



MODEL UNITED NATIONS

SOCOMUN XXXIII

UNITED NATIONS ENVIRONMENTAL
PROGRAMME

TOPIC: REDUCING MARINE POLLUTION



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UN Environmental Programme Reducing Marine Pollution

Introductions

Hello, delegates! My name is Layla Amer, and I am honored to be your chair at SOCOMUN this year. This is my 4th year involved in the MUN program, and I have learned so much not only about the world but about myself through MUN. Last year, I was a chair of the same UNEP committee, and am privileged to be returning this year because I am very passionate about environmental committees. In committee each delegate will have a chance to give a speech and the rest of the time will be spent forming resolutions and discussing specific topics under the umbrella of reducing marine pollution. Aside from MUN, I spend my time with my friends, at the beach, or on the soccer field. I hope that this conference is a great start to your year and can give each of you an educational and enjoyable experience. Looking forward to seeing you all in committee!

Hello everyone! My name is Noah Fan. This is my third year in MUN. I am a junior now. I have developed a strong passion for MUN over the course of my three years and I hope you will be able to as well! In terms of hobbies, I enjoy going to the gym, playing guitar, and reading. I am a leader of the tutors club on campus and also play video games here and there. I hope that with this conference, many of you will have great first experiences and much encouragement to continue MUN. Preparation may get hard, but I hope that I can help to make this conference fun, and worthwhile for you. Best of luck delegates!

Hello everyone, my name is Ava Zeinali, and this is my second year doing MUN. I am so glad I became a part of MUN and can learn so much about current issues. In my free time, I like to play piano, read, and write. I'm so excited to be a part of your MUN journey and to meet each one of you at the conference!

If you have any questions, don't hesitate to ask by emailing us at socomununep@gmail.com.



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Background:

According to Our World in Data, plastic production has rapidly increased over the past 70 years. In 1950, the world produced just two million tons. Today, it produces over 450 million tons. The National Oceanic and Atmospheric Administration describes marine pollution as the entry of harmful substances into the oceanic or marine environment. This mass production of plastic has a profound impact on biodiversity. It can lead to the death of marine organisms, the disruption of food chains, and the degradation of habitats. For instance, plastic waste can cause entanglement and ingestion issues for marine animals, leading to injury or death. Chemical pollutants can accumulate in the bodies of marine organisms, leading to long-term health issues or death. Furthermore, these pollutants can biomagnify up the food chain, affecting higher trophic levels, including humans. The impact on human health is similarly significant. Seafood contaminated with mercury, lead, or other toxins can lead to neurological and developmental issues when consumed by humans. Oil spills and toxic algal blooms can also have direct health impacts, such as respiratory problems. Moreover, the economic implications, particularly for communities reliant on fishing and tourism, are substantial, leading to the loss of livelihoods and economic instability. This problem was first raised in the nineteenth century when single-use plastic was invented by Alexander Parkes amid the fast industrialization of developing nations. This and numerous other inventions fundamentally changed how industrialization affected different regions of the world, particularly the ocean. It was unknown to scientists that plastic broke down into tiny, dangerous particles known as microplastics and was not biodegradable. By that point, an estimated amount of 100 billion tons of waste had already been discarded in the ocean. The United Nations approximates that, currently, the 5.25 trillion macro-pieces of plastic in the ocean harm over 800 oceanic species worldwide.

A well-known example of waste accumulation is the Great Pacific Garbage Patch. This is referring to a vast plastic debris gathering in the Pacific Ocean that is thought to be twice the size of Texas. The North Pacific current, the Kuroshio current, the North Equatorial current, and the California current all revolve clockwise around a region that, according to National Geography, measures 20 million square kilometers to form the North Pacific Subtropical Gyre. A gyre's core often has an extremely steady and tranquil atmosphere. Debris enters this stable center through the gyre's round circulation and is trapped there. For example, the California Current flows southward toward Mexico when a plastic water bottle is thrown off the coast of California. Possible results include starvation, suffocation, and entanglement of thousands of species. Moreover, oil spills are among the most visible and dangerous forms of pollution, and they are happening increasingly often in modern industrial environments. These spills, which can occur during the extraction or transfer of oil, can pollute the sediments of the bottom and sometimes wipe out entire species populations. This resulted in the death of thousands of marine animals, including sea turtles, various species of fish, and sea otters.

Additionally, sewage discharge is an influential source of marine pollution, in which there is a sudden introduction of pathogens, nutrients, and other contaminants into the marine environment. It may occur because of untreated or poorly treated sewage and can have devastating effects on nearby oceanic regions. Specifically, substances such as antibiotics are sometimes released into coral reefs and damage the protective layer of mucus, therefore leaving the coral exposed to disease. Around 2001, an outbreak of the



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mysterious “white syndrome” killed over 70% of rare coral species on the coast of Florida. The destruction of coral reefs is dangerous for human civilization as well. According to the United Nations, approximately 1 billion people in the world depend on coral as both a food and livelihood source. The decrease in the population of coral reefs has resulted in thousands of people their main financial provisions. Coral also provides a food source for countless marine creatures, and their destruction in affected regions causes a drastic decrease in the biodiversity of those areas. Additionally, the discarding of fertilizers into the ocean causes the abnormal growth of algae which blocks sunlight from reaching a variety of plants in an area. This can create “dead zones,” in which there is a fatal reduction of oxygen concentration in the water. With all these issues becoming more and more crucial as time goes on, the United Nations has taken various steps to combat marine pollution. Goal 14 of the UN Sustainable Development Goals focuses on reducing marine pollution from land-related activities, regulating harvesting and overfishing, and conserving no less than 10 percent of marine and coastal areas around the world. The U.S. Department of State has taken greater strides, forming the WasteWise Program and the Trash Free Waters organization. Both institutions have sought to promote the reuse of mass-produced goods as opposed to marine littering. Although these operatives have been greatly beneficial in raising awareness of these problems, the concentration of pollutants in the ocean continues to climb to alarming levels.

