

Hofstra University

Model United Nations Conference 2021



Food and Agriculture Organization (FAO)

Miranda Maliszka, Chair

To the 2021 Delegation of the Food and Agriculture Organization,

My name is Miranda Maliszka, your chair for the Food and Agriculture Organization (FAO) this year. I am beyond enthusiastic to welcome to you to HUMUNC 2021

As I approach my final year at Hofstra, I am exceptionally grateful for all of the memories I've created and opportunities that I have been given. I look forward to graduating with a Bachelor of Science in Environmental Resources and Geographic Information Systems with a minor in Food Studies.

I spend my "free" time as the Treasurer of Model UN, President of Habitat for Humanity, sister of Alpha Theta Beta Sorority, the Panhellenic Representative for the Fraternity and Sorority Expansion Committee, and a member of the Hofstra Division of Committee Standards Student Hearing Board.

In my previous Model UN experience, I served as the dais for the Social, Cultural and Humanitarian committee (SOCHUM), where we focused on human trafficking and women's rights in the Middle East. I've also attended both the University of Pennsylvania Model United Nations Conference (UPMUNC) and Columbia University Model United Nations Conference (CMUNY). These two experiences allowed me to enhance my delegation skills in the General Assembly and crisis committee.

As chair of FAO, a unique committee to the Model UN that I introduce three years ago, I wanted to continue to challenge to the participating delegates. The topics that will be discussed this year are the regulation of genetically modified agricultural products and invasive species and the implications for the forest industry. These past three years, I've been continuously impressed by the delegates, and my expectations for the committee have been exceeded as each delegate showed true character when representing their countries.

As a Hofstra student and a mentor to many these past few years, I would like to share one piece of advice with every delegate that will participate in my committee this year. Do not underestimate your abilities when it comes to speaking in front of others, step out of your comfort zone and use this experience to grow and better yourself. A wise one once said, *"Believing in yourself is the first secret to success."*

Even though the challenges of holding this conference during the COVID-19 pandemic will keep up from being in the same room, I look forward to meeting each and every one of you and watching you converse amongst yourselves to pass adequate resolutions that work towards these two ongoing issues. As the day grows closer, I cannot wait for the commencement of HUMUNC 2021 and to hear all of the ideas that will flow over the course of just one weekend!

Sincerely,
Miranda Maliszka
FAO Chair
HUMUNC 2021

Introduction to the Committee

The Food and Agriculture Organization (FAO) was first established as a specialized United Nations (UN) agency in 1945 focused on eliminating, “Hunger, malnutrition and poverty and [to] do so in a sustainable manner.”¹ The FAO’s Director-General as of August 2019 is Qu Dongyu from China.² The FAO is made up of 194 members, two of which are “associate members” and one, the European Union, which is classified as a “member organization”.³

The work of the FAO is broken down into five distinctive areas that facilitate more beneficial outcomes, including helping countries adopt sustainable agriculture practices, advising governments on policies to strengthen development and fight hunger, convening meetings for companies and governments to cooperate and share information on smallholder agriculture, managing projects in rural areas to protect livelihoods and rebuild after disasters, and provide risk-management and disaster-relief advice for agricultural areas.⁴

Introduction to the Topics

The first matter that will be addressed in the FAO committee is the regulation of genetically-modified agricultural products. Genetically modified agricultural products are classified by FAO in the category of biotechnology, which also includes crops, livestock, forestry, fisheries, aquaculture and agro-industries.⁵ Genetically-modified agricultural products are used to enhance plant and animal yields and efficiency for a more secure food supply, while conserving natural resources.⁶ As the world-wide population of humans grows—with estimates of it reaching nine billion people by the year 2050⁷—new challenges to the food supply will emerge. In order to successfully face these challenges, new and sustainable agricultural production methods need to be explored—while taking into account climate change, each

countries' natural resource supply and the infrastructure available to each country to access these resources.

Due to the complexity of genetically-modified agricultural products and the problems its attempts to address, delegates are invited to prepare for a robust discussion. Delegates will have to create clear positions and reasonable resolutions. Since this topic covers a vast variety of sub-categories it will be essential for delegates to listen carefully to each country's stance on the issue and work towards putting together resolutions that will achieve maximum levels of success.

