

OMUN V



Ad-Hoc Climate Change (AHCC)



Chair Letter

My esteemed fellow delegates,

I hope you are all excited for OMUN V! My name is Karam Bambawale and I will be your head chair for Ad-Hoc Climate Change this year. I am currently a grade 11 student at UCC and have had the wonderful privilege of being a member of the UCC Model UN team for the past two years, traveling to McGill, Harvard, and sunny California to compete in their world-renowned conferences. Having started my Model UN experience at OMUN, I am stoked to help facilitate an exciting weekend of debate with all of you delegates at the College.

My co-chair for this committee will be Drake Belanger-Polak, who has taken on the daunting task of writing this Background Guide. Drake is a grade 11 student at the College who began his MUN career in Year 8 and is a member of the teams traveling to McGill and Harvard. Drake epitomizes what it means to be a Varsity MUNer, and over 4 years and three OMUNs, has mastered in-room diplomacy among students.

Regarding the scope of this committee, many of you should know that this will not serve as a conventional “Ad-Hoc.” Instead, it will take on the format of an ECOSOC, with the potential for crisis-like updates to occur. While our primary topic is Food Insecurity and its impact on the environment, please be mindful that there will be some fun and improvised debate on other causes of climate change in the world today. I would also like to take this opportunity to remind you all that position papers are due the week before our first committee session on Saturday, April 4th, in order to be eligible for committee awards. We urge all delegates to keep position papers around a page in length, but up to 2 pages maximum, and for them to be submitted by email to adhoccc@omun.ca. To conclude, in case any of you are wondering what we are looking for from you over the weekend, well, Greta Thunberg said it best: “[We] don’t want your hope. [We] don’t want you to be hopeful. [We] want you to panic and act as if the [world] is on fire.”

If you have any questions or concerns about the conference, please do not hesitate to reach out.

Cheers,

Karam Bambawale & Drake-Belanger Polak
Chairs of Ad-Hoc Climate Change, 2020
adhoccc@omun.ca



Introduction

Food insecurity – defined as a situation when people do not have physical, social and economic access to sufficient, safe and nutritious food - can seem like an unrelated issue to climate change. However, environmental factors limit countries' abilities to cultivate and increase the severity of food crises. Namely, climate change is responsible for rising sea levels, land aridification, and longer droughts. If left ignored, climate change will destroy global food supply chains.

As the global population swells, a predicted increase of 1.8 billion by 2050, with growth highlighted in least developed countries, demand for food only increases. Climate Change harms the supply of food while population increases the demand. This problem previously unsolved will only become worse and delegates need to implement effective policies fast.

This committee will be focusing on the connection between Food Insecurity and Climate Change in the short and long term. Although delegates will want to create systems targeting the root cause of climate change, delegates will need to address the impacts of Food Insecurity as well, solving Food Insecurity sustainably.

History of the Committee

An Ad-Hoc is formed for a special and immediate purpose, without previous planning. Ad-Hocs are a temporary, yet much needed task force. As mentioned in the Chair Letter, please note that this will not serve as a conventional “Ad-Hoc,” but rather an ECOSOC with some Ad-Hoc-style debate.

Although this committee will have its own purview, enacting policy and creating recommendations, delegates must not repeat policy already created from these 4 pre-existing committees which already deal with environment and food insecurity related issues. Solutions may include the expansion of policy and delegates will be awarded for working with pre-existing frameworks.

Firstly, the World Food Program, WFP, acts as an “emergency assistance, relief and rehabilitation, development aid and special operations. Two-thirds of our work is in conflict-affected countries where people are three times more likely to be undernourished than those living in countries without conflict.” The WFP places an importance on nutrition for children and mothers.



Secondly, the Committee on World Food Security, CFS, acts as the intergovernmental platform for all stakeholders involved in combating Food Insecurity. The CFS provides policy recommendations. If delegates want to create solutions, it is highly recommended to look at these policy recommendations and ensure they are being incorporated in discussion.

Thirdly, the International Fund for Agricultural Development, IFAD, is an international financial institution. In particular, it focuses on developing low income farmers. The IFAD has created a toolkit to assess every country's agricultural situation and invest on a case-by-case basis.

Fourthly, the Food and Agriculture Organization, FAO, seeks to make pre existing agricultural systems more efficient and sustainable, reduce rural poverty, and increase resilience against threats and crises.

