

The Diplomatic Envoy

Summer 2021



Planet Unraveled

A Special Edition on Climate Change

From the Editor A Note to the Reader



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Dear Reader.

Thank you very much for taking the time to read The Diplomatic Envoy's 2021 Summer Edition on Climate Change.

The climate crisis represents one of the biggest threats facing humanity today. As we see effects such as increasingly deadly natural disasters and forced migration, the need for a strong international response is becoming clearer than ever. With this first-ever special edition on climate, we aim to bring you in-depth analysis and a variety of global perspectives on the issue. Within this magazine are six stories written by some of our best staff writers that cover different aspects of the crisis.

On behalf of the Editorial Board, we hope you enjoy reading our 2021 Summer Edition. If you'd like to become a part of our team, please scan the QR code on the back cover of this magazine or reach out to anybody on the Editorial Board.

Hazard Zet Forward!

Jarrett Dang *Editor-in-Chief*



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For more information on sources, go to blogs.shu.edu/thediplomaticenvoy

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The effects of climate change pose a threat to the global economy that varies in scale and severity. As drought endangers agricultural production in the Sahel and rising sea levels put the financial centers of East Asia at risk of flooding, different countries have developed strategies to combat climate change while ensuring the economic well-being of their people. However, certain states have adapted towards green economies more effectively than others. States working with global and regional partners to achieve the United Nations Sustainable Development Goals are beginning the difficult task of targeting the root causes of climate change while building thriving economies from green growth.

As one of the regions most affected by climate change, the Sahel, which encompasses the African states of Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mali, Mauritania, Niger, Nigeria, and Senegal, is home to a host of green innovative solutions that are simultaneously building resistance to the effects of rising temperatures while utilizing the region's renewable resources for economic growth. The UN support plan for the Sahel, as shared in the organization's Africa Renewal magazine, seeks to implement a strategy of sustainable development for the region. According to the support plan, regional risks include endemic poverty, inequality, limited access to basic services, a high rate of youth unemployment, and governance challenges, which would contribute to extremism, terrorism, and crime.

The support plan also emphasizes that these risk factors amplify one another, leading to significant challenges to meeting the Sustainable Development Goals such as advancing climate action by establishing and maintaining clean and affordable energy sources. The threat of climate change looms large over the Sahel with the threat of drought causing food insecurity, malnutrition, and internal migration. These risk factors, however, do not overshadow the economic potential and

progress already undertaken in these countries. The past decade has already shown that the macroeconomic conditions of the Sahel have surpassed the continental average. The region is home to an abundance of natural resources, including some of the largest aquifers on the continent, putting the region in a position to combat scarcity while striving for sustainable growth.

To combat climate change, the UN support plan includes several priorities. Priority five-promoting access to renewable energy- seeks to "increase on-grid and off-grid solutions to ensure access to affordable, clean and reliable energy services that can sustain economic growth as well as basic services." This involves promoting private investment in the region, developing small-scale enterprises, and increasing food productivity. Private investment is an untapped resource for the nations of the Sahel even with vast opportunities in terms of agriculture and renewable energy.

In Nigeria, where the effects of climate change are being compounded by the economic devastation brought upon by COVID-19, steps are already being taken to move towards the support plan. According to the World Resources Institute, Nigeria has implemented a \$5.9 billion Economic

Without full support from all member countries, it will be impossible for the EU to reach its 2050 goals.

Sustainability Plan that emphasizes the need to diversify the country's economy away from oil, which currently makes up 80 percent of its exports and 50 percent of government revenue. The Nigerian oil sector faltered in 2020, reinforcing the country's need to diversify its economy by investing in sustainable agriculture and renewable energy.

Often seen as the forefront of the fight against climate change, the European Union has taken the lead in green growth and combines the goals of net-zero carbon emissions with sustainable economic development. The European Green Deal set forth by the European Commission aims to transform the EU into a competitive green economy decoupled from resource use with no net emissions of greenhouse gases by 2050. Reaching the 2050 goal requires several policy changes in both the public and private sectors such as the decarbonization of the energy sector and the implementation of cleaner forms of transportation. The Commission predicts that a full transformation of the industrial sector will take approximately 25 years and require the full mobilization of constituent states' energy industries, as well as the decarbonization of the steel, chemicals, and cement industries.