The second matter under consideration is invasive species and their implications on the forest industry. The FAO defines an invasive species as, "...any species that are non-native to a particular ecosystem and whose introduction and spread causes, or are likely to cause, socio-cultural, economic or environmental harm or harm to human health."⁸ Examples of invasive species may include insects, pathogens, plants and wildlife. There are many ways that invasive species can be introduced into an ecosystem, the primary one being through human activities. Examples include aquatic organisms attached to the propellers of boats or insects burrowed into wooden shipping palettes and crates.⁹ It has proven difficult to track all of the invasive species that may exist, but the USDA National Invasive Species Information Center has identified over 185 invasive species, to date.¹⁰

Topic 1: The Regulation of Genetically Modified Agricultural Products

The regulation of Genetically Modified Agricultural (GMO) Products ranges across categories that include food, biotechnology and animals. Currently, each country sets its own regulations and guidelines when it comes to the commercial use and availability of these products. There have been 117 commercial releases of genetically modified (GM) crops in the

United States, as opposed to none from countries in Europe.¹¹ Other areas of the world have also moved faster than Europe, “[for] example, since 1995 there have been 3 permits for commercial releases in China, 41 in Brazil and 93 in Canada.”¹² When comparing the EU regulation system to the Canadian system, the Canadian system focuses more “on the characteristics of the crop produced,” unlike the EU system which “focuses on the technique that is used to modify the crop.”¹³

In 2003, the 9th conference of the FAO Biotechnology Forum dealt with regulating GMOs in developing countries and transition countries. The Forum aimed to analyze the implications of GMOs on environmental and human health on the development of climate change. This topic is one that takes place on both national and international levels in order to initiate better regulations that protect biological diversity.¹⁴

The first key point discussed at this conference focused on creating the foundational framework of GMOs for developing countries where they could, “Harness the benefits of these new technologies i.e. to avoid being bypassed by the ‘gene revolution.’”¹⁵ It was recommended that countries would need, “Stable and predictable regulatory regimes necessary to create an enabling environment for the application of agricultural biotechnology.”¹⁶ The second key point discussed at this conference focused on how to protect consumer health and the environment. More information pertaining to ideas that were presented at the conference and ways to help aid developing countries can be found in the bloc positions found at the end of the two case studies for this topic.

Case Studies

In order to better understand the regulation of genetically-modified agricultural products, please examine the case studies of the United States and Brazil’s partnership with Argentina. The

United States being high on the developmental list when it comes to technology, science and research and Brazil becoming more technologically advanced every day. These two countries have very unique polices and regulations, providing a profound structure when considering whether or not to formulate a resolution regarding universal laws on this matter.

Case Study One: The United States GMO policies

The Unites States is one of the most well-known countries that produces GMO Products. As a result, there are very specific guidelines that have been created in order to keep manufacturers accountable. There are three key agencies within the United States Department of Agriculture (USDA) that enforce written legislation in regard to this matter: The Environmental Protection Agency (EPA), Food and Drug Administration (FDA), and Animal and Plant Health Inspection Service. All three of these agencies work cohesively together to achieve the utmost highest level of success in order to allow for the most successful regulation enforcement.

The EPA is responsible for regulating actions taken when growing GM crops, in particular, ensuring that any genetic changes used to combat pests are not harmful to humans.¹⁷ By contrast, the FDA “is responsible for regulating the safety of GM crops that are eaten by humans or animals.”¹⁸ In the United States, GM crops and natural crops are not defined or treated as significantly different, as they are in other countries. However, the FDA is the responsible agency for regulating any significant differences.

According to a policy established in 1992, FDA considers most GM crops as ‘substantially equivalent’ to non-GM crops. In such cases, GM crops are designated as ‘Generally Recognized as Safe’ under the Federal Food, Drug, and Cosmetic Act (FFDCA) and do not require pre-market approval. [However], FDA reserves the authority to apply more stringent provisions of FFDCA requiring the mandatory pre-market approval of food additives, whether or not they are the products of biotechnology.¹⁹

To ensure that they are successful at receiving FDA approval, GM crop producers are encouraged by the FDA to participate in their voluntary consultation process.²⁰

The Animal and Plant Health and Inspection Service (APHIS) of the USDA is responsible for enforcing the Plant Protection Act, a series of regulations which pertain to modern biotechnology that can be potentially dangerous. This act, “Regulates the import, handling, interstate movement, and release into the environment of regulated organisms that are products of biotechnology, including organisms undergoing confined experimental use or field trails.”²¹

Bloc Positions:

The United States is more developed socially, politically and technologically than other nations. With this knowledge in mind, I urge delegates to consider its status as a developed country when formulating and writing official resolutions. While it may be able to stand on its own in regard to creating and enforcing regulations, developing countries should consider if working together and using the regulations created by the United States to achieve an international framework is a possibility, as there are many moving parts that come with a topic as complex as this one.

