



FC III



# UNITED NATIONS SECURITY COUNCIL



**BERKELEY**  
MODEL UNITED NATIONS

# LETTER FROM THE CHAIR

Hello Delegates!

My name is Taylor Lang and I will be serving as your head chair for the United Nations Security Council at Fall Conference III. I am a second year double majoring Environmental Economics & Policy and Sociology and minoring in City Planning and I'm interested in all things relating to climate change mitigation and sustainable development! At BMUN, I also serve as the USG of Organizations and Philanthropy which means I maintain and facilitate our organization's partnership, philanthropic efforts, and advocacy. This is my second year in BMUN and 6th year involved in Model UN and I've found Security Council and crisis committees to be the most compelling and beneficial for my education! Some of my favorite things include hiking, dancing, setting up my hammock on the glade, and exploring the Bay Area!

Climate change is much more of a multidimensional issue than it is often regarded to be, which did not only motivate me to pick this to be a topic for FC III but also stage it in a future setting. The Security Council as of now focuses much more on issues regarding international peace and security often associated with countries at war so not climate change in the traditional sense, however my goal of this committee is to focus on the threats that the changes in the Earth's geography will pose to global peace and security. My goal is to facilitate a compelling debate that pushes delegates to think critically about these emerging issues in relation to climate migration, terrorism, technology, and such in the context of the UN Security Council.

Our committee begins in 2050, under the presumption that the global temperatures have risen above 3 degrees celsius leaving 200 million people displaced from their homes, many small island developing states (SIDS) flooded and increased food insecurity from desertification. While this committee takes place in the future, delegates should be able to point to modern day experiences and case studies to the crisis presented.

If at any point if you have any questions, comments, or concerns, leading up to FC III feel free to contact me at [ops@bmun.org](mailto:ops@bmun.org) and I'm looking forward to seeing you all at FC III!

Happy researching!

Sincerely,



Taylor Lang  
Head Chair of United Nations Security Council  
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# SECURITY COUNCIL 2050: THE CLIMATE CRISIS

## TOPIC BACKGROUND

### NATURAL CHANGES

Given the current rate of climate change, the Earth's temperature is predicted to rise by 3 to 6 degrees celsius above the pre-industrial levels. When considering the changes to the land from climate change, it is vital to push out the misconception that the Earth will simply get more hot and dry as the climate will change on many different levels, with areas becoming increasingly more wet and hostile. With these stark changes to the environment, food production would be heavily impacted. One of the sectors that would be most affected by these changes would be food production as crop yields would decline by 1/5th while still facing a significant increase in temperatures. Additional-

ly, changes in this matter would mean the strong increase in certain foods like soy, however at the expense of losing the ability to produce. Air quality would significantly decrease as the atmospheric concentration of Greenhouse gasses would reach 685 parts per million (ppm) of carbon dioxide. Land use changes in relation to climate change and population growth will be significant in the success of human populations in 2050 as terrestrial biodiversity is estimated to decrease by an additional 10% by 2050 and mature forest areas are expected to shrink by 13%. This means a severe loss in biodiversity and the Earth's natural ability to sequester carbon. Water scarcity would become more present as over 40% of the projected global population would be living in river basins that are facing water stress, therefore prohibiting their ability to support

agriculture, manufacturing, and lifestyles. Going back to temperature changes, the increase in heat by 3 degrees Celsius would mean that the average drought would span 10 months, which leads to the loop of water scarcity. This also has an impact on crop yields as it would lead to soil erosion in increasingly dry environments and the increase in danger of flooding and landslides in wetter environments. Delegates in debate need to consider how the natural changes to the land will affect the way that the growing human population interacts with the land, economic stability, food security, environmental health, and overall the implications on global stability with such stark lifestyle changes.

## **CONFLICT**

Climate change over the years has also evoked more tensions in regions, therefore producing additional migrants, with notable countries and areas being Syria, the Lake Chad Basin, and Nigeria. The Syrian civil war grew from the changing climate condition as from 2006 up until the start of the unrest, a drought plagued the country's agricultural land, forcing around 1.3 million impoverished farmers into overpopulated cities. The economic decline that these farmers faced led them to join the rebels against the Assad government and fuel the civil unrest. The decrease of reliance on agriculture for many North African countries due to long periods of drought has allowed terrorist organizations to thrive as they prey on the financially unstable. With the desertification of the Lake Chad Basin, terrorist organizations, primarily Boko Haram, have been able to gain control of the deserte region and force an upwards of 4 million people into camps. Environmental changes lead to increases in political tension and therefore will be a vital part of debate

and the UN Security Council's role in maintaining global stability.

## **DISPLACEMENT**

In most situations, the climate migrant never leaves their home country, rather fleeing from the affected region, whether that be Southeast Asians escaping a deadly tsunami or farmers in the Sahel to find more economic opportunities along the coast because of the destruction of the soil. In 2018, an additional 17.3 million people in 148 countries were forced to migrate within their own country. Countries with the largest amount of international displaced people due to climate reasons at the end of 2019 included Afghanistan with 1.2 million, along with India, Ethiopia, Philippines, and Sudan . In conjunction with those numbers, natural disasters within the first half of 2020 led to 9.8 million IDPs with 75% of the new IDPs coming from India, Bangladesh, the Philippines, China, and Somalia. Climate migrants are also created by years of climate effects that have led to pollution, land degradation, droughts, and more. The countries being the most affected by the climate crisis are not the ones producing the climate stressors, as developed countries are responsible for 79% of carbon emissions. The current lack of stability and support for climate migrants have had detrimental effects, therefore delegates need to consider the potential solutions for creating stability for migrants and the global community as more populations are forced to flee their homes.