Sub topic 1: Short Term Crises

Food Insecurity is concentrated in few areas and correlates with areas of low development. In 2017, Eastern Africa had the world's highest rate of undernourishment with 31.4 percent of the population undernourished, followed by Middle Africa with 26.1 percent and the Caribbean with 16.5 percent. Western Africa, the Middle East, and South Asia also had rates of undernourishment higher than ten percent. Contrastingly, North America only had a rate of undernourishment less than 2.5 percent.

Short- term general malnutrition stems from external shocks, natural disasters like floods and internal conflicts. Climate Change increases the intensity of natural disasters and can cause internal conflicts.

The Yemeni crisis affects 10 million people. Government forces fighting against rebels, who shut down access to ports which were responsible for necessary food aid. Although this committee can not stop internal conflicts, it can work to subside the food crises. For example, the WFP managed to provide food stamps, through a block chain, to provide food in the ongoing Syrian Crisis.

In terms of natural disasters, recently, Cyclone Idai decimated Mozambique. Destroying crops right before harvest and waterlogging cropland, rendering it useless. Developing countries lack the resources to respond quickly to these disasters. Meaning even the smallest shocks can cause long term impacts.



Sadly, Climate Change also increases the spread of pests. Fall armyworms, reduced corn yields by almost 16 million tons in 2017. Pesticides may seem like an easy solution to this problem. However, specific pesticides must be developed and the pesticides need to be environmentally friendly, this solution takes time and is costly.

The mechanism for solving short term food insecurity has been food aid. Food aid is the immediate insulation of food in areas of crisis. However, often governments will use food aid to “food dump”. For example, countries will sell/ donate their large amounts of excess food to developing countries. This excess food results in a surplus of supply, crashing the food market for small farmers, strangling their ability to develop and prosper. Food aid is often criticized for being used as a means for developed countries to ignore Food Insecurity issues. Often countries will donate their food and leave, disregarding the long term structures that need to be in place to ensure a country will not ever need food aid again.

However, food aid helps the smallest stakeholder - the consumers - who cannot produce for themselves. This point is especially apparent when considering the impact of crises limiting most people's ability to cultivate and some markets are not self sufficient enough to provide food for the population.

Food assistance on the other hand is an ideology that has largely been gaining popularity in the early 2000s. Food assistance works with local farmers, with the goal of these nations to never require food aid. food assistance takes many forms. Mainly, food assistance takes the form of cash vouchers. Cash vouchers are typically money given to communities to stimulate more economic interaction- such as, giving consumers more money to spend on food. Or can be used to increase supply by supplementing farming costs. Also, food assistance can be carried out through providing research on the most drought resilient crops. Food assistance is almost any practice which provides a mechanism towards development.

Similarly, food assistance faces issues like food aid. Less people are affected by food assistance as programs tend to be more expensive, this means more people are at risk of food insecurity. Secondly, food assistance programs infringe on a country's sovereignty as they start to decide who receives help and teach new information that the government may not want to be practiced. Thirdly, food assistance requires screening and monitoring. Delegates will have to find a solution to monitor the use of cash vouchers and ensure they are going towards food and not other unintended purposes.



Subtopic 2.0: Long Term Issues

As previously discussed Climate Change will hurt the supply chain of food. Currently, droughts have become more common in places like Australia which have caught headlines. Areas like Egypt will start to suffer from reduced precipitation. Worryingly, humanity has already started to unsustainably draw from groundwater sources and acidify aquifers. This practice extremely affects those in low latitudes. For example the Punjab, the breadbasket for 1 billion stands to lose production due to reduced water.

Rivers have also started to dry out. The six major rivers have started to run dry before reaching the sea. This fact is especially scary considering the majority of the population tend to live at the basin of these rivers. This phenomenon is caused by the excessive use of water to grow crops now. Meaning, we are borrowing from the future and still failing to provide food to everyone.

Land degradation will only increase. Areas are becoming too dry to have adequate soil. Agriculture gradually removes the topsoil and its nutrients. In 1990, 201 million hectares of land suffered due to wind or water erosion, and the number has only increased. As a recurring theme, human land practices increase the amount of land degradation, again borrowing from the future, leading to a debt we may never be able to pay back.

Also, increased temperatures places stress on livestock production. As livestock fights off increased heat, they produce less milk. 80% of agricultural land in the world is dedicated to livestock. In Africa, there was a drop of 25% in milk production.

Lastly, as we all know too much about, pollinators are collapsing. Temperature changes change our season cycles and pollinators can no longer interact with the same plants they used to.