Due to the lack of resources faced by many developing countries, there may be additional strain on the legislative regulations to be drafted. Delegates at the FAO Biotechnology Forum noted that concern, yet still discussed the need for these regulations within developing countries. Even though this might seem like a hurdle to overcome, delegates at the Forum spoke on behalf of the idea that if the framework of the regulations were put into place, it would elevate some of the financial strain within the country.²² It was stated that countries with the intent to draft legislation pertaining to the regulation of genetically modified organisms needed to focus on the

transparency between producer and consumer.²³ The idea of the “domino effect” was also presented at the conference, whereas:

the complexities of regulatory guidelines established by international bodies like WHO [World Health Organization], FAO, WTO [World Trade Organization], OECD [Organization for Economic Co-operation and Development] and CBD [Convention on Biological Diversity] which are affecting international trade and the release of GMOs in individual countries. These developments are likely to have much influence on the acceptance and release of GMOs in developing countries, most of which are as yet to establish regulatory frameworks for GM foods.

I recommend to delegates keeping this in mind when working with other countries. Furthermore, I recommend that developing countries explore different ideas and/or options that do not strictly require funding from developed nations. The delegates of developing countries should consider how funding concerns and the barrier of transparency between their governments’ elected officials and people might make the issue they are trying to solve even worse.

Guiding Questions for Delegates:

1. Should FAO be responsible for distributing guidelines and information to states about issues related to GM products?
2. Should FAO advise states about the different ways biotechnology can aid in economic development?
3. Can developing countries implement a system of regulations like the United States has adopted to achieve the benefits of GM agricultural products?

Case Study Two: Brazil

In order to understand the adoption of GM agricultural products in developing countries, we can examine the case of a partnership between Brazil and Argentina. The first GM crop was released in Brazil in 1998 and now several major crop areas contain GM crops, including soybeans (eighty-four percent), corn (seventy-eighty percent) and cotton (fifty percent).²⁴

Genetically-modified crops were introduced in

Argentina in 1996 when GM technologies were used to produce soybeans that were tolerant of a herbicide called glyphosate.²⁵ Argentina is now the third largest producer of GM crops, which have provided the country with strong economic benefits, such as bringing \$72.6 billion dollars into the economy and creating over 1.8 million jobs.²⁶

As of 2018 Argentina and Brazil have been working towards merging their laws and scientific rules to regulate new breeding techniques (NBTs), which alter seeds at a molecular level to ensure they are successful, but does not create a crop with different genes.²⁷ Currently the system set forth by Brazilian officials:

is a hybrid system, focusing mainly on the characteristics and safety of the final product. It considers whether an introduced genetic material is absent, as well as the risk level classification of the modified organism. When applicable, it also takes into account information on...whether the [any component of the GMO] product has already been approved for commercialization in other countries.²⁸

In 2005, Brazilian officials established the National Technical Biosafety Commission (CTNBio) under Law No. 11.105 that outlined the rules for:

establishing authorization procedures for GMO research, and establishes rules for the production and marketing of GMOs, restrictions on their release into the environment, regimes for their cultivation, requirements for reporting their release, inspections and



<https://www.infoplease.com/atlas/south-america/brazil-map>

monitoring of GMO research activities and their commercial release, implementing authorities and authorizing procedures for their release, and restrictions on GMOs in foodstuffs.²⁹

This law also tracks violations and criminal offenses that are carried out for those not willing to comply with the regulations. Since these regulations have been made into law, "...CTNBio has approved the commercial use of about fifty GMOs, of which thirty-five are plants, including beans, cotton, corn, and soy[.]"³⁰ While the Brazilian government has in place a review system like the United States, Brazil's system is not voluntary.³¹ This system is made of five different stages, which includes a proposal phase, an inspection of testing facilities, development and testing of the product, a commercial launch of the product, and then an evaluation of the product's results.³²

Bloc Positions:

In order for these types of regulations to be properly enforced they must be funded by a country that has a strong economy and foundation. With the constant advancement of technology and growth of society, you need to think of ways developing solutions based on the current state of the country that you are representing. Delegates should also consider how universal regulations would benefit all of the countries at hand and what guidelines can be put into place if a country was to not follow universal regulations.

Guiding Questions for Delegates:

1. What other kinds of regulations, similar to those in Brazil, can be enforced in other developing countries that will allow for better structure around the world?
2. How can the FAO facilitate cooperation among countries willing to adopt universal regulation in regard to GMO products?

3. What are the consequences to world trade of adopting universal regulations in regard to sharing technological advancements?

Topic 2: Invasive Species and the Implication on the Forest Industry

Due to the uniqueness of this topic, the case studies will focus on two completely different invasive species, which will allow for a better understanding of the economic and financial strain that affects the forest industry as a whole. In addition to invasive species, it should be noted that deforestation and urbanization are also two human-caused factors that also threaten forests. Deforestation is defined as “the clearing or thinning of forests by humans”³³ and when combined with urbanization or “the process by which large numbers of people become permanently concentrated in relatively small areas, forming cities.”³⁴

Case Study One: Emerald Ash Borer

The Emerald Ash Borer (*Agrilus planipennis* Fairmaire) or EAB originates from China. Adult beetles have emerald green colored wings and a metallic purple-red abdomen that is visible when they fly. They measure approximately 3/8 to 3/4 inches long and 1/5 inches wide. This type of beetle only attacks ash trees at all stages of its lifecycle, eating leaves and burrowing into the bark as adults, and feeding on the tree when still growing.

