



## UNEP: GMOs and Their Effect on Agriculture and Protecting Our Oceans

Hello delegates, my name is Caitlin Clowers and I am delighted to be your head chair at the MVHS MUN 2018 Jade anniversary conference! I am a senior at Mission, and this has been my fourth wonderful year in MUN. Currently I am in full IB, I work at Island's, a volunteer at Saddleback church, am in my fourth year of golf here at school, and babysit. In my very rare free time, I enjoy long walks on the beach with Haley (Chef du Cabinet), watching Grey's Anatomy, and playing with my dog. Other than that, I cannot wait to hear all of your solutions to this problem and would like to remind everyone that there are more solutions than just education. If you have any questions feel free to email us at [mvhsmununep@gmail.com](mailto:mvhsmununep@gmail.com) and I'll try to respond as soon as possible. Happy researching!

Hello delegates, my name is Katy Rolstad and I'll be your vice chair for the MVHS MUN 2018 conference. I'm currently a junior, which makes this my third year in MUN. I'm currently in 4 AP classes, English, US History, Physics, and Calculus AB. I took 8 years of art classes and last year I won an art contest. I can't wait to spend this weekend with you and have an amazing committee session. If you have any questions, feel free to email me at [mvhsmununep@gmail.com](mailto:mvhsmununep@gmail.com)

*UNEP has conducted research to determine priority activities in the area of pollution damages liability, and is developing a draft liability and compensation protocol to the Basel Convention. UNEP considered developing conventions on information exchange and assistance in the event of serious industrial accidents. For the time being, however, the GC has decided to proceed by establishing a technical program and an information exchange network. In accordance with UNEP's mandate of giving special consideration to the situation of developing countries, UNEP endeavors, within financial and staff limitations, to provide legal assistance to such countries on request. UNEP publishes a number of useful reference works in the field of international environmental law.*

### GMOs and Their Effect on Agriculture

#### I. Background:

In 1944, Norman Borlaug started the Green Revolution, set into motion due to his attempts to eradicate the problem of starvation in the developing world. Borlaug styled wheat crops with simple techniques of cross-breeding, harvesting, and planting



to produce disease-resistant strains of wheat, and when his techniques proved to be successful, Borlaug sought to spread this new knowledge to the agricultural sectors of the poverty stricken countries of the developing world. In the late 20th century, Borlaug's work of altering crops at the genetic level, creating GMOs, also known as genetically modified organisms that are styled to meet the needs of the consumer, a promise of higher yield and ultimately a lower cost of food production. GMOs would make it possible for farmers to grow crops on land formerly viewed as inhospitable by designing them to withstand the conditions of the land and improve crop protection. Despite being driven by good intentions, recent studies have shown that GM crops pose a potential threat to the environment and to human health. The main issue with GM crops that has arisen within the past couple of years, is that their effects on the environment are unpredictable as it involves the creation of a product that can change and modify itself for survival. With these negative effects in mind, many organizations and governments have raised vocal opposition to GMOs, some have not only banned GMO production, but also GMO research. When dealing with a topic as sensitive and difficult as this, it's very important to consider the upsides and downsides to the usage of GMOs.

## **II. United Nations Involvement:**

The United Nations food agency has founded that an increasing number of incidents of low levels of GMOs are being reported in traded food and feed. The Food and Agriculture Organization (FAO) once stated that with no international agreement defining or quantifying "low levels", interpretation varies from country to country,



some being any level at which detection is possible, while in other countries case-by-case decisions are taken on what level is acceptable. These variable standards are why some importing countries are legally obligated to reject certain shipments that were perfectly legal in the exporting country. FAO did a survey on trade that contained low levels of GMOs in international food and animal feed trade. Respondents reported 198 such incidents between 2002 and 2012, with a high rise after 2009. "The numbers of incidents are small relative to the millions of tonnes of food and feed traded every day," said Renata Clarke, FAO Senior Food Safety Officer in charge of the survey, "But because trade disruptions may be very costly, and given the reported increase in the occurrence of these disruptions, FAO conducted this survey and is holding a technical consultation to try to start a dialogue between countries on the issue,". The survey also revealed that the highest number of incidents involved linseed, rice, maize and papaya, and that shipments with low levels of GM crops originated mainly from the US, Canada and China.