Possible Solutions:

Three considerations must be made when determining the steps the UN should take to stop harmful ocean pollution: damage control, prevention, and awareness. The main focus of these sections is on the events that occur before, during, and following the release of waste and pollutants into the ocean. Governments may establish a national framework to guarantee a sense of legal authority regarding acts by both people and major enterprises about the avoidance of ocean pollution. Promoting appropriate trash disposal through the availability of easily accessible facilities is another way to address this problem; this could involve adhering to the waste management and reduction plans outlined in the laws of Denmark and the Netherlands. Together, these countries have recycled an average of 53% of their total waste, demonstrating their extraordinary achievement in regulating the disposal of waste. Cutting back on single-use plastics may also be a good idea because they can produce up to 12.5 million metric tons of waste annually. The usage of reusable alternatives such as water bottles, bags, and straws, can be encouraged by governments. But it's important to remember the constraints that developing nations confront, which is why offering financial incentives might be a wise move.

It is the responsibility of the United Nations to raise public awareness of the issue at hand about society's overall awareness of the repercussions of marine pollution. Public education campaigns are one way to accomplish this, and local and national governments may start them. These initiatives would aim to increase public knowledge of the qualitative as well as quantitative effects of ocean pollution and offer helpful advice on how individuals can lessen their influence on the stability of the ocean's climate. These efforts may involve adding environmental awareness lessons to the core curriculum of schools as well as organizing public gatherings like educational seminars and beach clean-ups. Furthermore, social media is frequently a vital resource used to spread



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awareness of environmental issues. Sharing instructional information that emphasizes the effects of ocean pollution on marine ecosystems and human health can be done on social media platforms like Facebook, Instagram, Twitter, and even TikTok. By working together with these companies to leverage the algorithms, social media platforms may fully utilize their benefits in making information accessible to as many people as possible. This entails monitoring peak traffic times and hashtags that receive higher-than-average attention from users.

Harm control is an important consideration that cannot be overlooked. It involves the implementation of several ocean cleanup methods and legislative initiatives aimed at undoing the harm that has led to a significant number of deaths and destruction in the ocean. Now in its tenth year of operation, the Ocean Cleanup Project has collaborated with the UN to remove plastic garbage from the ocean in support of its Sustainable Development Goals.

Systems in which the ocean is cleaned use a combination of technology and innovation, such as large-scale floating booms and autonomous drones are able to collect and remove large quantities of debris. These systems can also provide valuable data on the sources and various types of pollution in the water. Additionally, another approach is creating regulations to be put in place, which hold polluters accountable for their damage and provide financial support for cleanup and restoration efforts. Governments may implement policies such as pollution taxes or fines for companies that have caused previous damage, using these funds to support further progress made in this area. Please keep in mind that funding is assumed to be provided by the UN and should not be a prevalent consideration when developing solutions.

Investment in cutting-edge technologies is essential for mitigating marine pollution, as numerous potential approaches can provide significant advantages. Bioremediation technologies employ microbes or plants to detoxify contaminants, facilitating the natural degradation of dangerous compounds in water, hence reducing their impact on marine ecosystems. Nanotechnology offers a novel method that can produce materials and absorb pollutants such as heavy metals and oil, thereby efficiently purifying water at the molecular level. In addition, the advancement of more effective garbage treatment and recycling methods can greatly reduce the quantity of waste that ends up in the oceans. For example, innovative plastic recycling methods that transform waste into valuable goods might decrease the amount of plastic pollution. Satellite surveillance and data analysis can detect the origins of pollution and monitor its dispersion in real time, facilitating focused remedial measures. These solutions not only reduce the effects of current pollution but also prevent future contamination by promoting sustainable practices and improving our capacity to manage and safeguard maritime habitats.



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Questions to consider:

These questions do not need to be directly answered by delegates but should be considered when drafting speeches, caucuses, and resolution papers. With these questions, the chair hopes to expand each delegate's research on the topic as well as provide ideas on how to address the topic itself:

1. How has your country had an impact on marine pollution in the past?
2. What steps has your country taken to improve conditions in previous years?
3. Has your country been involved with Sustainable Development Goal 14?
4. Do your country's solutions take into account financial and economic factors related to marine pollution?
5. Do you specifically address various factors related to the effects of marine pollution?
6. Are your solutions connected in the sense that none of them directly contradict one another?
7. Does your country have the financial means to improve its conditions for marine pollution? If not, how can you address this through your solutions?
8. To what extent might your country be able to implement modern technologies to improve marine pollution?



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