment, safe collection of disposal, etc.[2] Improving the access to sanitation globally means that there would be a lower disease burden, improved

nutrition, reduced stunting, improved quality of life, increased numbers of girls attending school, more job opportunities, higher wages, healthier living environments, and economic and social growth.[3]

Inadequate sanitation is estimated to cause 432 000 diarrheal deaths annually and is a major factor in several neglected tropical diseases, including intestinal worms, schistosomiasis, trachoma, and malnutrition.[4] Diarrhea remains a major killer but is largely preventable. Better water, sanitation, and hygiene could prevent the deaths of 297 000 children aged under 5 years each year.[5] Poor sanitation reduces human well-being, social and economic development due to impacts such as anxiety, risk of sexual assault, and lost educational opportunities.[6] It is important that as an international community, global efforts to hit continuous and updating targets continue and get stronger.

History:

Increasing access to basic sanitation started with the initiatives of access to safe drinking water and coming up with a resolution to the arising issue of the scarcity of water. The Millennium Development Declaration is a driver for international development policy as it supports poor countries and encourages wealthier nations to provide aid, debt relief and improved market.[7] This declaration called for "the world to halve by 2015 the proportion of people who do not have access to basic sanitation".[8] The world missed the MDG target for sanitation by almost 700 million people.[9] With that being said, in September of 2015, the "2030 Agenda for Sustainable Development was adopted at the UN summit" and is now referred to as Sustainable Development Goal 6 'Water and Sanitation.[10] Thus, referring back to the fact that the last goal for water and sanitation was not met, and that the United Nations is not a binding body, it is apparent that new solutions must be found and implemented.

Another concern regarding the lack of sanitation is the economic consequences that many countries are facing as a result. According to the World Bank poor sanitation is costing many countries billions of dollars, "amounting to the equivalent of 6.3% of GDP in Bangladesh (2007), 6.4% of GDP in India (2006), 7.2% of GDP in Cambodia (2005), 2.4% of GDP in Niger (2012), and 3.9% of GDP in Pakistan (2006)".[11] These costs are mainly costed from premature deaths, the cost of health care treatment, as well as the lost time and productivity finding treatment and access to sanitation facilities.[12] A World Health Organization study in 2012 calculated that for every US$ 1.00 invested in sanitation, there was a return of US$ 5.50 in lower health costs, more productivity, and fewer premature deaths.[13]

Current Situation:

Currently, 2 billion people do not have access to safely managed drinking water, 3.6 billion people lack safely managed sanitation services, and many people partake in unsafe hygiene practices that are negatively impacted their health as well as increasing child mortality rates.[14] Every day, over 700 children that are under the age of 5 die from diarrhea directly linked to the use of unsafe water, poor sanitation, and poor hygiene.[15] Children under five years old that live in countries that experience "protracted conflict" are more likely to die due to poor sanitation, hygiene, and unsafe drinking water than they are from direct violence.[16] The global disease burden would decrease 10% if the issues of sanitation, hygiene, and safe drinking water were to be of universal access.[17] Promoting hygiene and sanitation is the most affordable health intervention.[18]

In many parts of the world, water sources are far from their home and due to these women and girls spend most of their day walking to these water sources risking the vulnerability to attacks from men or wild animals. Communities are also sometimes forced to get drinking water from vendors selling water that could be unsafe and contaminated.[20] Moreover, if people do not have access to facilities that separates human waste from contact, then they are left to use communal options or open defecation.[21] Not only does this result in the spread of diseases such as cholera but it also puts women in danger due to the lack of privacy and again leaving them vulnerable to abuse and sexual assault.[22] In some parts of the world, good hygiene is not taught and if it is common knowledge, some of these people do not have access to the proper supplies they require.

Focus Questions:

1. What is currently being done to help increase educational awareness around the world?
2. What actions can be taken within your country to help meet the 2030 Sustainable Development Goal 6?
3. How can the UN WHO committee consider all the obstacles that would be affected by the improvement of sanitation and hygiene in order to overcome them?
4. How does the lack of access to sanitation, hygiene, or clean drinking water affect your country?

[1] "Sanitation & Hygiene Home." Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, June 22, 2017. https://www.cdc.gov/healthywater/global/sanitation/index.html.

