

**UC Davis Model United Nations Conference 2013**  
**Committee - Food and Agricultural Organization (FAO)**



Dear Delegates,

Welcome to the Model United Nations Committee of Food and Agriculture Organization for DMUNC 2013! My name is John Wu and I will be serving as your Director General (head chair) of the FAO for the upcoming conference. I am a first-year UC Davis student, double majoring in Political Science with an emphasis on International Relations and Macroeconomics for International Business Counseling. This will be my fifth year participating in MUN, and my experience extends as far as participating in twelve conferences since my freshman year in high school. Outside of MUN, my activities also include racing in mountain biking for the UC Davis Collegiate Cycling Team -which spends the rest of the free time that is usually left over after classes and MUN.

I am pleased to have the opportunity to work with you, in addition to other delegates, on building a breadth of potential solutions to bring about changes in how the world produces, consumes, and organizes its resources. No matter who you are or what you do, everyone needs to eat; thus, as a delegate of the FAO, take pride in the fact that transparency in what we do allows the world to continue fueling its enormous economic engines.

So please, take an interest in what the FAO does, focus on what your country may have to offer in resource acquisition and organization, and most importantly, have fun! Come excited, prepared, and ready to work with others on potentially controversial topics, and remember, challenge yourself to do something new. MUN is a great place to work with others, get out of your comfort zone, and challenge your ideals. You represent your individual country, but you work with an entire community of people who care, just as much as you do, about the issues the world faces today.

Feel free to contact me with any questions you may have on your topic, or anything else! I am so excited and look forward to meeting, working with, and talking to all the delegates, but most excited about meeting you. I await your arrival at Davis MUN Conference, 2013!

Sincerely,  
John Wu  
(cejwu@ucdavis.edu)

## Introduction to the FAO

The Food and Agricultural Organization in the UN, founded in 1945, has an ongoing mandate of leading international efforts to defeat hunger. The FAO works in both developed and developing countries, helping countries raise levels of nutrition and standards of living, improve efficiency in the production and distribution of all food and agricultural products, and ultimately contributing to the global expansion of world economy. The FAO does all this with the aid of countries, both big and small, poor and wealthy, coming together to establish policies on major food and agriculture issues such as that of droughts, over-grazing, unproductive land, and much more. The FAO provides a medium for exchanging information and building interdependence between nations - because at the end of the day, even amongst all the differing opinions in other topics, we still get hungry, and so we must work together to feed ourselves.

Since 1945, the FAO has been working very hard in establishing relations between countries to bring about food aid for the developing nations and economic expansion for the developed nations. 1996 marked a historic time for the FAO when Heads of State from 185 nations and the European community were called together for the World Food Summit. Along with the Director General at that time, the committee set a minimum goal in which a blueprint for sustainable food security was laid out called the Plan of Action. Since then, the FAO has been working on other tasks such as establishing a comprehensive source for information on anything food and agriculture related, setting international food standards, ensuring food aid to those who need it, working on conserving food and reducing food waste, and protecting countries that are highly dependent on imported food.

So how does this tie in with the UN? Well, the FAO ensures the basic right to human life by helping the world become aware of the simple fact, that many people are starving, is a generous contributor to which we have crime, violence, and even war. Many people do not actually realize the impact on food security and its role in avoiding violence, war, and fighting, but as a wise friend once told me, if you want to turn a man into a monster, make him choose between being civilized or being able to feed his family. It is a natural human instinct to fight for survival, or in layman's terms, a fact of

life. However, the FAO is resolute in its mission to provide food security which, in turn, helps with the UN's ultimate mission statement of saving succeeding generations from the scourge of war, assure human person of their fundamental human rights, and promote social progress and better standards of life.

## Topic I

The U.S. is responsible for about 100 billion dollars worth of crops and 100 billion dollars worth of livestock each year. However, the U.S. is by far, the largest producer of corn in the world. Corn is grown in over 400 thousand farms and in 2000, the U.S. was responsible for the production of almost half of the 23 billion bushels of corn produced that year. That's about 10 billion bushels of corn produced to be distributed both domestically and abroad, meaning that the world depends on the U.S. for half of its corn supply. Additionally, the U.S. also produces 13% of the world's wheat supply, 20% of the world's cotton supply, and 50% of the world's soybean production.

