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LETTER FROM SECRETARY GENERAL

Dearest Delegates,

It is with great pleasure and enthusiasm that I extend a warm welcome to each of you as you embark on your HASTRAIN'23 journey. As the Secretary-General of the Kadir Has University Model United Nations HASTRAIN Conference 2023, I am honored to guide you through this enriching experience of diplomacy, collaboration, and international engagement.

The Model United Nations is a unique way to practice your critical thinking, negotiation skills, and a deep understanding of global affairs. This study guide has been carefully crafted to provide you with the essential information and resources to navigate the complex issues that will be addressed during our conference. Whether you are participating for the first time or you are an experienced participant, this guide is designed to assist you in your preparation and contribute to the success of your committee sessions.

I encourage you to approach the conference with an open mind, a commitment to understanding diverse perspectives, and a dedication to finding creative and effective solutions to the global challenges we face. Remember that your role as a delegate is not only to represent the interests of your assigned country but also to contribute to the collective effort of finding resolutions that benefit the international community as a whole.

As the Secretary-General, I am confident that the HASTRAIN'23 will be a memorable and transformative experience for each one of you. Take full advantage of the opportunities to engage with your fellow delegates, share your ideas, and build lasting connections.

In conclusion, I extend my gratitude to each and every one of you for your enthusiastic participation. May this be an amazing and rewarding experience. I cannot wait to meet you all in person and witness the positive impact we can create together. #welcomehome, Delegates!

Sincerely,

Aylin Rassad

LETTER FROM DEPUTY SECRETARY GENERAL

Dear Delegates,

It is with great enthusiasm and anticipation that I extend my warmest welcome to each and every one of you at the Kadir Has University Model United Nations Conference Hastrain'23. As the Deputy Secretary General, it is my privilege to be a part of this inspiring gathering of young minds and future leaders in diplomacy.

As you prepare for this conference, I urge you to dive into comprehensive research, critically analyze the provided study guides, and develop innovative policy recommendations. I understand the dedication and diligence required to excel in Model United Nations, and I am confident that each of you will rise to the occasion.

Through this conference, I hope to see you not only excel in the art of diplomacy but also develop a deeper understanding of global affairs, empathy for different perspectives, and respect for diverse cultures. Remember, the essence of MUN lies in fostering an atmosphere of dialogue, negotiation, and cooperation.

In addition to the committee sessions, Hastrain'23 offers a range of workshops, networking opportunities, and social events that are designed to enhance your overall experience. I encourage you to take advantage of these opportunities to expand your knowledge, build lasting connections, and forge friendships with like-minded individuals from around the world.

Your role as a delegate is not just to represent a country or organization, but to embody the ideals of global citizenship, empathy, and leadership. Your active participation and thoughtful contributions will undoubtedly shape the outcome of the conference.

As we embark on this MUN journey together, I extend my wholehearted support and encouragement to each of you. I am eager to witness your intellectual prowess, diplomatic finesse, and commitment to constructive dialogue during the sessions. At Hastrain'23, I am confident that your dedication and passion will set the stage for an unforgettable conference experience.

On behalf of the Secretariat and the entire organizing team, I wish you the very best in your preparations for the conference. Embrace the challenges, engage with an open mind, and let the spirit of diplomacy guide you towards impactful resolutions and enriching interactions.

I am honored to be a part of this transformative experience with you, and I look forward to meeting you all at Hastrain'23. #Welcomehome , all!

Warm regards,

Nazrin Sadigova

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I. BACKGROUND INFORMATION

The problem of water contamination is a significant concern in the current era. Water pollution exacerbates the already strained water supplies in a world where there is a growing demand for freshwater and limited water resources. Water pollution refers to the deliberate or unintentional introduction of substances or energy into water by human activities, leading to detrimental consequences. These include damage to living organisms, threats to human well-being, disruption of aquatic activities, deterioration of water quality for economic purposes like farming and manufacturing, and degradation of recreational opportunities. Water pollution can arise from diverse origins, such as conduits or artificial channels transporting waste or sewage, agricultural runoff containing chemicals like herbicides and pesticides, disposal of waste materials into rivers and oceans, heavy metals resulting from oil and gas exploration, and thermal pollution caused by power plants.