[2] "Sanitation." World Bank, September 14, 2020. https://www.worldbank.org/en/topic/sanitation.

[3] "Sanitation." World Bank, September 14, 2020. https://www.worldbank.org/en/topic/sanitation.

[4] "Sanitation." World Health Organization. World Health Organization, June 14, 2019. https://www.who.int/news-room/fact-sheets/detail/sanitation.

[5] "Sanitation." World Health Organization. World Health Organization, June 14, 2019. https://www.who.int/news-room/fact-sheets/detail/sanitation.

[6] "Sanitation." World Health Organization. World Health Organization, June 14, 2019. https://www.who.int/news-room/fact-sheets/detail/sanitation.

[7] Migiro, Asha-Rose. "The Importance of THE Mdgs: The United Nations Leadership in Development." United Nations. United Nations. Accessed August 31, 2021. https://www.un.org/en/chronicle/article/importance-mdgs-united-nations-leadership-development.

[8] "Water and Sanitation: Sustainable Development Knowledge Platform." United Nations. United Nations. Accessed August 31, 2021. https://sustainabledevelopment.un.org/topics/waterandsanitation.

[9] "Sanitation." World Bank, September 14, 2020. https://www.worldbank.org/en/topic/sanitation.

[10] "Water and Sanitation: Sustainable Development Knowledge Platform." United Nations. United Nations. Accessed August 31, 2021. https://sustainabledevelopment.un.org/topics/waterandsanitation.

[11] "Sanitation." World Bank, September 14, 2020. https://www.worldbank.org/en/topic/sanitation.

[12] "Sanitation." World Bank, September 14, 2020. https://www.worldbank.org/en/topic/sanitation.

[13] "Water and Sanitation: Sustainable Development Knowledge Platform." United Nations. United Nations. Accessed August 31, 2021. https://sustainabledevelopment.un.org/topics/waterandsanitation.

[14] UN-Water. "Water, Sanitation and Hygiene: Un-Water." UN. Accessed August 31, 2021. https://www.unwater.org/water-facts/water-sanitation-and-hygiene/.

[15] “Water Security for All.” United Nations Children's Fund (UNICEF), March 2021. https://www.unicef.org/media/95241/file/water-security-for-all.pdf.

[16] “The Convention on the Rights of the Child at a Crossroads.” United Nations Child's Fund (UNICEF), November 2019. https://www.unicef.org/media/62371/file/Convention-rights-child-at-crossroads-2019.pdf.

[17] “Water, Sanitation and Hygiene: Exposure.” World Health Organization. World Health Organization. Accessed August 31, 2021. https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/water-sanitation-and-hygiene-exposure.

[18] “Reproductive, Maternal, Newborn, and Child Health.” Disease Control Priorities. World Bank, 2016. https://openknowledge.worldbank.org/bitstream/handle/10986/23833/9781464803482.pdf?sequence=3.

[19] UN-Water. “Water, Sanitation and Hygiene: Un-Water.” UN. Accessed August 31, 2021. https://www.unwater.org/water-facts/water-sanitation-and-hygiene/.

[20] UN-Water. “Water, Sanitation and Hygiene: Un-Water.” UN. Accessed August 31, 2021. https://www.unwater.org/water-facts/water-sanitation-and-hygiene/.

[21] UN-Water. “Water, Sanitation and Hygiene: Un-Water.” UN. Accessed August 31, 2021. https://www.unwater.org/water-facts/water-sanitation-and-hygiene/.

[22] UN-Water. “Water, Sanitation and Hygiene: Un-Water.” UN. Accessed August 31, 2021. https://www.unwater.org/water-facts/water-sanitation-and-hygiene/.

Bloc Analysis: Topic A

Western Bloc

Universal healthcare has always been a contentious issue amongst the Western bloc. Namely, nations such as Canada and Australia have achieved some extent of subsidized healthcare and wish to continue to make strides towards further medical welfare. However, nations such as the United States continue to engage in discord amongst their majority political parties on the possibility of dismantling their current health administration programs and implementing universal healthcare as opposed to relying on government-sponsored programs such as Medicaid and Medicare, which do not apply to all citizens. European healthcare systems are particularly refined, which Norwegian countries such as Denmark and Norway ranking among the best health care systems in the West. Notably, their healthcare systems also happen to be the most universal.