There are a few challenges present in achieving this goal, such as the economic hardship brought on by the COVID-19 pandemic and resistance from member countries. Critics of the European COVID-19 recovery act, also known as NextGeneration Europe, claim the 18.9 billion euros of funds allocated towards fighting climate change in the recovery deal is simply not enough. Reuters reports that nearly 550 billion euros could be invested in the Multiannual Financial Framework 2021-2027 to fight climate change - however, this amount would still fall well short of the 2.4 trillion euros needed to meet current EU climate goals. According to Politico, Poland, among other countries, has opted out of the deal completely, citing a dependence on fossil fuels like coal. Without full support from all member countries, it will be impossible for the EU to reach its 2050 goals. It is imperative that each member state prioritizes shifting away from carbon resources and instead work towards building green economies built on sustainable growth.

While the goals set by the European Green Deal provide a good foundation for sustainable development in Europe, it is unclear whether

these policy changes point towards a shift in European voters' priorities. In Germany, the Green Party has seen unprecedented support in recent polls following its choice to run Annalena Baerbock for chancellor, according to Reuters. A successful Green bid for the German chancellery could signal a dramatic shift in priority for green economic policy within Germany. As noted by Deutsche Welle, this is due to the party's more ambitious climate proposals, including a 70 percent reduction in greenhouse gases by 2030 compared to the current government's 50 percent, as well as a rapid rollout of renewable products like electric cars. While incumbent chancellor Angela Merkel's CDU party and its sister CSU party will retain their parliamentary majority, the Greens' performance in the September election could position it to form a coalition government with the CDU/CSU. Regardless, the sudden, albeit brief, surge in the polls for the Green party signals environmental policy as a priority among German voters, a trend that could spread in other EU countries.

While they do not contribute to carbon emissions as much as other regions, Latin American and Caribbean (LAC) countries must still combat the effects of climate change.

The main effects of climate change on the LAC region include drought and other extreme climate shifts that cause mass displacement. The World Bank explains that natural disasters push 150,000 to 2 million individuals on average into extreme poverty. The emergence of climate refugees has led to food and worker shortages in the region as people are forced to relocate from their homes. This situation has been exacerbated by COVID-19 and wealth inequality in these regions will continue to expand into 2030 unless action is taken.

The World Bank recommends that LAC region states undergo long-term economic development strategies that aim to reduce local emissions and protect against the effects of climate change. With technical support and investment, focusing on fields such as clean energy and green transport could spur green growth. Mitigation strategies in agriculture, forestry, and urban development could also work to alleviate the impact of climate disasters.

Among LAC nations, Chile is a regional leader in implementing sustainable development strategies into national policy. According to its Nationally Determined Contribution report, "by 2025, a national indicator for hydrological watersheds will be established to track water shortages and risk, helping to promote water security nationwide." This is only one adaptation policy among Chile's expansive climate strategy that targets all sectors of its industry and addresses other

policy areas such as women's equality. Directly incorporating the United Nations Sustainable Development Goals into its national policy has set the country up to respond to any incoming challenges and achieve green growth.

On the other side of the hemisphere, North American countries, especially the United States, have failed thus far in transitioning towards a green economy.

The effects of climate change on the North American continent are as varied as the geography and have disproportionately affected marginalized communities. According to the proceedings of the National Academy of Sciences, one consistent climate impact across North America, though disproportionately affecting American Southwest, is aridification, roughly defined as an extreme form of dryness that has a tremendous effect on ecosystems. This means the continent will face further droughts, flash floods, and intense wildfires, as well as longer and drier summers.

Among North American states, the United States is by far the largest global emitter. Due to shale gas collection, the U.S. became energy independent for the first time since 1957. However, as the European Geosciences Union states, the emergence of shale has drastically increased global methane emissions. This has removed the incentive for the United States to begin a large-scale transition away from fossil fuels, and without a national strategy for dealing with climate change emissions, the U.S. is not likely to begin decreasing fossil fuel use and related emissions anytime soon.

The Biden administration promised to make climate change a priority, a promise that included rejoining the Paris Climate Agreement and committing to reducing greenhouse gas pollution by 50-52 percent from 2005 levels by 2030 according to a White House Press Briefing. However, the U.S. is unlikely to meet this target. According to PubMed Central, the United States is currently decreasing emissions at an



The EU is one body working to transition to clean energy and transform the industrial sector. Courtesy of BEUC (Flickr)

average rate of 1 percent per year but needs to be reducing emissions at an average rate of 1.8 percent per year to avoid a 35 degree Fahrenheit rise in global temperatures by 2100. The Biden administration has started promoting jobs in green industries, but the administration will need to move faster if it wishes to meet its targets.