These crops seem so random and that they make no difference to the world's food production, but one must not forgo the importance of these crops and their contribution to feeding livestock. For example, only about 12% of the total corn produced is used to feed people, a whopping 80% of the corn goes to feed livestock both domestic and abroad. We might not be responsible for much of the consumption of wheat, corn, or soybeans but, we, are definitely responsible for consuming chicken, pork, beef, and other livestock. We wear them, eat them, use them, and millions of industries are dependent on the output of the livestock and poultry industry.

Food security is one of those issues that has a huge impact on the growth of a country's economy, political stability, and productivity. Public unrest over rising food prices in 2007-2008 helped spark the Arab Spring in the Middle East and North Africa. Places where countries are highly dependent on imported food are extremely uneasy about the waste of one-thirds of all the foods the world produces. About 1.3 billion tons of cereal (wheat, barley, rice, rye, oats, maize) is either lost or wasted resulting from poor storage techniques and facilities, inefficient or incorrect transportation methods, and also tossed out just because it doesn't meet stringent standards that the West has become used to. To put that number into perspective, 1.3 billion tons of cereal is

equivalent to the entire food production of Sub-Saharan Africa. Food waste, coupling with other inefficiencies, such as being too dependent on imported foods, or being a source half of the world's production of food goods, create an uncertainty when external problems start affecting our food production.

Suppose there was an outbreak of an extremely fast mutating and spreading fungus that destroys hundreds of millions of acres of farmland in the U.S. in a matter of days. No one has ever seen this fungus before, and scientists start researching immediately. In the mean time, because of the extensive use of Genetically Modified Organisms (GMOs) by American farmers, there are very few varieties of crops grown in the fields. The fungus is able to take out large portions of the agricultural sector and overcome the crops' immune systems due to the lack of variance in species of crops. If there had been more crop variance, some of that year's yield might have survived. Unfortunately, this seems to be a recurring theme in the history of mankind. As you may recall, little variation in crop types was the main reason for the cause of the Irish Potato Famine in 1850 and the Southern Corn Leaf Blight of 1970. This, as history has shown, will cause a massive uproar in the production and distribution of food. If the crops were wiped out, we will see a dramatic halt in the production of cattle, poultry, and even in the fishing industry. And because the U.S. is number one in beef production and second in milk production, all prices in products associated with beef, dairy, and poultry will skyrocket. Anybody who depends on food aid will be sidelined in favor of maintaining supply to the hundreds of million Westerners so that developed countries such as the U.S. and European Union can maintain government stability and economic security. Currently, the western world cannot fathom the concept of food scarcity and will do whatever it takes to maintain their food security as consistently as possible. So, as one may see, a fungus outbreak such as that illustrated in this topic may very well be a catalyst to the start of a world war for food security.

### *Questions to Consider*

- How can we prevent people from panicking in situations like this?
- How can we ensure greater food security for the world's hungry?
- What can the world do to prepare for it?
- What can we do to prevent it?
- Are there other ways to secure the agricultural industry, are there more efficient ways for the production of crops?

- Many people have pushed for establishing the concept of 'Permaculture' where multiple crops are grown along side of each other, complimenting, protecting, and feeding one another. Could we apply that concept to help with prevention, or should we focus on preparing for the worst?
- Brazil depends on corn for fuel, but they use the same genetically modified corn as the U.S. does what will they do?
- EU and China may see this as an opportunity to boost their own agricultural sectors with the fall of the U.S. agricultural industry, would they help the U.S. or let it fail?
- How would this affect African agricultural investments and industries?
- What would the South American nations do?
- We all know violence increases as conditions around us depreciate, so how do we control for violence and ensure security for people during situations like this?
- How do we keep helping African nations that depend on food aid in times like this?

#### *Helpful Links for Topic I*

##### Cattle Production

<http://www.epa.gov/agriculture/ag101/beefbackground.html>

##### Crops being grown in the U.S.

<http://www.epa.gov/agriculture/ag101/cropmajor.html>

##### Bottlenecking effect of GMOs

<http://www.jamesandthegiantcorn.com/2009/11/01/domestication-bottlenecks/>

##### FAO Statistics Yearbook

<http://www.fao.org/economic/ess/ess-publications/ess-yearbook/yearbook2012/en/>

##### Get an Idea on what Permaculture is

<http://www.permaculture.org/nm/index.php/site/index/>

##### International Plant Protection Convention

<https://www.ippc.int/>

##### European Production of Agricultural Products

[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Agricultural\\_products](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Agricultural_products)

##### Food Waste

<http://www.epa.gov/foodrecovery/>

## Topic II

Spring is the time of sunshine, growth, and the color green. It is a foundation for plants that take root and begin their infancy to yield flowers in the summer and fruits in the fall. The world provides that foundation with an ecosystem, which does exactly what the word implies: a group of organisms that work together to form a process of production.

