

#### **Committee** United Nations Environment Programme

General Assemblies

October 14-15, 2024

www.gtmun.gatech.edu

Georgia Tech Model United Nations





#GTMUN2024

# 



**INDEX** Letter from the Sec-Gen Introduction to the Committee History **Functions O** Position Papers **Topic 1: Facilitating** Access to Climate **Change Mitigation** Technologies **Topic 2: Formulating** and Promoting Policies to Ensure Sustainable Agriculture **28** Bibliography

#### #GTMUN2024



#### Letter from the Secretary General

#### Dear esteemed delegates,

Welcome to the twentyfifth edition of the Georgia Model of United Nations. I am incredibly excited to be your Secretary General for GTMUN 2024!

*My first Model UN conference was GTMUN, six years ago, and it's given me a joy and passion for diplomacy that has lasted since. This year, the secretariat team has worked extraordinarily hard for months to assemble an incredible array of committees and topics to test your abilities and push you to grow as a delegate and as a future leader. As a person who was in your position six years ago, reading the GTMUN background guides, I know how it feels to prepare for a committee. Though this resouce is invaluable, I encourage you to go beyond in terms of studying about your topic(s) and your country's diplomatic position. I firmly believe that the greatest moments in Model UN happen when you have resiliently prepared through different resources to bring your member state's view into the committee. It is a sincere hope of mine that you enjoy the conference, and take the fullest advantage of what GTMUN has to offer, from public speaking skills, to critical thinking and policy creation. It is opportunities like these when you can connect with fellow, like-minded delegates to bring ideas into the table and construct the progress that people across the globe need, and that only the United Nations can deliver.* 

GTMUN is an amazing chance to brainstorm to solve current issues creatively and practicing being the leader of tomorrow. I wish you the best in preparing for and participating at the upcoming conference!

5

GTMUN XXV Secretary General Jonah Isaza





## *Introduction to the Committee*

UNEP (United Nations Environment Programme) was founded in 1972, with the purpose of strengthening environmental standards and regulations, along with aiding the implementation of environmental obligations at the country, regional and global levels. It is composed of all 193 UN member states, and traditionally meets biennially in order to discuss and debate global environmental policies and international environmental law. Within the GTMUN conference the UNEP committee will be focusing on two topics; Facilitating access to climate change mitigation technologies, and Formulating and promoting policies to ensure sustainable agriculture.

Climate change was first discovered over one hundred years ago by Swedish scientist Svante Arrhenius.<sup>1</sup> Arrhenius predicted that anthropogenic forces would drive the greenhouse effect to drastically alter surface temperatures and atmospheric carbon dioxide levels. For decades, the existence of climate change was highly debated on the international forum. However, as of 1988, climate change has become a prominent topic on the international political agenda.<sup>2</sup> In November of 2019, thousands of scientists from over 150 countries officially declared that the world is in a state of Climate Emergency, or a Climate Crisis.<sup>3</sup> Founded in 1972, the United Nations Environmental Programme, or UNEP, was established with the intention of aiding the environment on a global scale. UNEP is known as the leading environmental authority in the United Nations. This committee wishes to ensure the implementation of positive environmental policies and actions on a global and regional scale. The United Nations Environment Programme's goal is to guarantee a safe and healthy world for future generations.

#### History

1972 —	UNEP is founded. "Conceived to monitor the state of the environment, inform policy making with science and coordinate responses to the world's environmental challenges"
1973 —	"The first meeting of the Governing Council of UNEP takes place in the Palais des Nations, Geneva"
1985 —	Vienna Convention for the protection of the ozone layer
1987 —	Montreal Protocol on substances that deplete the ozone layer
1988 —	Intergovernmental Panel on Climate Change (IPCC)
1992 —	UN holds Earth Summit: Leaders sign UN Framework Convention on Climate Change (UNFCCC)
2007 —	Climate panel wins a nobel prize for the release of its fourth assessment report recognizing and charting the effects of man-made climate change
2008 —	UNEP becomes carbon-neutral
2009 —	UN Climate Change Conference held in Copenhagen
2010 —	UNEP releases first emissions gap report
2013 —	Fifth IPCC assessment report: Greenhouse gas emissions are at their highest levels in recorded history and have begun to affect the climate
2015 —	World leaders sign the Paris Agreement
2018 —	IPCC launches special report on global warming of 1.5 degrees Celsius
2019 —	Leaders gather for UN climate action summit
2021-2030	The UN Decade on Ecosystem Restoration is launched
2021 —	IPCC publishes first part of 6th assessment report "Code red for humanity"