A drastic rise in global temperatures poses a distinct threat to East Asia, where the fishing industry and coastal cities are at risk due to climate change and rising ocean temperatures.

According to the Asian Development Bank, climate change will result in a much warmer and wetter East Asia. This directly impacts water resources in the region and could fuel future natural disasters due to increased annual precipitation, greater seasonal variation, and more extreme weather events increasing the severity and frequency of annual floods. This, in turn, impacts other areas such as agriculture and biodiversity, which will be severely harmed by climate change. More preemptive measures must be taken to protect against flooding, especially in high-risk regions.

The greatest impact of climate

change in East Asia will be the rising sea level, which directly affects densely populated coastal cities in China and Japan. The Asia Development Bank report states, "Three cities in East Asia – Guangzhou and Shanghai in the PRC and Osaka/Kobe in Japan – are in the top 10 in the world in terms of current exposed population. In terms of value of assets exposed, three Japanese cit-

The greatest impact of climate change in East Asia will be the rising sea level.

ies are in the top 10..." These centers of global trade will suffer immensely if sea levels rise due to a slowdown in shipping and potential impacts on city energy grids as a result of flooding.

Just as North America's economy centers around the United States, so does East Asia's economy around the People's Republic of China which, like the United States, has not fully committed to reducing emissions. The Climate Action Tracker reports that China plans on peaking carbon dioxide emissions around 2030, and earlier if possible – if it is serious about combating climate change, China must commit to peaking carbon dioxide emissions closer to 2025. Its fourteenth five-year plan, which has set a carbon neutrality goal of 2060 and focuses on new energy technologies, has taken steps to address increase investment in a green economy.

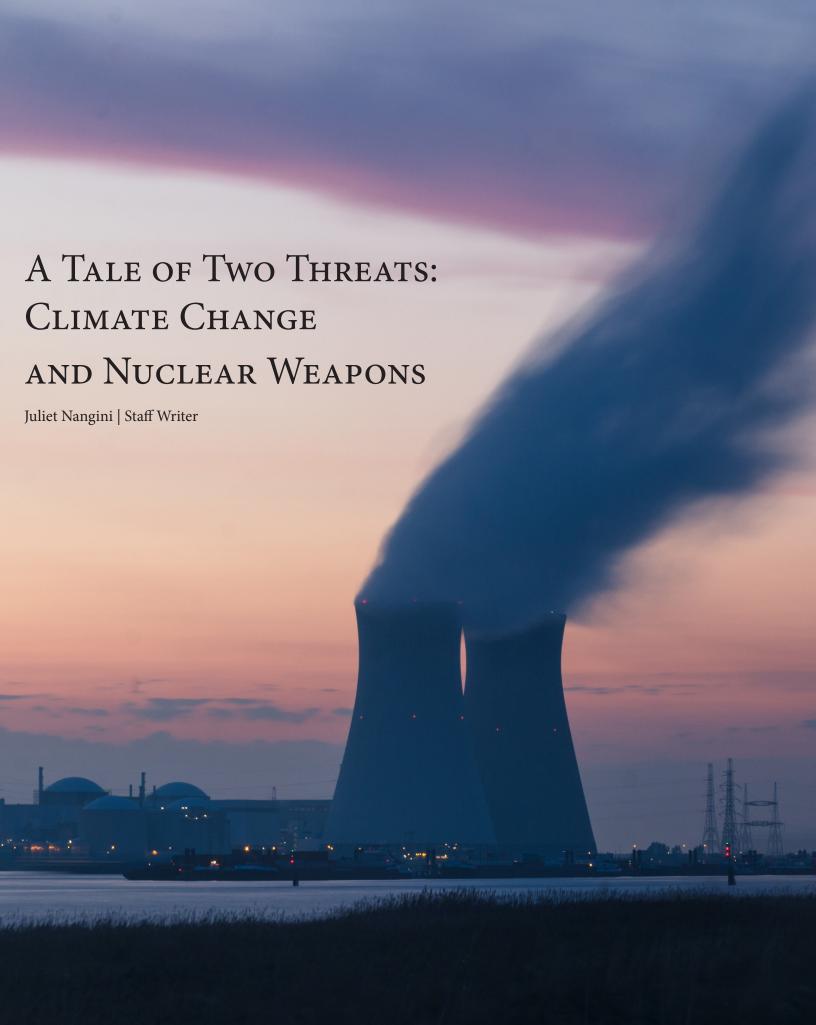
While each region of the globe has dealt with the effects of climate change differently, a few facts are universally clear: climate change threatens to displace hundreds of thousands if not millions of people, and these effects are already being seen in vulnerable regions. Global powers such as the United States and China must increase their commitment to net-zero emissions and cooperate with other states to do so. Economic development and a commitment to reducing carbon emissions along with other sustainable practices are not mutually exclusive and many states have already shown the positive effects of prioritizing a green economy.

