WMUN II

United Nations Environment Programme (UNEP)

L. Douglas Wilder Middle School Model United Nations

Background Guide

Siddarth Kaparthi

Co-Chair

Devesh Somasundaran

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Letter From the Chairs

***Honorable Delegates*,**

Welcome to the Second Iteration of the Wilder Model United Nations Conference. You are participating in the United Nations Environmental Programme (UNEP), co-chaired by Siddharth Kaparthi and Devesh Somasundaram.

Siddharth Kaparthi is currently an 8th grader in the GYSA program at L. Douglas Wilder Middle School, and this is his second year participating in Wilder Model UN, but this is his first time as a chair. He is also an active member of several other clubs, such as Technology Student Association (TSA), National Junior Honor Society (NJHS), and Math Club. Outside of school, he enjoys reading a variety of books, playing his keyboard, and hanging out with his friends.

Devesh Somasundaram is also currently an 8th grader in the GYSA program at L. Douglas Wilder Middle School, and this is his second year in Wilder Model UN, but this is his first time as a chair. He is also an active member of several other clubs, such as Technology Student Association (TSA), National Junior Honor Society (NJHS), and Math Club. Outside of school, he enjoys reading books and taking karate classes. He is currently a black belt in Grandmaster Dong's.

Though it is not required, we strongly urge you to write a position paper as it better helps you prepare for the committee. Remember to make your position paper with reliable sources. Please do not divert from the delegate position that you have been given. Keep personal bias to a minimum, and please refrain from the use of AI, or else you will be disqualified. Delegates are strongly encouraged to research as much as possible for the topics at hand. To qualify for awards, you must submit a well-written position paper.

We look forward to being your chairs for this committee and wish you all the best for your preparations!

- Your chairs, Devesh Somasundaram and Siddharth Kaparthi

Introduction:

The United Nations Environment Programme, also known as UNEP, was formed after the Stockholm United Nations Conference on the Human Environment in 1972. It was created to address the problems of climate change, loss of biological diversity, and pollution. UNEP makes policies to better prevent and stop these existing crises. The headquarters is in Nairobi, Kenya, which makes it one of the few UN programmes in the developing world. This programme works with international organisations and scientists to create solutions for the listed problems. The United Nations Environment Programme also played an important role in creating initiatives such as the Montreal Protocol, and also created the Global Environment Monitoring System (GEMS) in 1975. This mechanism, called Earthwatch, collected environmental data from UN-associated agencies.

Topic 1: Preventing Food and Water Insecurity to Better Protect the Environment

Topic Overview:

Food and water insecurity have long been persistent problems worldwide. Still, third-world countries such as Somalia, Chad, and other developing nations with generally lower Human Development Index (HDI) scores suffer more. Over 2 billion people currently do not have access to clean or safe drinking water, while around half of the planet's population has severe water scarcity. When these people, out of necessity, are forced to drink dirty water, viruses and certain chemicals can enter their bodies and endanger their lives. As global hunger

continues, around 2.3 billion people are food insecure. In 2024, around 783 million people went hungry. With both of these problems existing, the current climate change accelerates, while the environment worsens in terms of health.

Background:

There are many examples of places where there are insecure sources of food, such as Sudan or other locations where there is conflict-disrupted agriculture. Climate change and extreme weather are also contributing factors to the disruption of the food supply. 65% of famished individuals live in war-affected locations and areas. A third of the food produced is wasted, but if it were possible to acquire all the food that is wasted, one could feed all the hungry people on the planet.

Sudan and South Sudan are two of the countries with some of the world's hungriest people. When war broke out between the Sudanese Armed Forces (SAF) and the Rapid Support Forces (RAF), a humanitarian crisis unfolded. Nearly two-thirds of Sudan's population needs humanitarian assistance because of a food security crisis. In 2025, 3.2 million children under the age of 5 were malnourished. Farmers have been displaced from their homes, and with agriculture being the main source of income for over 80% of the population, this shows that food production is at an all time low.

Areas such as sub-Saharan Africa face some of the most extreme weather, which can destroy crops and lower agricultural production. One specific example of this is the drying up of Lake Chad, which, at one point in time, was one of the world's largest lakes. It is estimated to be one-tenth of the size it was in the 1960s. Around the lake basin, about 30 million people rely on the freshwater there, and the industries that it supports. Lake Chad directly supports fishing,

irrigation, and the economy in all its surrounding countries: Chad, Niger, Nigeria, and Cameroon. The lake drying up is a huge problem for the surrounding community, as their source of income, way of life, and drinking water (Lake Chad is a freshwater lake) is negatively impacted.