Water pollution has been scientifically recorded as a factor that contributes to a diverse array of risks for both human health and ecosystems. Contaminated water is prone to harboring disease carriers, such as *Vibrio* bacteria that cause cholera and parasitic worms that transmit schistosomiasis. Approximately 80% of infectious diseases globally are attributed to unsafe water, resulting in an annual death toll of 3.4 million individuals, predominantly children, due to contaminated water sources.

Water contaminated by industrial and agricultural practices may contain various metals (e.g. arsenic, cadmium, and mercury) as well as synthetic organic compounds (such as pesticides and PCBs) that can be harmful to humans when present in high

concentrations. These pollutants have the potential to amass in groundwater, pollute aquifers, and result in human poisoning. Water that contains an excessive amount of nutrients can result in the process of eutrophication in both water and soil. This can also lead to the growth of hazardous algal blooms, which pose a threat to the biodiversity of aquatic ecosystems. Furthermore, the presence of newly identified contaminants such as medicines and personal care products in water exacerbates the strain on our water supplies, with uncertain long-term consequences for human health and ecosystems.

With the increasing global population and the proliferation of water pollution sources, the water quality is prone to deteriorate, leading to potential dangers to human health, the environment, and causing social and economic issues.

According to UNESCO, issues with the quality of water pose significant challenges to water security and sustainable development, affecting both developed and developing nations. This is why tackling the problem of water contamination has become a high-priority item on the worldwide agenda. The 2030 Agenda and the Sustainable Development Goals (SDGs) have brought water quality challenges to the forefront of international action. Goal 6 has a special objective of guaranteeing the accessibility and long-term control of water and sanitation for everyone, in order to address the significant difficulties presented by water quality problems.

The issue of water quality is specifically discussed in relation to other Sustainable Development Goals (SDGs), including those related to poverty reduction, health, sustainable consumption and production, and life on land. Furthermore, there exist numerous indirect connections between water quality concerns and the promotion of

sustainable development. Nevertheless, there has been no attempt to comprehensively comprehend these connections and interconnections.

II. OVERVIEW OF THE ISSUE

The water in our universe is an invaluable asset of our planet. It provides sustenance, employment, and transportation. It facilitates the production of oxygen and regulates the climate. Wherever we have explored, we have made a lasting impression. The ocean's capacity to support all life on earth is being threatened by plastic and chemical pollution, overfishing, and climate change. Based on the ongoing patterns, it is projected that by 2050, the weight of plastic in the ocean will surpass that of fish. The majority of marine animals are impacted by plastic pollution, with a significant number ingesting it or becoming ensnared in it. Illegal, unreported, and unregulated fishing has a simultaneous and detrimental effect on fish stocks, resulting in small-scale fishers catching no fish. Global warming poses another significant peril. The ocean mitigates climate change by sequestering surplus heat. However, its durability has limitations. Several species are at risk of extinction due to the warming and acidification of the ocean. Volunteers from various parts of the world are actively taking initiative to contribute towards reversing the current situation. These exemplary individuals contribute significantly by actively removing litter from beaches, minimizing their consumption of plastic, and consciously selecting environmentally sustainable household products. However, these volunteers are unable to

independently resolve these issues. Precautions must be taken at both the local and national levels, and global cooperation is required.