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Rising sea levels will greatly impact agriculture and coastal communities as global temperatures rise, especially in China and Japan.

Courtesy of Flickr



Climate change and nuclear weapons, two existential threats to humanity, work to exacerbate each other's detrimental effects. Though the two topics may seem distantly related at first glance, they share many connections. Where climate change is likely to amplify the scarcity of resources, nuclear weapons facilities compound these effects by harming natural resources, increasing the risk of conflict, Accord reports. Moreover, since climate change is a threat multiplier, its negative impacts can lead to the risk of escalation during a conflict between nuclear-armed states. Therefore, acting on each of these issues can mitigate the threat of both.

Food and water security are among the many issues relevant to both climate change and nuclear weapons. Food and water shortages are consequences of climate change that are further multiplied by nuclear waste, which can contaminate food and water sources. While the effects of nuclear weapons add to those of climate change, the reverse is visible, too. Climate change-driven extreme weather events, varying from floods to wildfires, are already risking damage to nuclear weapons sites. Matt Korda, a research associate for the Nuclear Information Project at the Federation of American Scientists, warns of the danger. He informs that "nuclear warheads and their delivery systems are relatively delicate: stored warheads need to be cooled, missile silos need to be kept clean and dry, runways can't be underwater, and shipyards can't be flooded," according to Forbes. A report from the Department of Defense in 2019 highlighted over 70 military facilities, with seven that store up to 6,000 nuclear warheads, that are threatened by climate disasters, Forbes adds.

Evidence of a connection between nuclear sites and climate change can be seen in the case of the Camp Century military base. In the late 1950s to 1960s, the U.S. established Camp Century in Thule, Greenland. Though it supposedly conducted military research, the base was set up for Project Iceworm, a program launched to build a tunnel system of nuclear-armed "Iceman" medium-range ballistic missiles with an easy route to the Soviet Union, according to TIME. According to a case study conducted by Dr. Jeff D. Colgan, an associate professor of Political Science and International and Public Affairs at Brown University, the missiles would have been in constant movement in the underground railway

...the effects of climate change can lead to increased tensions between nuclear-armed states.

tracks within the tunnels. This would have rendered it difficult for the Soviets to identify their location and optimize second-strike capability for the U.S. However, Project Iceworm quickly shut down before it became operational, partly due to the slow but present movement of the Greenland Ice Sheet. This ice movement, which was faster than expected, would have shifted the tunnels and ceilings of the facility, disrupting operations.

Today, more than half a century after the project shut down, climate change is not only unearthing the secret military operation of the Cold War era, but also the toxic waste stored at the site. Dr. Colgan's case study revealed the release of toxic polychlorinated biphenyls (PCBs) as the primary environmental concern along with low-radioactive waste in the region. These pollutants can remobilize, accumulate in marine ecosystems, and rise along the food chain. This issue is also present in similar nuclear sites such as those in the Ulithi atoll in Micronesia where rising sea levels are driven by climate change is increasing the threat of radioactive waste reaching the ocean, Dr. Colgan's case study adds.

The effects of climate change include melting glaciers, rising sea levels, increased frequency of natural disasters, more droughts and floods, and changes in variations in precipitation patterns, according to NASA. As a threat multiplier, the effects of climate change can lead to increased tensions between nuclear-armed states. One vivid example of this is the conflict is between India and Pakistan over Kashmir, where factors such as the increasing demand for water come into play. India and Pakistan have around 150 and 160 nuclear warheads, respectively, according to Arms Control Association (ACA). In the past, the two countries have engaged in conflicts that neared the use of nuclear weapons. This includes the conflict in 2001 where Pakistan considered a preemptive nuclear attack and the Kargil War of 1999 where former Pakistan Foreign Secretary Shamshad Ahmad claimed that his country was ready to use "any weapon," Outrider Foundation says. This was followed by reports that the country had notified its nuclear forces of possible deployment, according to BBC.