#### **Functions**



BACKGROUND GUIDE / SOCHUM

#### **Position Papers**

A position paper is a document which expresses a member state's policy or position regarding the topic(s) that will be discussed in the committee. It can also help as a forefront to ideas, perspectives, solutions, or approaches that a delegate expects to prioritize in committee. It is recommended that a position paper includes the following: **a) member state's view on the topic(s)**, **b) information on how the nation has addressed (or not) the issue in the past, c) proposed solutions based on research and policy.** 

#### Sample Position Paper

*The United Mexican States Committee: Commission on Narcotic Drugs Topic Area: Heroin Trafficking* 

"My sole ambition is to rid Mexico of the class that has oppressed her and giving the people a chance to know what real liberty means. And if I could bring that about today by giving up my life, I would do it gladly"

Although "El Centauro del Norte" spoke these words during the Mexican Revolution more than a century ago, the Mexican people are far from knowing the meaning of "real liberty". Mexico is suffering the consequences of being a key player and a large contributor in a growing illicit drug market, which each year seems to be more diversified and more difficult to trace. Mexico's protagonic and problematic stance provoked former president, Felipe Calderón, to declare open a new theater of the War against Drugs in 2006, as a strategy to counter the violence of the cartels. The low-intensity conflict has left a toll of more than 150.000 deaths and 23.000 disappearances. These painful numbers have placed Mexico as the second most dangerous country in the world.

Currently, drug trafficking and organized crime industry in Mexico is like energy: it is not destroyed, but transformed from one form to another, since each cartel dismantled by the Mexican Government gives way to more small and irrepressible groups. The strategy of the war on drugs, which was based on punctual operations to eliminate the highest branches of the cartels, has not had the desired results.

Mexico recognizes that instead of addressing the problem by the branches, we must change our strategy and attack it from its roots. The first step is understanding that fiercely repressing the violence of the cartels only results in the bloodshed and loss of precious lives of innocent citizens. We invite fellow representatives to consider our modern history, experiences and learnings as a reference.

The United Mexican States notes the necessity to promote the enhancement of international cooperation and exchange of information with the purpose of strengthening the common front in the face of transnational organized crime. For this reason, we must take the responsibility of attending and repairing the social damage of vulnerable communities that are bonded with illicit drug markets. Furthermore, we must develop integral prevention programs against violence, exclusion and weakening of the social tissue, aiming towards the most vulnerable demographics.

## TOPIC 1 Facilitating access to climate change mitigation technologies.

### Key Terms and Acronyms

<i>Climate Change</i>	<i>Climate change refers to shifts in long-term temperatures and weather patterns, on local, regional, and global scales.</i>
<i>United Nations Environmental Pro- gramme (UNEP)</i>	Founded in 1972, the United Nations Environmental Programme is the "leading environmental authority in the United Nations sys- tem," and their goal is to "strengthen environmental standards and practices while helping implement environmental obligations at the country, regional, and global levels." <sup>4</sup>
<i>Intergovernmental Panel on Climate Change (IPCC)</i>	Established in 1988, the IPCC is "the leading international body for assessment of climate change." The IPCC is a scientific body that provides key information and guidance to the UNFCCC. <sup>5</sup>
<i>UN Framework Con- vention on Climate Change (UNFCCC)</i>	<i>Created in 1992, the UNFCCC's ultimate goal is to "stabilize green- house gas concentrations 'at a level that would prevent dangerous anthropogenic interference with the climate system."</i> <sup>6</sup>
<i>The Greenhouse Gas</i> <i>Effect</i>	The greenhouse gas effect is when heat is trapped in the atmosphere near the Earth's surface by gases and substances known as "greenhouse gases." Anthropogenic sources release more greenhouse gases into the atmosphere, and this causes more heat to be trapped near Earth's surface than there should be. <sup>7</sup>
<i>Climate Change Mitigation</i>	<i>Climate change mitigation techniques reduce the amount of an- thropogenic greenhouse gases that trap heat from being released into the atmosphere.</i>