III. WATER POLLUTION

1. Scarcity of Water

About two billion people worldwide don't have access to safe drinking water today (SDG Report 2022), and roughly half of the world's population is experiencing severe water scarcity for at least part of the year (IPCC). These numbers are expected to increase, exacerbated by climate change and population growth (WMO). Only 0.5% of the water on Earth is usable and available freshwater, and climate change is threatening that supply. Terrestrial water storage - including soil moisture, snow, and ice - has declined at a rate of 1 cm per year over the last two decades, with serious implications for water security. Water supplies stored in glaciers and snow cover are expected to decline further over the next century, reducing water availability during warm and dry periods in regions supplied by melt water from major mountain ranges, which currently house more than one-sixth of the world's population. Limiting global warming to 1.5°C rather than 2°C would roughly halve the proportion of the world population expected to face water scarcity, though there is considerable regional

variation. Water quality is also affected by climate change, as higher water temperatures and more frequent floods and droughts are projected to exacerbate many forms of water pollution ,from sediments to pathogens and pesticides.

2. Impact on Human Health and Ecosystems

Water quality is a big issue that mankind is facing in recent years. Water is separated from other environmental components, because it is not substitutable. The water cycle constitutes the basic dynamics of the life and economy cycle. Water resources are limited and exposed to many human-induced negative effects. Environmental components such as water and the sustainability of these components are very important for all living organisms and the future of the earth. All organisms in the ecosystem are connected to each other with a life link. Therefore, the deterioration that occurs in a part of the system affects the whole system over time. Water is separated from other environmental components as it is the main source of life and cannot be substituted. Most of the big problems that mankind is facing in the recent years are related to water quantity and water quality (Unesco, 2009). Water must be preserved and protected from all type of pollutant. Water is among the indispensable ingredient in the center of the life. Without water, life is not possible. But water resources contaminated by various toxic, industrial pollutants that results in some problems such as unsafe for consumption for humans and irrigation activities; so this lead to water scarcity for humans and ecosystem. There are two different water sources on our planet. The first is the water we see in oceans, rivers, lakes and ponds called surface water. Surface water is home to many species of plants and animals that depend not only on the quantity but also on the quality of the water to survive. Another is groundwater, stored below the surface in Earth's aquifers. This source of

water feeds our rivers and oceans and makes up most of the world's drinking water supply. Both of these water resources are critical to life on Earth, both can get dirty in different ways. The word pollution can define as contamination; desecration, dirtying,soiling, spoiling, destruction.

IV. INTERNATIONAL CONVENTIONS

1. International Agreements

International treaties are essential in tackling the problem of reducing water pollution for the purpose of achieving sustainable development. Below are notable global accords expressly designed to address water pollution:

a. The United Nations Watercourses Convention:

Adopted in 1997, seeks to facilitate the fair and rational exploitation of international watercourses, while also preventing any adverse impacts on neighboring nations. The main objective is to avoid and regulate pollution in watercourses that are used by several parties.

b. The United Nations Framework Convention on Climate Change (UNFCCC):

The UNFCCC, while largely focused on tackling climate change, also has an indirect impact on water quality and pollution. This is achieved by targeting the reduction of greenhouse

gas emissions, which contribute to environmental deterioration and subsequently impair water resources.

2. **National Policies**

The United Nations has a crucial role in providing guidance and making recommendations for national policies aimed at reducing water pollution, in accordance with sustainable development goals. Although the specific policies may differ among countries, the United Nations offers comprehensive frameworks and principles that governments can adopt or modify in order to tackle water pollution problems. Several crucial elements of national policies that align with the recommendations of the United Nations include:

a. Integrated Water Resources Management (IWRM):

The UN-Water Policy promotes the use of Integrated Water Resources Management (IWRM) techniques, which prioritize the coordinated development and management of water, land, and associated resources. Integrated Water Resources Management (IWRM) advocates for the responsible and long-term utilization of water resources, taking into account ecological, societal, and economic aspects.

b. National Water Legislation and Regulation:

The UN Development Programme (UNDP) Guidelines propose the creation of thorough national water legislation that encompasses water quality requirements, pollution

control methods, and rules concerning the discharge of industrial, agricultural, and domestic wastewater.