Gaining control of Kashmir also extends to the water flowing between India and Pakistan. This has generated tensions between the two countries because they share several major rivers under the Indus Water Treaty of 1960. According to UNICEF, "Climate change is disrupting weather patterns, leading to extreme weather events, unpredictable water availability, exacerbating water scarcity and contaminating water supplies." Coupled with the two countries' overuse of water and growing populations, water scarcity and water stress - the inability to meet the water demand - are fueling these existing tensions. With more global issues coming into play, particularly the effects of climate change, the risk of escalation remains present between the two nuclear-powered states.

If such a nuclear war does occur between the two states, the resulting nuclear winter would lead to the negative consequences of climate change, such as the disruption of agriculture. A re-

search study published on Advancing Earth and Space Science uses two atmospheric models to demonstrate how a hypothetical nuclear exchange between India and Pakistan using a 15-kiloton weapon can affect the climate. The findings show that the detonation can set off fires, resulting in smoke that could hinder sunlight. Factors including the weapon's yield and where the smoke remains could even alter the global climate. If it remains in the upper troposphere, it could move to the stratosphere and potentially destroy stratosphere ozone, resulting in more ultraviolet radiation exposure and a cooler Earth's surface.

This leads to another important idea common to both climate change and nuclear weapons: they transcend borders and create an impact from any corner of the world. Even if a person or nation has not contributed to either issue, they can still be affected as the effects do not discriminate. Nine countries around the world possess nuclear weapons, with a combined total of almost 13,500 warheads. More than 90 percent are owned by Russia and the U.S., says the ACA. Yet, the effects of a nuclear detonation would impact many more countries than just those nine. Dr. Paul N. Edwards, a fellow in International Security at the Center for International Security and Cooperation, tells Stanford University's Freeman Spogli Institute for International Studies, "medium- and large-scale nuclear conflicts would have severe, and global, climatic effects. Most on all neutral nations and non-combatants would be damaged and would suffer casualties."

Also common to climate change and nuclear weapons is the fact that they cause disproportionate harm to indigenous groups and communities of color. Such communities face more harmful environmental threats, such as pollution and health concerns including asthma despite inadequate access to resources. The disproportionate effects of climate change can also be seen through the greater fre-

...over 50 million gallons of chemically unstable and radio-active contaminated wastewater are stored underground.

quency of natural disasters due to aid distribution and weak infrastructure. The global rise in temperatures has contributed to more intense storms due to more rain and faster wind speeds, according to the Princeton Student Climate Initiative (PSCI). PSCI also highlights how low-income and minority communities are at risk of experiencing additional effects of natural disasters such as chemical spills due to living closer to toxic waste-producing facilities. Supporting this, a study found that "60 percent of African Americans in Baltimore live within one mile of a Toxic Release Industry, and 70 percent of African Americans live within two to four miles of one," PSCI reports.

In a similar vein, the disproportionate effects of the nuclear industrial complex on minorities are evident. One 2016 report conducted by the Centers for Disease Control and Prevention found uranium in the urine of babies born to Navajo parents, The World reports. Additionally, a study published by the National Center for Biotechnology Information says, "the weapons complex also occupies (and contaminates) 36,000 square miles of the U.S., much of its federal sites on public

lands in proximity to Indian reservations and other population centers." This is evident in many nuclear weapons sites, such as the decommissioned Hanford Site initially established as a part of the Manhattan Project for plutonium production. At this site, located on the Columbia River in Washington State, over 50 million gallons of chemically unstable and radioactive contaminated wastewater are stored underground. Over a million gallons have penetrated the Columbia River, the NCBI study reports. This poses a threat to the many tribes like the Nez Perce Tribe that fish in this area, as the harmful contaminants reach humans through fish consumption, resulting in health concerns.