Eastern Bloc

Healthcare ecosystems in Asia have been working prime itself for the new age of healthcare, driven by shifting demographics, rising consumer expectations, technological innovations, and limited legacy health infrastructure. This ambition for medical progress is aimed to address the concern of Asia’s rapidly aging population. By 2025, Asia will be home to 456 million seniors age 65 or older, representing 10% of its population. Nations such as South Korea, Taiwan and Japan are particularly vulnerable to this aging population epidemic and also have some of the best healthcare systems in the world; in terms of universality, accessibility and innovation. [23]

The health care system in India is universal. However, there is great discrepancy in the quality and coverage of medical treatment in India. Healthcare between states and rural and urban areas can be vastly different. Rural areas often suffer from physician shortages, and disparities between states mean that residents of the poorest states often have less access to adequate healthcare than residents of relatively more affluent states. State governments provide healthcare services and health education, while the central government offers administrative and technical services. Lack of adequate coverage by the health care system in India means that many Indians

turn to private healthcare providers, although this is an option generally inaccessible to the poor. [24]

Healthcare in Russia is free to all residents through a compulsory state health insurance program. However, the public healthcare system has faced much criticism due to poor organizational structure, lack of government funds, outdated medical equipment, and poorly paid staff. Because of this, many expats in Russia choose private medical treatment which is widely available in many areas. [25]

MENA

Countries in the MENA region have made tremendous progress in reduction of maternal and under-five mortality. There is, however, unbalanced progress within countries with all segments of the population not making progress at the same rate. Higher income countries, such as Saudi Arabia, have better coverage of maternal, newborn and child survival inventions such as antenatal care visits, skilled birth attendance, protection against neonatal tetanus, and measles vaccination. Moreover the inequities and bottlenecks between countries are replicated within national borders.

For many years the MENA region has been plagued by ongoing conflicts, detrimentally affecting the health status of the most vulnerable population, women and children. Outbreaks of diseases have been occurring in many parts of MENA region and particularly in countries affected by conflict. Outbreak of wild polio virus in Syria and cholera in Yemen are some examples of continued public health challenges in this region. These regions also rely heavily on international humanitarian aid to address such outbreaks, as internal healthcare systems are constantly undergoing threats of destruction by ongoing political conflict. [26]

Central and Southern Africa

Health care in Sub-Saharan Africa remains the worst in the world, with few countries able to spend the $34 to $40 a year per person that the World Health Organization considers the minimum for basic health care. [27] For instance, Health in Chad is mostly characterized by infectious and parasitic diseases such as outbreaks of meningitis, HIV/AIDS, and malnutrition and, while strides are being made for improving access to health and medicine, structural mismanagement of federal funds and unstable governance is establishing hurdles at every point of the way. Most African countries have integrated UHC as a goal in their national health strategies. [28] Yet, progress in translating these commitments into expanded domestic resources for health, effective development assistance, and ultimately, equitable and quality health services, and increased financial protection, has been slow.

[23] Baur, A., Yew, H., & Xin, M. (2021, July 26). *The future of healthcare in Asia: Digital Health Ecosystems*. McKinsey & Company. Retrieved November 23, 2021.

[24] Healthcare System in India. International Student Insurance. (n.d.). Retrieved November 23, 2021, from https://www.internationalstudentinsurance.com/india-student-insurance/healthcare-system-in-india.php.

[25] *Healthcare in Russia: The Russian Healthcare System explained*. Expatica. (2021, November 10). Retrieved November 23, 2021.

[26] *https://www.unicef.org/mena/health*

[27] *Health Care in Africa: IFC Report sees demand for investment*. ifc.org. (n.d.). Retrieved November 23, 2021.

[28] World Bank Group. (2016, August 26). Universal Health Coverage in Africa: A framework for action. World Bank. Retrieved November 23, 2021.