#### Introduction

Climate is a region's regular weather patterns, typically tracked over the course of thirty years.<sup>8</sup> Climate change is the shift in temperatures and weather patterns of an area over a long period of time.<sup>9</sup> There are a multitude of anthropogenic forces driving climate changes. Human activity is putting more carbon dioxide in the atmosphere than there should be, and natural sinks are unable to cycle it out. Carbon dioxide enforces the Greenhouse Gas Effect.<sup>10</sup> Greenhouse Gases keep heat trapped on Earth's surface, and with an increase in carbon dioxide, more heat is trapped, increasing current and future global temperatures. Excess carbon dioxide in the atmosphere addition impacts our oceans. Oceans absorb carbon dioxide, and with the additional anthropogenic carbon dioxide in the atmosphere, the ocean is absorbing more. Ocean water is becoming more acidic because once carbon dioxide reacts with seawater, oceanic pH levels decrease. Most species of plants and animals are not adapted to live in highly acidic ocean water, drastically disrupting the ecosystem.<sup>11</sup>

Climate change negatively impacts the environment in a variety of ways, including the rise of sea level. With increasing global temperatures, glaciers

and ice sheets worldwide are melting, adding more freshwater to oceans. While this increases sea levels, this also interrupts the delicate balance of fresh and saltwater in the ocean. The melting of glaciers and ice sheets additionally decreases the natural habits of many creatures in the Arctic and Antarctic.<sup>12</sup> Climate change contributes to droughts and heat waves. With warmer global surface temperatures, evaporation rates increase, which reduces the amount of surface water available for vegetation and soils. This also leaves the environment vulnerable to wildfires.13 The world is more prone to experience extreme weather events due to climate change. Higher surface temperatures over water can increase the severity of storms, including hurricanes and tropical storms.<sup>14</sup>



'The Earth is like each and every human being: it can only take so much abuse, and neglect, before it expires'

There is a variety of compelling evidence to prove the existence of climate change. Reputable members of the scientific community have released data proving that there are anthropogenic forces driving this climate crisis. Scientists from NASA

have taken data and information from ice cores, tree rings, rocks, and more. Modern instruments such as satellites are also used to obtain data. Since the late 19th century, Earth's surface temperature has risen about 1 degree Celsius, or 2 degrees Farenheit. 2020 and 2016 are tied for the warmest years on record. Since 1969, the ocean has warmed 0.33 degrees Celsius, or 0.67 degrees Fahrenheit, because the ocean absorbs much of the increased heat. Greenland has lost approximately 279 billion tons of ice per year between the years of 1993 and 2019, as seen by data collected from NASA's Gravity Recovery and Climate Experiment Show. In the past one hundred years, sea levels have risen an average of 8 inches, and ocean acidity of surface water has increased by 30% since the 1800s.<sup>15</sup> NOAA has released more information adding to the existing evidence of climate change. Animals are an indicator of climate change, as multiple species of birds are migrating earlier in the year and marine species, such as lobsters, are moving north. In the Northern Hemisphere, snow coverage is declining. Approximately 8% of Earth's fresh is held in Greenland's ice sheets, which are rapidly melting.<sup>16</sup>

In the past 150 years, atmospheric carbon dioxide levels have risen from 280 parts per million, or ppm, to 414 ppm.<sup>17</sup> However, how do we know humans are causing climate change? In March of 2023, a Synthesis Report was published by The

Intergovernmental Panel on Climate Change, which is a United Nations organization. This 2023 Synthesis Report noted various human activities that are known to release tremendous amounts of Greenhouse Gases, including carbon dioxide, into the atmosphere. Anthropogenic carbon dioxide emissions increased during the Industrial Revolution with the usage of nonrenewable resources. When coal and oil are burned, large amounts of carbon dioxide are released into the atmosphere. Furthermore, the Synthesis Report described how Greenhouse Gases are released into the atmosphere from sectors, including energy, industry, transportation, and buildings. Households are also known to contribute to carbon dioxide emissions.<sup>18</sup> Deforestation, which is the clearing of a wide area of trees, is another anthropogenic cause of climate change; forests are large carbon sinks, meaning they absorb carbon dioxide. This means that less carbon dioxide is stored in sinks, and more sits in the atmosphere.<sup>19</sup>