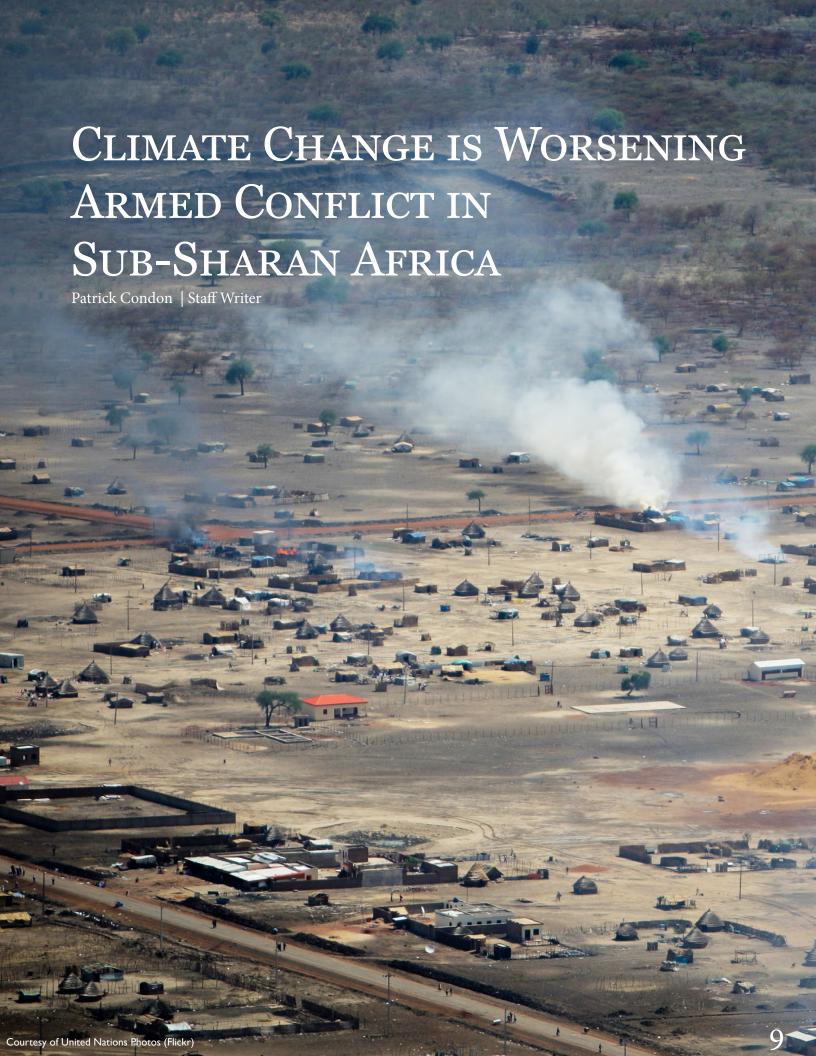
The Seventh Generation Principle is an indigenous value is based on the idea that today's decisions will impact the next seven generations, according to Woodbine Ecology Center. It is commonly associated with the idea of sustainability and reinforces the importance of considering how our actions impact the future. This reveals one other commonality between climate change and nuclear weapons: the action we take on these tied issues today will impact the coming generations. Therefore, it is vital to address the consequences of climate change and nuclear weapons to protect both the present and the future of the world.

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Issues of climate change can escalate conventional conflict, as seen in the Kashmir region between India and Pakistan.

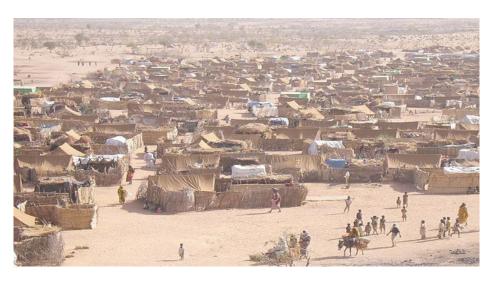
Courtesy of Wikimedia Commons



Climate change has become one of the gravest threats to world peace and endangers communities in nearly every corner of the world. However, while global temperatures are changing, armed conflicts simultaneously pose a more immediate, tangible threat. These two issues are frequently portrayed in dialogue as unrelated, yet there is a close relationship between climate change and armed conflicts, especially in sub-Saharan Africa where insecurity threatens millions of lives. Through rapid desertification and environmental degradation, sub-Saharan Africa now finds itself stuck in the crossroads of climate change and regional insecurity.