## **TECHNOLOGY**

Geoengineering is large-scale intervention in environmental processes with the goal of counteracting climate change. Geoengineering takes the form of

Solar Radiation Management (SRM), which aims to lower temperatures by redirecting solar energy back into space, Earth Radiation Management (ERM) which forces excess heat on earth back into space, and Greenhouse Gas Removal which works to remove carbon dioxide and other greenhouse gasses from the atmosphere. Seeing that around 90% of the IPCC's recent research points in the direction that "negative emissions" will need to be seen to stay below the 2°C threshold in the Paris Agreement, the controversial idea of geoengineering becomes evermore prevalent.

One of the most notable forms of SRM is Stratospheric Aerosol Injection which consists of distributing particles like SO<sub>2</sub> into the atmosphere via aircraft to reflect solar radiation. The downside of this process is that Earth would become dependent on this technology to regulate the climate, equally affect certain regions, and would require international consensus otherwise nations could utilize it as a weapon. Another proposed method includes Bio-energy with carbon capture and storage (BECCS) and consists of dedicating large areas of land to plant CO<sub>2</sub> sequestering plants, burning those trees to generate energy, then liquidating the CO<sub>2</sub> emitted and storing it in depleted oil and gas reserves. The downfalls of BECCS is that in order to match the Paris Agreement carbon levels, almost double the amount of land currently used for agriculture would need to be used, which would drive up food and land prices, affecting small agricultural com-

munities, and added emissions elsewhere as fertilizer and water use would double. It is also used in the ocean as scientists, through the process of iron-fertilization, aim to simulate the growth of carbon sequestration performed by plankton, as when this process naturally occurs it draws up to 60 billion tons of carbon from the atmosphere. More hope lies in geoengineered clouds as manipulating marine stratocumulus clouds is based on the success of the natural phenomenon as they already cover 20% of the Earth's land and reflect 30% of solar radiation and cool the ocean beneath it.

Geoengineering seems like a positive thing as it can guarantee the cooling of the environment, however there are many prominent cons. The controversies include that it would affect regions more than others with decreased rainfall from some techniques. Additionally, it would encourage greenhouse gasses to build up and even though warming stopped, it would not address other harms of human emissions such as ocean acidification. Next humans would be dependent on it forever as termination shock would create extreme rises in temperature. Lastly and most importantly in the context of committee, it would require international consensus or one nation would adjust it for their liking at the expense of others & could be used as a weapon. Delegates in this environment must consider their country's policy on geoengineering use and development and the implications it has on global security.





“Kri Kri, on the shores of Lake Chad” by Anouk Delafortrie licensed under CC BY-NC-ND 2.0 DEED

## CASE STUDY: LAKE CHAD BASIN

Lake Chad, once serving as the main body of water to the West African people, specifically in the western border of Chad and northeast Nigeria, reaps the effects of climate change, unsustainable population growth, and improper irrigation, leading to a decrease by 95% from original size. Serving as the heart of the Sahelian region, the changes inflicted by climate change on the water levels of this lake has had vast effects. The body of water, once stretching 8% of Africa’s landmass, is now being called an “ecological catastrophe” by the Food and Agriculture Organization, with predictions that the lake will be gone by the end of the century. Prior to the desertification of Lake Chad, the agricultural sector flourished, there was limited conflict between farmers and herders, and there were over 20,000 commercial fish sellers who benefited from the diverse fish populations found in the lake.

The environmental implication of the desertification of Lake Chad has sparked conflict as seen with

the rise of Cameroonian-Nigerian tensions and the presence of Boko Haram. The Darak village as the Cameroonian and Nigerian people dispute over who owns the territory, with the debate being heightened because of its necessity to water. Additionally, the use of dams can create environmental warfare as the creation of the Tiga and Chalawa dams increased conflict between the upstream communities in Nigeria versus those downstream in Niger. The decrease of reliance on agriculture has allowed terrorist organizations to thrive as they prey on the financially unstable. With the desertification of the Lake Chad Basin, terrorist organizations, primarily Boko Haram, have been able to gain control of the disparate region and force upwards of 2.8 million people out of their homes, with 1.7 million of them being children. The link between the desertification of this region and the rise of terrorism is clearly seen as 7 million out of 9 million in need of humanitarian aid in the Lake Chad Basin are from Nigeria.

## QUESTIONS TO CONSIDER

1. Should countries consider the use of geoengineering to modify the climate and weather patterns? What measure would have to be taken to assure that this technology is not weaponized?
2. How can countries best address the increase in terrorism and stability issues as a result of changes in climate?
3. How can the United Nations and refugee host countries best plan and handle the increase in migrants fleeing from climate crises?
4. What adaptation measures does your country support in regards to global climate change and changes in the land's ability to support its population?
5. What is the role of larger, more developed nations in regards to the inequitable struggles faced by small nations who bear the more intense burden of climate change?

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