The Climate Crisis is a major issue that needs to be addressed, because climate change is having tremendously negative impacts on the environment, the ecosystem, and human health. The rise of global surface temperatures due to an increase in greenhouse gas concentration lead to higher daily temperatures in all regions. This makes humans more prone to

to heat-related illnesses, and outdoor jobs will be more difficult to complete. A rise in temperature can lead to more extreme and destructive weather patterns. With an increase in temperature, there is an increase in evaporation rates, leading to intense flooding and rain. The frequency and intensity of hurricanes, tropical storms, cyclones, and typhoons increase, as they are driven by warm surface seawater. These storms are ruinous, destroying households, ecosystems, and communities. This leads to major death rates and economic loss. An increase in surface temperature will lead to droughts, increasing the risk of agricultural loss. Coastal communities are threatened by rising sea levels, and increased ocean acidification endangers marine life and ecosystems.20

As a global community, we must act soon. The incoming Climate Crisis is not something that can be averted. The overwhelming amount of anthropogenically produced greenhouse gases are detrimental to not only our environment, but to future generation's health and wellbeing. Luckily, there are many climate change mitigation technologies that can be implemented in order to reduce the impact of increased carbon dioxide emissions. These strategies will help humanity combat the climate crisis, and establish a safer world for future generations.



Protesting for climate change in Washington, D.C.

#### *Current Situation*

Climate change mitigation officially began between 1994 and 1995 with the UN Framework Convention on Climate Change, or the UNFCCC. The most influential climate change action taken thus far began with the Kyoto Protocol in Japan in December of 1997. There are various different forms of climate change mitigation strategies. Climate change mitigation technology can be used to decrease the amount of anthropogenic greenhouse gas emissions worldwide. There is also climate change action taken to resist adverse impacts of climate change. Lastly, there are soft climate change actions used to train communities to use energy-efficient practices.<sup>21</sup>

Renewable energies are a fundamental way that countries can reduce greenhouse gas emissions. This includes wind energy,

hydropower, solar power, geothermal energy, bioenergy, and ocean energy. Solar power is one of the most abundant forms of renewable energy, and it is when solar energy or sunlight is converted into electrical energy. This electrical energy can be harnessed to deliver cooling, heating, fuel and more. Wind energy is typically harnessed using large wind turbines to collect kinetic energy to convert to electricity. Using renewable energy is a very effective way to combat climate change because renewable energies do not release greenhouse gas into the atmosphere like nonrenewable energies do.<sup>22</sup>



Natural Resources with Renewable Energy

Humanity must also find ways to adapt to the adverse effects of climate change, and these strategies are another form of climate change mitigation. Planting drought resistant crops can allow for anthropogenic agriculture needs to be met in lue of increasing droughts and temperatures. Early warning systems and sea walls can help prepare communities for inclement weather anomalies caused by the shifting climate. Solar panels, LED light bulbs, and lithium-ion batteries are climate mitigation equipment that can be used by the general public. Additionally, soft climate change actions can be used by governments to teach local communities of ways to use climate mitigation strategies themselves.

Unfortunately, the facilitation and use of these climate change mitigation strategies can not be put into effect without facing some tremendous obstacles. There are three main barriers that we must face in order to put climate change mitigation into effect. This includes the economical impact of the reduction of areenhouse gas emission, climate change denial, and the political side of climate change mitigation strategies.<sup>23</sup> According to a 2024 study done by the University of Michigan, 15% of Americans deny that climate change is real. Climate change denial has significantly decreased over the past few decades, so it is not as much of a threat as the economic and political aspects.<sup>24</sup> Global Giving estimates that it will cost anywhere from \$300 billion to \$50 trillion over the next two decades to aid in ending climate change. Global leaders need to take political action in order to receive the necessary funding for proper climate change mitigation actions.<sup>25</sup> A large amount of funding is needed to aid in climate change mitigation, and although the United Nations has passed certain policies, states need to pass legislative policies on national, regional,

and local level. There are many countries that are already helping to stop climate change.