### **III. Possible Solutions:**

Possible solutions could involve the use of biotechnology. FAO recognizes that when appropriately integrated with other technologies for the production of food, agricultural products and services, biotechnology can be of significant assistance. Using biotechnology, other countries and their institutions can be aided by providing them with legal and technical advice, an example being when FAO assisted Bangladesh, Paraguay and Sri Lanka to develop their national biotechnology policies and strategies. Other countries can also be aided by helping them to develop their



capacities in agricultural biotechnologies and related issues through technical cooperation and training, or providing them with access to high-quality, updated, balanced, science-based information, which can be done using the Internet, newsletters, books, glossaries, proceedings and studies published by FAO concerning biotechnology. By offering a neutral forum to discuss policy and technical issues related to biotechnology, it will be easier for countries to come to a consensus and lessen the tension regarding traded items in between other countries.

#### **IV. Guiding Questions:**

1. Is genetically modifying foods ethical?
2. Can GM crops affect developing nations differently than they affect developed nations?
3. Can GM crops be used safely?
4. Should there be restriction on the trade of GM crops between nations?
5. Can alternatives to GMOs arise, or are GMOs too vital to our trade?

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## **Protecting our Oceans**

### **I. Background**

The ocean provides about 97% of Earth’s livable habitats and enables human life. The ocean provides probs, joy, and food, not to mention half of the oxygen in the air, to nearly every living person on this planet. However, almost 40% of all oceans are impacted by the human activities of depleted pollution, human activities, and loss of coastal habitats. Yet, for a resource as vital as this, humans on average completely disregard and trash it. For example, there are currently about twelve million metric tons of debris that joins the ocean every year, statistically it's a truckload of trash per minute, that is stuck in one of our necessary resources. All of this debris has not only been endangering the cleanliness of our oceans, but it is affecting the species through entanglement, choking, and clogging the throats of the estimated 700,000 species that live in the ocean, until it ends up in our own seafood. Not only is the ocean affecting by our trash, but also by our released carbon dioxide. About 30% of all released carbon dioxide is absorbed into the ocean water, slowing impacts of global warming while destroying the ecosystems and food chains within the ocean. Careful management of the ocean is a key factor for a sustainable future.



## **II. U.N. Involvement**

The United Nations believe that the ocean plays such a key role in human livelihood that protecting our oceans has become goal number fourteen on their sustainable development goals. To help with this, they have created over ten different specialized committees including UN-Oceans, and UNEP ecosystem management. Regardless of committee, the United Nations believes that “through enhanced scientific cooperation at all levels” oceans can be protected and even have some of the damage reversed. They also believe that through the creation of more laws that protect the ocean and its inhabitants then the ocean could be sustained. By 2020, they wish to have avoided major impacts and take actions to restore the ocean to be healthy and productive for the species. The United Nations hopes to address and minimize the impacts on the ocean that humans have had on it.

### **II. Possible solutions**

There are many different ways that the United Nations and other assorted NGOs have proposed to solve and even reverse the damage that is done. The “common person” can help save the ocean through advocating for ocean management, supporting small scale fisheries, supporting sustainable aquaculture, and promoting the provided services by ecosystems. People can minimize their carbon footprint, reduce energy consumption, make more sustainable seafood choices, utilize reusable products, taking care of the beach, support others that support, influence change, travel responsibly, and educate yourself. Companies can also help save the oceans through the reduction of plastic and carbon footprints. Major fishing companies are depleting many fish species so the use of localized fisheries will save species and use less than \$50 billion (USD) less per year. Companies that undergo seabed mining should have stricter codes to follow so that they can cause



less damage. Humans reliance on fossil fuels has led to major spillage into the oceans that cause irreversible damage and has collapsed some of the major food chains and sources in the world; as well as global warming which has led to an increase in the amount of carbon dioxide in the water, killing off many species and causing overpopulation due to the lack of oxygen.

### **III. Guiding Questions**

- A. Can we do more than just educate people to solve this problem?
- B. Who is the lead culprit of this?
- C. Does making rules for organizations and corporations that tamper with the ocean an invasion of sovereignty?
- D. Is education the only way to save our oceans?
- E. Who will enforce created laws for companies that work in the ocean?
- F. How can carbon emission be reduced?

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