Current Situation:

The current situation of this massive problem is that in 2025, global hunger has seemed to have declined slightly from previous years, but still considered a severe crisis. At the same time, areas in Africa have actually seen an increase in hunger, showing that specific areas still have a large problem. It is projected that in 2030, approximately 512 million people will be starving or malnourished, and out of them, 60% will be in Africa. Around 1.4 million people still suffer conflict-driven hunger in locations such as Gaza, which has a major humanitarian crisis currently. Sudan and Gaza have both also been reported to have catastrophic famines. Four more countries/territories that have severe food insecurity include: South Sudan, Yemen, Haiti, and Mali. Another finding was that extreme weather and climate change continued to drive a decrease in both food production and security.

Global water insecurity is still a critical issue that has been continuously escalating. 1 in 4 people globally are still not able to drink safe, clean water. This means that around 2.1 billion people around the world are water insecure. 3.4 billion people still do not have access to safe sanitation, while 1.7 billion people still lack access to any sort of basic hygiene services in households. Around 4 billion people, or two-thirds of the planet's population, undergo severe water scarcity for at least one month each year. An estimated amount of 700 million people may be displaced by 2030 because of severe and intense water shortages and scarcity. For a lot of

people, the water that melts from glaciers and mountains is necessary for survival, but as climate change increases, glaciers are melting faster, decreasing our freshwater supply in the world.

Both problems directly affect the environment because they have certain implications that can worsen the environment. When there is food insecurity, that means that farmers in the affected locations need to perform more intensive farming, which damages the soil, which damages the environment's biodiversity, and the methane from that much fertilizer is released into both the air and water nearby. When there is water insecurity, people are required to use up more freshwater than is usually required, so it will accelerate the decrease of Earth's freshwater supply. Since glaciers and other water towers release mountain meltwater (water released by the melting of glaciers, snow, and more), when they melt, our freshwater reserves decrease rapidly. The freshwater mixes with the saltwater, making it unusable for drinking water. This again increases water insecurity. It is a cycle between how food and water insecurity increase climate change, but the climate increases both of these problems, which is why solutions must be found to solve food and water insecurity.

Topic 2: The Overuse of Earth's Limited Natural Resources

Topic Overview:

Earth's supply of natural resources has been on the decline since humans first figured out how to use them as a power source. As of today, Earth's natural resources are merely a fraction of what they were fifty years ago, with the Earth having lost over one million acres of forest land in the past 35 years. The shortage of important resources such as water is decimating the

economies of third-world countries such as Venezuela and Ethiopia. Other countries are also being affected by this, since the use of these resources emits Carbon Dioxide, which throws off the climate of the globe.

Background

Humans have been using the natural resources of Earth as a source of energy and to produce products for centuries, but it has gotten worse in the past 200 years with the advent of the Industrial Revolution. Coal was a resource that was extensively used with massive repercussions to the environment. As it was used, other resources have also been stripped from the land, including wood and oil for fuel sources and the production of building materials.

The burning and use of natural fuels have offset the ecosystem of the globe, creating problems such as global warming and the hole in the ozone layer. The ozone layer is a part of the atmosphere that helps reflect most of the sun's harmful ultraviolet light, which can alter human DNA. The ozone hole has been a problem since the 1980s, wrecking the regulation of ultraviolet light in the atmosphere. Use of natural resources to produce coolants has given off a dangerous byproduct called chlorofluorocarbons, which has been expanding the hole in the ozone layer. The Montreal Protocol was a protocol issued by UNEP in 1987 to make countries enact laws to reduce chlorofluorocarbon emissions to start repairing the ozone layer.

Current Situation:

Only a fraction of the jungles and animals of the world remain to this day. Over 20% of the Amazon rainforest alone has been cut down in the last 50 years, among other forests that have been reduced in size, as trees are being used up faster than they can replenish, and the same is happening with other materials. Materials such as coal and natural oils are being used as a fuel

source much faster than they can be replenished. These materials take millions of years to form, and other materials are also being depleted in the same way.

Overall, this usage of materials will not sustain the human population if not reduced or streamlined. Most fossil fuels will run out this century, and if not carefully regulated, the tree populations of the world can be depleted in a very short amount of time. As the population of humans grows, so does the excessive use of natural resources, limiting the capabilities of humankind.

Citations:

"6 Causes of World Hunger - Why There Is Global Food Insecurity." *World Food Program USA*, 7 July 2025, wfpusa.org/hunger/issues/.

Action Against Hunger. "The Hungriest Countries in the World." *Action against Hunger*, Action Against Hunger, 15 Dec. 2024, www.actionagainsthunger.org.uk/our-impact/stories/the-hungriest-countries-in-the-world.

Edmond, Charlotte. "Lake Chad Shows How Climate Change Is Hitting Real Lives in Africa." *World Economic Forum*, 2 Dec. 2019, www.weforum.org/stories/2019/12/lake-chad-africa-climate-change-water-indigeous-women/.