Bloc Analysis: Topic B

Western Bloc

In general, access to water in this bloc is of little issue. The United States, Canada and all other constituents have some of the safest water supplies in the world as well as the most convenient access to drinkable water. Over 90 percent of Americans get their tap water from community water systems, which are subject to safe drinking water standards. However, some communities are more affected by poor water sanitation than others. [29] In 2014, the town of Flint, Michigan in the United States reached headlines when it was found that their water contained toxic levels of lead; a phenomenon that can lead to increased blood pressure, incidences of hypertension, decreased kidney function as well as severe reproductive problems in both men and women. [29] In permafrost nations such as Sweden and Greenland, water supplies come from surface water, that is, from lakes and running watercourses. The other half come from groundwater. Good quality raw water from these water sources has made purification techniques in Sweden relatively simple. [30]

Eastern Bloc

Driven by population growth and the need for increased agricultural production, water resources are coming under intense pressure across Asia. Inadequate provision of sanitation facilities, sewerage and wastewater treatment results in significant quantities of this waste water reaching water bodies that may service human consumption. Asian countries are making concerted efforts to address these problems, but the pace and scale of this policy response must increase urgently. A large contributor to the inadequate water supply can be chalked up to the predominantly agricultural-based economy that is based in many of the nations. Agricultural production in the region increased 62% from 1990 to 2002 and consumption of mineral fertilizer increased 15%. [31] Exceedingly high levels of nutrients were found in 50% of rivers in the region and moderate levels in 25%. High nutrient levels cause eutrophication, including algal blooms that severely damage freshwater ecosystems and hinder their provision of vital environmental services to people. [32]

Though Russia is known to be abundant in water resources, the primary concern among citizens are their access to clean and safe drinking water. With over 2 million lakes and 200,000 rivers, Russia accounts for 1/4 of the earth's freshwater supply. Despite this abundance, water contamination is a serious concern for Russia, particularly in Moscow. Over half of their water supply do not meet safety standards. There are large amounts of heavy metals like sulfur, aluminum, oil, as well as other pollutants rampant in groundwater and surface water. [33]

MENA

Among the many problems that plague the region, the western states of the Middle East, Israel, Palestine, and Jordan suffer most from water scarcity. The three states depend on three major trans-boundary surface and groundwater reservoirs, which historically supplied 75% or more of water but nowadays are critically low because of overuse, lack of rainfall, and climate change, which magnify the water stress in this arid region. [34] Consequently, the shared water resources are under heavy natural and man-made pressures, in terms of quantity and quality, affecting every aspect of life from ecosystems and the environment, to food security and health. The

region's annual internal water resources amount to only 6 percent of its average annual precipitation, against a world average of 38 percent. [35]

Water quality is another variable issue, often varying depending on the rural-ness of regions. Parts of the groundwater resources contain unhealthy levels of biological contaminants, nitrates and chlorides compounds beyond the permissible limits, while many communities are exposed to waterborne diseases because of lack of safe drinking water and basic sanitation. [36] Also, inadequate treatment of point and nonpoint sources of pollution and trans-boundary movement of pollutants from one entity to another endangers the shared water bodies and poses a threat to the drinking water and the environment. [36]

[29] https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

[30] Fresh Water Resources in Sweden. Climatechangepost.com. (n.d.). Retrieved November 23, 2021.

[31] Biswas, A. K. and Seetharam, K. E. (2008), Achieving water security for Asia, International Journal of Water Resources Development, Vol. 24, No.1, pp. 145-176.

[32] Economic and Social Commission for Asia and the Pacific [ESCAP] (2005), State of the Environment in Asia and the Pacific (Bangkok: United Nations ESCAP).

[33] Ritter, Kayla. “Pollutants and Heavy Metals Taint Moscow's Water Supply.” *Circle of Blue,* Kayla Ritter.

[34] Shevah, Yehuda. "Water Quality in the Middle East " Chemistry International, vol. 36, no. 3, 2014, pp. 5-8. https://doi.org/10.1515/ci.2014.36.3.5

[35] *Water in crisis - spotlight middle east*. The Water Project. (n.d.). Retrieved November 23, 2021, from https://thewaterproject.org/water-crisis/water-in-crisis-middle-east.

[36] Golmohammadi, V. (2021, May 25). Water scarcity in the Middle East: Beyond an environmental risk. ORF. Retrieved November 23, 2021.