In 2015, 194 countries along with the European Union signed the Paris Agreement. The Paris Agreement's intention is to abade the threat of climate change through an increased global response, specifically with the goal of keeping the global rising temperature "well below 2 degrees celsius." Countries have publicized their commitment to the Paris Agreement, and while this may keep them accountable, countries must pass legislation and policies in order to help reach this goal.<sup>26</sup>

The United Kingdom is an example of a country who has written legislation to aid in the climate crisis. In 2019, the United Kingdom passed a law with a domestic requirement to reach net zero greenhouse gas emissions by 2050. The UK is transforming their financial system in order to boost

Unfortunately, the facilitation and use of these climate change mitigation strategies can not be put into effect without facing some tremendous obstacles. There are three main barriers that we must face in order to put climate change mitigation into effect. This includes the economical impact of the reduction of greenhouse gas emission, climate change denial, and the

political side of climate change mitigation strategies.<sup>23</sup> According to a 2024 study done by the University of Michigan, 15% of Americans deny that climate change is real. Climate change denial has significantly decreased over the past few decades, so it is not as much of a threat as the economic and political aspects.<sup>24</sup> Global Giving estimates that it will cost anywhere from \$300 billion to \$50 trillion over the next two decades to aid in ending climate change. Global leaders need to take political action in order to receive the necessary funding for proper climate change mitigation actions.<sup>25</sup> A large amount of funding is needed to aid in climate change mitigation, and although the United Nations has passed certain policies, states need to pass legislative policies on national, regional, and local level. There are many countries that are already helping to stop climate change.

In 2015, 194 countries along with the European Union signed the Paris The Paris Agreement's Agreement. intention is to abade the threat of climate change through an increased global response, specifically with the goal of keeping the global rising temperature "well below 2 degrees celsius." Countries have publicized their commitment to the Paris Agreement, and while this may keep them accountable, countries must pass legislation and policies in order to help reach this goal.<sup>26</sup>

The United Kingdom is an example of a country who has written legislation to aid in the climate crisis. In 2019, the United Kingdom passed a law with a domestic requirement to reach net zero greenhouse gas emissions by 2050. The UK is transforming their financial system in order to boost businesses and lead high carbon emitting sectors towards clean growth alternatives. In 2008, the UK passed the Climate Change Act, and became the first country worldwide to establish legallybinding national policies to decrease greenhouse gas emissions. The Climate Change Act's goal was to decrease the country's greenhouse emissions by 80% by 2050. The United Kingdom's actions have been working thus far. According to Greenpeace, the UK's 2020 usage of coal had gone down to almost nothing, whereas a decade earlier, the UK got 40% of their electricity from coal. While this is a great start, the United Kingdom still has much work to do over the following years in terms of implementing additional climate change mitigation techniques.<sup>27</sup>

Norway is another country working towards the end of climate change. For instance, Norway has worked with the World Bank to introduce climate change mitigation legislation. In 2015, the World Bank launched their Zero Routine Flaring Initiative by 2030; Routine Flaring is when gas is routinely flared, emitting carbon dioxide into the atmosphere. Norway has

financially supported and endorsed the World Bank's effort for Zero Routine Flaring by 2030. Routine Flaring, alongside gas flaring, has been prohibited in Norway.<sup>28</sup> Norway passed the Climate Act in 2017, which is helping to transform the country by reducing greenhouse emissions 40% by 2030 and into a low-emission society by 2050. The country has prohibited the sale of older wood burning stoves, and only more modern, clean-burning wood stoves are sold. Oslo, the capital city of Norway, has the highest concentration of electric cars worldwide. Agriculturally, Norway is working to fund research to reduce the production of methane emissions coming from soil and enteric sources.<sup>29</sup>

Some climate change mitigation techniques are already in place around the world. Drought-resistant crops are a staple that farmers have used in drought-prone regions. Bassari farmers in Southeastern Senegal have been historically known to grow and consume a wide variation of drought-resistant crops that can do well in poor soil and provide plenty of nutrients. These crops include fonio, sorghum, and Bambara groundnut.<sup>30</sup> Senegal is extremely vulnerable when it comes to climate change, so Senegal has decided to implement climate change mitigation and adaptation strategies in response to the Paris Agreement. The Senegalese government has three main objectives to combat climate change: "reducing CO2

emissions by up to 29.5 percent, increasing the share of renewable energy in the electricity mix to 40.7 percent by 2035, mobilizing \$8.7 billion and \$4.3 billion to fund mitigation and adaptation efforts, respectively, and reducing deforestation by 25 percent from 40,000 hectare/year to 30,000 hectare/year.<sup>31</sup>

