

An underwater scene showing a variety of colorful fish swimming in clear blue water. In the foreground, there is a large, dense pile of plastic waste, including bags, bottles, and other debris, illustrating the impact of plastic pollution on marine life.

Research Report

Youth Committee

The Question of Reducing the
Amount of Plastics Pollution in Our
Oceans



Lingfield
COLLEGE

We kindly ask that you refrain from making or submitting any resolutions, as we will be using working papers and those will not be discussed.

Please note that the Youth Committee is specifically tailored for new MUN delegates.

Summary

Plastic pollution poses an existential threat to marine ecosystems, with repercussions for the broader environment and human health. Non-biodegradable plastics break down into microplastics that infiltrate every aspect of our environment, affecting species at all levels of the food chain. The economic, ethical, and ecological impact of this crisis highlights the necessity of finding effective solutions. The Youth Committee will use working papers as tools to brainstorm and develop comprehensive approaches that target plastic reduction, responsible production, and clean-up efforts, moving towards a future with less plastic in our oceans.

Background

Plastic pollution in the world's oceans has become one of the most pressing environmental crises of our time. Annually, around 430 million tonnes of plastic are produced, with nearly two-thirds of it discarded after a single use. According to current projections, if no significant action is taken, the quantity of plastic waste in the ocean will triple by 2060.

This mass of oceanic plastic has dire implications for marine ecosystems and human health alike. Plastics are largely non-biodegradable, meaning they can persist in the environment for hundreds of years. Over time, they degrade into smaller particles known as microplastics and nanoplastics, which are now found in almost every corner of the globe. These tiny particles infiltrate marine ecosystems, harming marine organisms and disrupting the natural food web. Recent studies reveal that microplastics can interfere with animal reproduction, thereby affecting the food chain—a concern that ultimately affects human health. Additionally, larger pieces of plastic often cause severe physical injuries or fatalities to marine animals, raising significant ethical concerns about the use and disposal of plastic.

The situation necessitates urgent global collaboration. The United Nations Environment Programme (UNEP) has prioritized tackling this issue, emphasizing the need for international policies that reduce plastic production, increase recycling, and clean up existing ocean pollution.

Key Terms

Microplastics: Tiny plastic particles, less than 5mm in size, which result from the breakdown of larger plastics. These particles can enter the food chain, causing ecological and health issues.

Nanoplastics: Even smaller plastic particles, typically less than 1 micrometer, that can penetrate deep into biological tissues, with potentially unknown long-term impacts.

Non-Biodegradable: Materials that cannot be broken down by natural processes, persisting in the environment for long periods.

Single-Use Plastics: Items made from plastic that are intended to be used once and discarded, contributing significantly to plastic pollution.

Working Paper: A preliminary document where delegates collaboratively write down ideas and proposals for resolving an issue. It forms the basis for a formal resolution.

Key Questions

How can international policies be structured to effectively curb the production of single-use plastics?

What are the most feasible methods for cleaning existing plastic pollution from the oceans?

How can countries balance economic interests in plastic production with environmental and ethical responsibilities?

What educational or awareness campaigns could be implemented to reduce plastic use at a consumer level?

How can international cooperation be fostered to support under-resourced nations in reducing plastic waste?

Wider Reading

<https://www.weforum.org/agenda/2021/04/4-ways-to-reduce-plastic-pollution/#:~:text=8%20million%20tons%20of%20plastic%20enters%20the%20ocean,can%20help%20curb%20the%20amount%20of%20plastic%20pollution.>

<https://www.oceanicsociety.org/resources/7-ways-to-reduce-ocean-plastic-pollution-today/>

<https://www.weforum.org/agenda/2018/03/8-steps-to-solve-the-oceans-plastic-problem/>

<https://www.bbc.co.uk/news/science-environment-64889284>

<https://www.nrdc.org/stories/10-ways-reduce-plastic-pollution>

<https://www.weforum.org/agenda/2021/04/4-ways-to-reduce-plastic-pollution/>

<https://www.unep.org/topics/ocean-seas-and-coasts/ecosystem-degradation-pollution/plastic-pollution-marine-litter>