3. Pollution Prevention and Control:

The UN Environment Programme (UNEP) offers recommendations on measures for preventing and controlling pollution. It highlights the significance of minimizing pollution at its origin by employing cleaner production processes, reducing waste, and adopting sustainable practices across all sectors.

4. Capacity Building and Technical Assistance:

UNESCO and UN-Water initiatives aim to enhance capacity-building endeavors by offering technical support, knowledge-sharing platforms, and training programs to facilitate water quality monitoring, pollution assessment, and the adoption of efficient management methods.

5. Sustainable Development Goals (SDGs):

SUSTAINABLE DEVELOPMENT GOALS



SDG 6: Nations are urged to synchronize their domestic policies with SDG 6, which centers on guaranteeing the accessibility and enduring administration of water and sanitation for everyone. This encompasses objectives pertaining to the improvement of water quality, the mitigation of pollution, and the preservation of ecosystems.

6. Public Participation and Awareness:

Facilitating citizen participation in water management, pollution prevention, and conservation initiatives, the UNESCO Water Education Programme promotes public awareness and education campaigns regarding water-related issues.

7. International Cooperation and Partnerships:

The United Nations Water Collaborative Initiatives promote the active participation of nations in global partnerships, wherein they exchange information, technologies, and optimal methods to efficiently manage water pollution, with a specific focus on transboundary water resources.

In accordance with United Nations recommendations, national policies frequently prioritize a comprehensive strategy, engagement of relevant stakeholders, decision-making grounded in scientific evidence, and collaboration across sectors as critical elements in effectively tackling water pollution challenges. By integrating environmental protection, economic development, and social equity, these policies aim to ensure that future generations benefit from water management that is both sustainable and equitable.

V. Implementation Challenges

Water quality is one of the main challenges that societies will face during the 21st century, threatening human health, limiting food production, reducing ecosystem functions, and hindering economic growth. Water quality degradation translates directly into environmental, social and economic problems. The availability of the world's scarce water resources is increasingly limited due to the worsening pollution of freshwater resources caused by the disposal of large quantities of insufficiently treated, or untreated, wastewater into rivers, lakes, aquifers and coastal waters.

Furthermore, newly emerging pollutants like personal care products and pharmaceuticals, pesticides, and industrial and household chemicals, and changing climate patterns represent a new water quality challenge, with still unknown long-term impacts on human health and ecosystems. The 2030 Agenda and Sustainable Development Goals (SDGs) bring water quality issues to the forefront of international

action by setting Goal 6 specifically aiming to “*ensure availability and sustainable management of water and sanitation for all*” to respond to the pressing challenges posed by water quality issues.

Water quality is addressed also under other SDGs such as the goals on health, poverty reduction, ecosystems and sustainable consumption and production, recognizing the links between water quality and the key environmental, socioeconomic and development issues.

IV. QUESTIONS TO BE ADDRESSED

- a. What exactly are the main effects of water pollution, such as the impact on living organisms, threats to human well-being, economic activities, and recreational opportunities?
- b. What leads to water pollution, and how do human activities like waste disposal, agricultural runoff, industrial practices, and power plant operations contribute to it?
- c. In response to water quality challenges, how does the 2030 Agenda and Sustainable Development Goals (SDGs), particularly Goal 6, address the global priority of ensuring everyone's access to safe water and sanitation?
- d. How do international treaties like the United Nations Watercourses Convention and the United Nations Framework Convention on Climate Change contribute to global efforts to reduce water pollution and achieve sustainable development?

- e. What are the key components of UN-Water Policy-recommended Integrated Water Resources Management (IWRM), and how does it promote coordinated development and management of water, land, and associated resources?
- f. With what manners does SDG 6 guide nations in synchronizing their domestic policies to ensure the accessibility and long-term administration of water and sanitation for all, including goals related to water quality improvement, pollution reduction, and ecosystem preservation?
- g. What exactly are the major implementation obstacles associated with water quality degradation, and how do these challenges, as highlighted in the discussion, endanger human health, food production, ecosystem functions, and economic growth?

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