South Africa is already facing the dangerous effects of climate change. South Africa's "national average temperature has increased twice as fast as global temperatures." They have been hit by more extreme weather events in recent years, including droughts and heat waves resulting in water scarcity all over the country. South Africa has a goal of reaching target mitigation by 2025 and 2030. The country has identified critical sectors that need mitigation strategies implemented, such as agriculture, forestry, energy, waste, industrial processes, and more. The U.S.'s Agency for International Development, or USAID, has begun to support South Africa in their journey towards implementing climate change mitigation techniques. USAID has helped South Africa begin to reduce greenhouse gas emissions in accordance with the Paris Agreement, as well as decreasing the amount of fossil fuels used in the power sector down to 42 percent. 32

Vietnam is home to almost 100 million people, all of which are vulnerable to

the devastating effects of climate change. Vietnam has seen deadly typhoons, droughts, floods, landslides, and more, and these events are steadily increasing. The country's target is to reach net zero carbon emissions by 2050, as stated at the 2021 United Nations Climate Change Conference. Solar energy production has exponentially increased for Vietnam, going from less than 10 megawatts in 2017 to over 16,500 megawatts in 2020. USAID is additionally Vietnam, supporting especially with providing support for when the country is struck by natural disasters. Approximately \$80 million has been provided or is in planning for climate change adaptation.<sup>33</sup>

Hundreds of countries worldwide have pledged to help aid in the incurring climate crisis. While these countries have begun to put legislation in place, we must keep pushing forward. In order to truly aid in this climate crisis, we must begin a worldwide effort. Delegates are encouraged to research further climate change mitigation initiatives concerning their specific nation. This will allow for a more specific approach per nation to the plight at hand, with a more thorough breakdown of the measures being taken.<sup>34</sup>

#### **Directives**

As delegates of the United Nations Environmental Programme, it is crucial to find innovative ways to approach the aforementioned issues regarding climate change mitigation. Below are guiding questions to aid you in your discussion around creating policies and resolutions involving these topics:

- What measures has your nation already taken towards climate change mitigation?
- What position does your country have on climate change mitigation?
- How would climate change mitigation techniques impact national, regional, and local communities in your nations?
- How will you deal with economic setbacks that hinder the implementation of climate change mitigation? What are some ways to address these issues in a cost-effective manner?

- What kind of methods can you use to promote climate change mitigation on a national, and international level? Are there certain methods that already exist to hold countries accountable in regards to implementing long-term climate change mitigation techniques?
- How can countries strengthen their legal framework to effectively implement longterm, cost-effective climate change mitigation techniques? What methods can be taken to enhance the enforcement of these methods?

## TOPIC 2 Formulating and promoting policies to ensure sustainable agriculture.

## Key Terms and Acronyms

Sustainable Development Goals (SDG)	17 goals that were adopted in 2015 by the UN defining how we can promote sustainable farming and agriculture globally <sup>35</sup> They help by form- ing a set list of regulations and goals to slow climate change and to help reduce the effects that agriculture has on the planet <sup>35</sup>
Agroecology	General term used for the practice of applying the study of ecology (how plants grow and their requirements) to agriculture in order to develop better farming techniques that optimize plant growth and development and to reduce the use of resources <sup>36</sup>
Biodiversity	<i>The variety of flora and fauna present within a habitat forming part of a larger ecosystem.</i>
Crop rotation	The practice of growing a different group or type of crops in the same location across a set of growing seasons in order to improve soil health, optimize nutrients in the soil, and combat pest and weed pressure.
Conservation tillage	A farming practice that reduces soil erosion, soil disturbance and maintains plant residues on the surface of the soil. Therefore making tillage more sustainable. Some examples include but are not limited to; mulch till, ridge till, and strip till. It is commonly used in combination with crop rotations, cover cropping, composting, and other soil erosion control practices.
Organic farming	<i>A farming process which uses organic compost such as but not limited to; green manure, compost manure and bone meal. Some synonyms include, ecological, biological farming.</i>
Integrated pest management	An environmentally friendly method of pest control that involves multiple pest management practices with the goal of reducing the use of chemical pesticides in order to improve human and environmental health.
Agroforestry	An agricultural practice that incorporates the planting of and usage of trees into farming systems. In order to improve crop production, mitigate environmental impact and improve economic factors.