To combat Climate Change the world has largely disagreed on the best method. Mitigation versus Adaptation has separated the developed countries from the developing. Developed countries prefer mitigation as they are the contributors to Climate Change. Developing countries prefer adaptation investments as they already feel the brunt of Climate Change. For example, the island of Kiribati is predicted to be submerged underwater in 100 years. However, mitigation if successful helps everyone as it reduces the impact of Climate Change. On the other hand, adaptation only helps those most affected.

Also, as delegates debate where climate finance should be directed, it is important to mention the lack of climate financing. Developed countries pledge \$100 billion a year in



the Paris Agreement. That number in reality is around \$15 billion towards developing countries. The UN estimate for funds needed in developing countries ranges from \$49 billion to \$171 billion a year. 3-11 times greater.

Thirdly, delegates need to make effective policies which have mechanisms to keep countries on track and would change our course for climate failure. For example, even if the most ambitious Paris targets are met, three degrees rise, this would be disastrous for the world. The US Department of Defense, predicts a 2.5 metres sea level rise. If we cut the three degrees in half, there will still be a 0.40 metre rise by 2100. China would lose around 100,000 square kilometers of prime agricultural land in its productive delta regions.

1.5 degrees is an important number to this committee. A 1.5 degree rise is the temperature rise by 2030. A report stated “Food production [will be] inadequate to feed the global population and food prices [will] skyrocket, as a consequence of a one-fifth decline in crop yields, a decline in the nutrition content of food crops, a catastrophic decline in insect populations, desertification, monsoon failure and chronic water shortages, and conditions too hot for human habitation in significant food-growing regions.” Another study claimed if we stay in the same position and fail to create new technology, there will be an increase of 1.7 billion undernourished in 2050.

Although these reports may seem extreme, they should still be taken into account when discussing the need for climate policy.

Rising salinity is extremely damaging to rice and corn. In the US rising sea levels have poisoned soil with too much salt, degrading the corn crops. Ironically, drainage ditches, a practice in many countries, act as conduits for excess water caused by draining sea levels salt water has an easy access to seep into the soil. Fish farms are heavily impacted by salinity as fish can only withstand certain salt levels. Forests that protect coasts from storm surges and are often areas with fish in them, will be destroyed by rising sea levels. However, not all impacts of rising temperatures are necessarily bad. Some countries will receive more rain and therefore be able to produce a variety of crops as they have more water. Also, as temperatures get warmer some countries will experience longer cultivation periods. Unfortunately, the benefactors of rising temperature are already Food Secure. In conclusion, there will be less land to plant, crops will have less resources to draw on, all while more people will need food.

An international consensus is to use the land we have more efficiently. Implementation is not agreed on. GMOs have the power to create drought resilient super crops which contain far more nutrients compared to any other alternative. Also, GMOs are quick to develop. However, GMOs are largely criticized by developing countries. GMOs often out



compete other crops, over time, GMOs create a mono-culture which weakens genetic diversity and increases the risk that a pest will decimate an entire crop field. To combat this issue, GMO companies have implemented a gene which produces infertile seeds. However, this “solution” means small farmers can never have their own crops and would have to constantly buy seeds. Secondly, GMOs are controlled by an Oligopoly, some countries do not want their future to reside in the hands of a few companies.

Thirdly, the same way GMOs create “super plants”, they can create “superweeds”. Super weeds can become totally resilient to pesticides, harming cultivation and crop yields.

Interestingly, a common policy for countries is to ban the production of GMOs in their country but are willing to import GMOs. This policy proves that they’re benefits to GMO.

Another way to increase efficiency is to invest in better growing techniques. Vertical farming requires less water and uses less land. However, these techniques need to be introduced to developing countries which requires a mechanism for teaching farmers. Delegates will need to create policy to ensure education aligns with the respective countries policy and a way to teach farmers.

Closing Remarks

Congratulations on reading this background guide! You have now familiarized yourself with the impacts of climate change and the relation to food insecurity. We tried our hardest to make sure the guide contained a balanced view of issues. Also, we tried to make it as concise as possible.

Further questions can be found below.

1. How can climate change be both mitigated and adapted to?
2. What methods will be used to improve water and land use policies?
3. How will funds be balanced between addressing the symptoms of environmental problems and addressing the problems themselves?
4. How will smallholders and the most vulnerable populations in society benefit from the resolution? How will the resolution take these groups into account?
5. How can developed countries aid developing countries without imposing undue burdens on either group? Consider the points of contention regarding climate financing, short-term food aid, and GMOs in this point and more broadly.
6. Will any proposed solutions backfire and actually have negative impacts on the environment in the long run?

Good luck to all of you and see you April 4th!