EAB larvae feed just under the bark in the phloem and cambium, part of the vascular system of the tree that moves essential nutrients to different parts. As they feed, larvae form characteristic large, serpentine-shaped galleries and severely damage the vascular system of the tree, eventually killing the tree.³⁵

The EAB was first detected in the United States, in Michigan, in the 1990s. By 2002 it was identified as the cause of severe damage and death of ash tree forests in southeastern

Michigan³⁶ and by 2009 it was moving south, threatening ash trees in Kentucky.³⁷ The range of this invasive species has only increased. “EAB has subsequently been found in at least 24 [U.S.] states and 2 Canadian provinces as of March 2016.”³⁸ The initial point of entry for EAB was suspected to be “...solid wood packing materials used to transport manufactured goods.”³⁹ Today, EAB is spread by their ability to fly to new locations, as well as moving by “...human transport of infested ash firewood, logs, lumber, and nursery stock.”⁴⁰



<https://www.invasivespeciesinfo.gov/profile/emerald-ash-borer>

Case Study Two: White Pine Blister Rust

In the 1800s, the first documented sighting of White Pine Blister Rust (*subgenus strobus*, *section strobus*) occurred in Europe, and since then has spread all over the world. White Pine

Blister Rust is native to Asia and “was introduced separately into both eastern and western North America early in the 20th century.”⁴¹ What makes this invasive fungus special is that it risks attacking all native white pine trees. The fungus attacks directly and “In large trees, mortality is often indirect; when trees become weakened from heavy infection in their crowns, they more easily succumb to drought or attack by bark beetles. Where hazard is high, over 95% of mature trees in a stand can be killed over time.”⁴²



https://www.fs.fed.us/rm/higherelevationwhitepines/images/threats/Threats_WPBR_Photos/ribesrust.jpg

This type of invasive species grows into the bark tissue of the tree at a rate of 5-6 inches per year and can last 3-6 years on just one tree in order to successfully kill it and complete the cycle. Studies state that this invasive species will initially infect a pine tree, forming blisters, in late summer or early autumn. Following the initial infection, the fungus is then carried by rain or wind and spread to other trees in the area of the infected tree.⁴³ After three to four years, the blisters turn a pale-yellow or cream color and the cankers that have grown on the tree burst. This is also another way that additional trees in the area are affected. The spores that were released from the burst canker spread to nearby trees. Following that spring yellow fluid oozes out of the canker site, hardens and creates the rusty cover on the branches.⁴⁴

There are various practices that have been implemented to control the spread of White Pine Blister Rust. A mechanical approach requires pruning infected trees to remove any visible canker sites. It is also recommended that all alternate host plants in a minimum of 1,000 feet around the infected tree are destroyed and removed from the area. A chemical approach requires the application of certified fungicides to pine trees and alternate hosts in later summer. A preventative approach calls on planters to buy pine trees from a reputable company and inspect seedlings before they are purchased.⁴⁵ According to the United States Forest Service, the two primary trees that have suffered from this invasive species is the sugar pine and western white pine.⁴⁶

Bloc Positions:

Since this topic is quite unique, I urge delegates to think outside of the box. One starting point to keep in mind is that the two invasive species in the case studies are not representative of each country's experience with invasive species, as they vary from country to country. Delegates can obtain specific information about invasive species affecting their countries via internet

search (e.g., Googling “Ghana” and “invasive species”). Since this topic is comprised of two parts, I recommend that delegates focus on one part at a time. Delegates would highly benefit from learning what policies their countries have put into place to combat invasive species and determine the effect that these policies had on the forest industry.

Delegates could also benefit from becoming familiar with how the FAO deals with invasive species:

[**FAO - Invasive species: impacts on forests and forestry**](#)

[**FAO - Regional invasive species networks**](#)

Guiding Questions for Delegates:

1. How can the FAO facilitate cooperation among countries willing to implement different practices that would lessen the spread of invasive species?
2. Would it benefit the FAO to use the laws of states and federal governments to structure universal practices to lessen the spread of invasive species?
3. What are the consequences of adopting universal practices when it comes to exporting and importing through ships/shipping containers?
4. Would it benefit the FAO if there was a UN-sanctioned database including different tracking patterns of species and sightings compiled by the governments of member states?

Endnotes

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