Environment, UN. "Food Loss and Waste." *UNEP - UN Environment Programme*, 2024, www.unep.org/topics/food-systems/food-loss-and-waste.

---. "Where We Work." *Global Environment Facility*, 2021, www.unep.org/gef/about-us/where-we-work.

"Extreme Weather = Extreme Hunger." *Www.wfpusa.org*, www.wfpusa.org/climate-change-infographic/.

"Food Crises: 1.2 Million People Suffer Catastrophic, Conflict-Driven Hunger in 2025." *The Joint Research Centre: EU Science Hub*, 16 Sept. 2025, joint-research-centre.ec.europa.eu/jrc-news-and-updates/food-crises-12-million-people-suffer-catastrophic-conflict-driven-hunger-2025-2025-09-16_en.

"Global Report on Food Crises." *Fightfoodcrises.net*, 2020, www.fightfoodcrises.net/global-report-food-crises.

Green, Kara. “Global Hunger Persists as 2.3 Billion Face Food Insecurity despite Signs of Progress, New UN Report Finds | Action against Hunger.” *Action against Hunger*, 30 July 2025, www.actionagainsthunger.org/press-releases/global-hunger-persists-as-2-3-billion-face-food-insecurity-despite-signs-of-progress-new-un-report-finds/.

Kuo, Gioietta. “When Fossil Fuels Run Out, What Then?” *The Millennium Alliance for Humanity and the Biosphere*, Stanford University, 23 May 2019, mahb.stanford.edu/library-item/fossil-fuels-run/.

Muskan Katoch, and Muskan Katoch. “How Climate Change Is Impacting Global Food Systems and Security.” *So What Else Inc - Can We Do to Help?*, 30 Apr. 2025, sowhatelse.org/how-climate-change-is-impacting-global-food-systems-and-security/.

NASA Earth Observatory. “World of Change: Antarctic Ozone Hole.” *NASA Science*, June 2009, science.nasa.gov/earth/earth-observatory/world-of-change/ozone-hole/.

One Planet Network. “Natural-Resource Use and Environmental Impacts.” *One Planet Network*, One Planet Network, 5 Oct. 2021, www.oneplanetnetwork.org/SDG-12/natural-resource-use-environmental-impacts.

Ritchie, Hannah. “What Is the Ozone Layer, and Why Is It Important?” *Our World in Data*, 13 Mar. 2023, ourworldindata.org/ozone-layer-context.

Terrapass. “Overconsumption of Natural Resources | the Problems We Face.” *Terrapass*, 19 Aug. 2022, terrapass.com/blog/overconsumption-of-natural-resources/.

“Two Years since the Start of the Conflict, Sudan Is Facing a Severe Food Security Catastrophe.” *Newsroom*, FAO, 15 Apr. 2025,

www.fao.org/newsroom/detail/two-years-since-the-start-of-the-conflict-sudan-is-facing/en.

"UN World Water Development Report 2025." *UN-Water*, 2025, www.unwater.org/publications/un-world-water-development-report-2025.

UNICEF. "Water Scarcity." *UNICEF*, 2020, www.unicef.org/wash/water-scarcity.

United Nations. "Water – at the Center of the Climate Crisis." *United Nations*, 2022, www.un.org/en/climatechange/science/climate-issues/water.

United Nations Environment Programme. "About Montreal Protocol." *UN Environment Programme*, United Nations Environment Programme, 2025, www.unep.org/ozonaction/who-we-are/about-montreal-protocol.

"United Nations Environment Programme (UNEP) | EBSCO." *EBSCO Information Services, Inc. | Www.ebsco.com*, 2024, www.ebsco.com/research-starters/environmental-sciences/united-nations-environment-programme-unep.

"United Nations Environmental Programme (UNEP) Established." *Environment & Society Portal*, www.environmentandsociety.org/tools/keywords/united-nations-environmental-programme-unep-established.

"With 783 Million People Going Hungry, a Fifth of All Food Goes to Waste | the United Nations Office at Geneva." *The United Nations Office at Geneva*, 27 Mar. 2024, www.ungeneva.org/en/news-media/news/2024/03/91990/783-million-people-going-hungry-fifth-all-food-goes-waste.

World. “Global Hunger Declines, but Rises in Africa and Western Asia: UN Report.” *Who.int*, World Health Organization: WHO, 28 July 2025, www.who.int/news/item/28-07-2025-global-hunger-declines-but-rises-in-africa-and-western-asia-un-report?scrlybrkr=4b0d7bdd. Accessed 21 Jan. 2026.

World, WHO. “1 in 4 People Globally Still Lack Access to Safe Drinking Water – WHO, UNICEF.” *Who.int*, World Health Organization: WHO, 26 Aug. 2025, www.who.int/news/item/26-08-2025-1-in-4-people-globally-still-lack-access-to-safe-drinking-water---who--unicef.