### Introduction

Food is one of the most important parts of human life, with it having the ability to bring people together, sustain generations, and, of course, sustain life itself. However, the practice of producing food is something that has become a growing issue through the last century. This has fueled sustainable agriculture as a topic that has been gaining traction within the last few decades. With increasingly alarming effects felt globally as a result of climate change, it is no surprise that sustainable agriculture is one of the main methods world leaders are looking to use to help curb the effects of it. Sustainable agriculture is a farming approach that produces food, fiber, and other plant and animal products in a way that preserves the environment, promotes economic profitability, and social equity. It focuses on methods that support the natural ecosystem and biodiversity, reduce the use of non-renewable resources, and maintain soil fertility and water quality. Key practices include crop rotation, conservation tillage, organic farming, integrated pest management, and agroforestry.<sup>37</sup>

The concept of sustainable agriculture has roots in traditional farming practices that were inherently sustainable. However, the modern movement began to take shape in the mid-20th century in response to the negative impacts of industrial agriculture,

which took place after World War II and was in response to there being too many farmers with not enough land <sup>38</sup> As a result, farming was shifted towards a larger-scale approach, rather than having several smaller farming families that lived off the land. After realizing that such an industrialized approach was not as efficient as previously thought, since there was a hefty cost associated with maintaining large scale farms and the health risks posed by widespread pesticide use, more sustainable practices were looked into. Despite this, it wasn't until the turn of the century that there has been substantial interest in sustainable agriculture.<sup>38</sup>

#### *Current Situation*

Currently, sustainable agriculture is gaining significant traction worldwide as a crucial strategy to address the challenges posed by climate change, population growth, and environmental degradation. Many countries are adopting sustainable practices to ensure long-term food security and reduce greenhouse gas emissions. Governments, international organizations, and nonprofits are actively promoting policies and initiatives that support sustainable farming techniques, such as organic agriculture, agroecology, and permaculture. However,

the adoption of sustainable agriculture varies widely across regions, often influenced by economic, social, and political factors. While certain nations have made significant strides, others face challenges such as lack of access to resources, education, and infrastructure. This is reflected within the 2021 food sustainability index (FSI) which ranked Sweden, Japan, Canada, Finland and Austria as the best nations in regards to food sustainability, all of which are developed first world nations. Furthermore, the same index found that only 28 of 78 countries with international climate change commitments are prioritizing sustainable agriculture within them, and of the top 20 nations in regards to sustainable agriculture, 17 have been mainstreaming climate change within their agriculture policies.



Sustainable Farming in Developing Countries

Across Asia, promoting sustainable agriculture presents a complex challenge. While specific policies vary by country, some countries have taken action to start the journey of promoting sustainable agriculture. The Indian government's National Water Mission highlights a crucial concern – water scarcity. This scarcity is likely to worsen due to factors like climate change and population growth, putting immense pressure on India's agricultural sector. The National Water Mission's success in promoting water-efficient irrigation techniques and rainwater harvesting will be critical for sustainable agriculture in India, as it promotes conservation and better delegation of resources.<sup>39</sup>

Vietnam's National Target Program for Development, while New Rural not explicitly focused on sustainability, is also helping improve the overall situation. By improving rural livelihoods through better infrastructure, education, and access to credit, the program could indirectly encourage the adoption of sustainable practices. For instance, improved access to credit could allow farmers to invest in watersaving technologies or organic fertilizers, ultimately promoting long-term agricultural productivity and environmental health.<sup>40</sup> China's grain farming policy exemplifies the complex balance that must be maintained between producing resources needed by humanity and saving the environment. While promoting sustainable practices is essential for long-term agricultural health, ensuring food security remains a top priority, especially considering China's vast population. This can sometimes lead to

policies that incentivize high yields even if they come at the expense of environmental sustainability, such as subsidies for chemical fertilizers and pesticides.<sup>41</sup>