Specifically, bees play an extremely important role in the symbiosis process. By helping plants reproduce and become fertile, pollination is the key deciding factor in the impregnation of flowering plants that will later yield the fruits by which they were tasked to do. One would think that large-scale farmers could do without a technique as old and as primitive as using bees for pollination services, with what the technology we have today, but they have found that bees are currently the only viable means of large-scale pollination in addition to the fact that statistically, one in every three bits of food that we consume, is dependent on honey bees for pollination. 90% of the world's fruits such as peaches, cherries, apples, and strawberries, to nuts like walnuts and almonds depend on pollination services from bees. Without this service, any crop or plant that requires the help of bees can potentially vanish, not to mention the production of goods from bees themselves such as honey, wax, and even flowers in the floral industry.

Over the past few years, farmers and beekeepers have seen a slow, but dramatic decrease in the survival of honeybees. This phenomenon is described as Colony Collapse Disorder (CCD) and many reasons contribute to their demise. The most mentioned causes of the honeybee population decline is the use of pesticides (neonicotinoids) and the use of Genetically Modified (GM) 'terminator' seeds. The utilization of pesticides by farmers to protect their crops from disease and pest has an inadvertent affect on honeybees who get sick from the toxic substances. Neonicotinoids are used on hundreds of crops ranging from corn to almonds. However, like many other plants, almonds are extremely dependent on pollination services to produce their fruit and thus, it only makes matters worse when almond farmers decide to use the exact pesticide suspected of killing honeybees to protect their plants in hopes of it yielding increasing amounts of almonds. The irony is lost in their interpretation of saving money to produce more. In

addition to the use of pesticides, farmers using GM plants are also contributing to the decline of the bee population. 'Terminator seeds' as they are called, are designed to produce infertile seeds, to which farmers cannot replant. It benefits in the sense that 'terminator seeds' produce plants where certain genes are switched off to increase the survival probability of said plant however, the growth of plants from 'terminator seeds' are suspected to contain indigestible GMO proteins to humans but more importantly, to the honeybees. They cause deformations in the digestive tracts of bees eventually disabling them and killing them.

Although none of the causes have been a hundred percent confirmed, we do know that beekeepers who tend to hives during the spring notice that their honeybee mortality rates increase year after year growing from 10% loss each year to now, a 36% loss each year. This is devastating to the agricultural industry because with the now scarce honeybee workers, pollination services also decline, in turn, fertilizing less plants and crops, reducing production to that of previous years even with the same expanse of farm land. Therefore, to keep up with demand, farmers increase the size of farm land and plant more crops, causing more inadvertent problems such as deforestation, and soil malnutrition from failure in correct farming practices.

#### *Questions to Consider for Topic II*

- Is there any means of establishing large-scale pollination services without the aid of bees?
- How do we stop the decline of bees?
- What can we do to increase honeybee populations?
- Should we lead an international ban on all pesticides and GMOs, or do we need to develop better formulas for pesticides and more precise technology for GM crops?
- What are your country's thoughts on Genetically Modified plant technology?
- Other contributing factors to the phenomena of Colony Collapse Disorder?
- If there is a sudden spike in honeybee mortality rates, what would we do to mimic pollination services?

#### *Helpful Links for Topic II*

Chart of how much some plants rely on honeybee pollination services:

<http://www.globalresearch.ca/articlePictures/beestable.gif>

Honeybee decline due to pesticides:

<http://www.theworld.org/2013/03/europe-bee-populations-in-decline-debate-swarms-around-pesticides/>



Factors that may cause CCD

<http://www.globalresearch.ca/death-of-the-bees-genetically-modified-crops-and-the-decline-of-bee-colonies-in-north-america/25950>

Pesticides and Pollinator decline

<http://www.panna.org/current-campaigns/bees>

Roles of honeybees

<http://www.prnewswire.com/news-releases/honeybee-population-decline-and-its-devastating-effects-are-topic-of-vanishing-of-the-bees-82364717.html>

NGO determined to find a solution to CCD

<http://www.beenative.org/>

What some people are doing to help increase honeybee population

<http://thehoneybeeconservancy.org/>

Information on Terminator Seeds

<http://www.monsanto.com/newsviews/Pages/terminator-seeds.aspx>