The European Union is also making strides towards sustainable agriculture through its Farm to Fork Strategy. This ambitious plan aims to reduce reliance on chemical fertilizers, pesticides and promote biodiversity on agricultural land, and improve animal welfare standards. A key target is a 25% reduction in overall chemical pesticide use and a 50% reduction in the use of more hazardous pesticides by 2030. Recognizing the challenges farmers face in transitioning to sustainable practices, the EU offers financial support through the Common Agricultural Policy (CAP). CAP incentivizes environmentally friendly methods by providing financial rewards to farmers who adopt them. Knowledge sharing and innovation are also crucial aspects. The EU actively supports research into sustainable agricultural techniques and promotes the dissemination of best practices among farmers.<sup>42</sup>

25

Additionally, the UK has started to develop Environmental Land Management Schemes (ELMs). ELMs offer financial rewards to farmers who implement practices that benefit the environment, such as creating buffer strips along waterways to reduce pollution, planting trees to enhance biodiversity, and managing grasslands for improved soil health. By combining a comprehensive EU strategy with national programs like ELMs, Europe is fostering a collaborative effort towards a more sustainable agricultural future. This approach offers a promising model for other regions seeking to promote environmentally responsible farming practices.<sup>43</sup>

In the Americas, the vast Amazon rainforest is a critical ecological resource. However, deforestation for agriculture, cattle projects ranching, and infrastructure remains a major concern. The Forest Code, which establishes protected areas within private properties, exists to address this issue. Yet, enforcement remains This continued а significant hurdle. deforestation undermines efforts to promote sustainable land management in the region.<sup>44</sup> In the US, the "US Farm Bill" includes programs that incentivize farmers to adopt sustainable practices. These practices include conservation tillage (minimizing soil disruption) and planting cover crops (improving soil health). While the Farm Bill's focus is broader than just sustainability, it offers significant financial incentives for American agriculture to move in a more sustainable direction. The future success of sustainable agriculture in the Americas will hinge on addressing these challenges and finding a balance between economic development and environmental protection.45



Cattle grazed on deforested Amazon land flatten back

#### **UN Action**

Whilst many nations and groups of nation states have taken action at a regional or national level, the UN has taken a variety of steps in order to support them. Since the adoption of the 2030 Agenda for Sustainable Development, the UN has begun scaling its efforts to work with both governments and individuals in the form of; businesses, academia, and civil society in order to encourage sustainable agricultural policies. However as a part of the 2030 agenda, they are not only focusing on sustainable agriculture but also a variety of items that are linked to it, including but not limited to; rural poverty, loss and waste of food, access to adequate food and ending malnutrition.

Furthermore the UN has created the Food and Agricultural Organization of the United Nations, the FAO works with governments and other NGO partners in order to empower those in marginalized communities in order to put an end to rural poverty. Similarly to the 2030 Agenda for Sustainable Development, a key faucet of this is the promotion of programmes that end hunger, promote food security and sustainable agriculture to those in LDCs. In addition to these programs the FAO also supports innovation in areas such as digital forest management, wood-based textiles and sustainable building materials in order to improve sustainable agriculture. Despite the importance of these programs, the UN faces a large issue with respect to its sustainable agriculture policy. That is the issue of sovereignty. Within all UN policy sovereignty of individual nation

26

states must be respected. Therefore the UN is unable to take forceful action in regards to sustainable agricultural practices, and must rely on commitments, research and supporting different programs and policies. Delegates should keep a respect for national sovereignty in mind during the committee and whilst writing any work papers, and resolutions.

#### **Directives**

27

With an entire planet's food supply on the line, it is urgent that delegates of the United Nations Environment Programme deliberate and create policy that uses sustainable agricultural practices that benefits the world.

- What are some long term solutions for furthering sustainable agriculture?
- How can farming be optimized in terms of physical land utilization?
- What position does your nation have in the global agriculture market? Is it a producer of a certain crop? How has this affected the sustainability of agriculture in your nation?

- What is the environment like in your country and what does that mean in terms of agriculture?
- What would the best possible situation of having sustainable agriculture look like (i.e. what are the most important issues with agriculture and how can those be prioritized)?
- How does your nation support farmers? How does it help alleviate the common issues of farming?
- What measures has your country put in place to promote specific issues like erosion, deforestation, etc.?
- How can the UN complete their sustainable agriculture goals whilst ensuring that the sovereignty of nation states is respected.

GTMUN 2024

28

BACKGROUND GUIDE / UNEP

GTMUN 2024

30

BACKGROUND GUIDE / UNEP

GTMUN 2024



32