Climate change is a threat multiplier which, according to the Hague Institute for Global Justice, is characterized by its ability to "[exacerbate] existing socioeconomic stress factors in societies with high exposure, high levels of poverty, and little institutional capacity to mitigate or adapt to climate change." As such, conflict is rife in the continent's Sahel region, one of the driest and hottest places in the world that cuts through states with some of the world's lowest levels of human development like Sudan and Nigeria, according to the United Nations Development Programme. The lack of reliable clean food and water, coupled with governmental institutional instability, has compromised the population's ability to achieve peace and security. Armed conflicts in sub-Saharan Africa have resulted in approximately 142,000 deaths and millions of people displaced in the past 8 years, as noted by the Stockholm International Peace Research Institute.

Sudan is located in sub-Saharan Africa and is made up largely of desert in the north with grassland plateaus and grazing land near the Sahel in the south. It receives an average of 25 centimeters of rainfall per year, falling almost entirely in the southern half, according to World Bank data. As reported by the FAO, Sudan's agricultural industry historically comprised 33%



A continually drying Lake Chad Basin has affected human migration, security, and conflict in Darfur.

Courtesy of Wikimedia Commons

of GDP until climate change sparked droughts within the past two decades. As climate change began pushing the Sahel region of the Sahara closer towards the southern plateaus in the 1980s, Action on Armed Violence says, "prolonged periods of drought, intense desertification, and soil erosion persisted, resulting in depleted productivity of land and changes in grazing patterns." This environmental degradation caused immediate insecurity in the short term while creating the environmental and social conditions for one of the worst humanitarian crises of the past century. Sudan's environmental status and characteristics are not unique, however, as another Sahel nation - Nigeria - shares similar environmental and social struggles exacerbated by climate change.

Nigeria is a West African state with a climate is like that of Sudan, varying from a desert steppe climate in the north to tropical rainforests in the south. While the country tends to be more humid than Sudan, this has not spared its northern provinces from serious desertification, particularly around Lake Chad in the northeast. Since 1960, Lake Chad has lost 90% of its surface water to desertification and overuse, per ANS data. As Lake Chad currently provides water for rapidly growing populations in Nigeria, Niger, Chad, and Cameroon, there is increased water insecurity

and reduced crop production due to a 53% reduction in rainy days since the 1970s. These conditions have thrown 7 million people in the region into a state of food insecurity, as identified by UNHCR. The growing threat of desertification spreads insecurity and heightens the risk for conflict in Nigeria's northeast region.

Both Sudan and Nigeria maintain large agricultural industries, characterized by two distinct farming practices. The main agricultural dichotomy in both countries is characterized by

Since 1960, Lake Chad has lost 90% of its surface water to desertification and overuse.

settled farming versus nomadic herding. According to the Belkhir Journal, in Sudan, nomadic Arab pastoralists have been historically restricted from Darfur, the country's westernmost region, where settled African farmers comprised the majority ruling class that established regional governance and agricultural divisions. By comparison, Nigeria lacks explicit governmental divisions of agricultural practices, allowing geography to naturally separate farmers from herdsmen – settled farmers and nomadic Hausa herds-

men divided themselves across the Lake Chad Basin. However, as climate change diminishes natural resources and pastoral land in both Sudan and Nigeria, nomadic herdsmen have been driven into settled farmland, notes TIME. This ecological migration is a prime example of the threat multiplying effect, as climate change is

> Nigeria is a clear case of the multiplying effect of environmentally-driven migration.

now cramming previously separated populations into arable, yet finite land.

As Lake Chad dries up, Nigerian Hausa herdsmen have been forced southward, resulting in territorial conflicts between herdsmen and farmers. According to NPR, in 2018 alone, conflicts between herdsmen and farmers in Nigeria caused over 2,000 casualties, a count that tops all terrorism-related deaths from Boko Haram in that same time frame. Nigeria is a clear case of the multiplying effect of environmentally-driven migration; the situation in Darfur, by contrast, has worsened due to both environmental causes and ethnic tensions. Under colonial rule, African Darfurian farmers were seen as inferior and consequently forced to give up farmland to Arab herdsmen. This power dynamic worsened with the presidency of Omar Al-Bashir, who equipped Arab Hausa nomads with military-grade weapons, leading to widespread violence and further division of horticulturalists, this time along ethnic lines. As conflicts between herdsmen and farmers become more intense - and climate change more severe - regional insecurity is skyrocketing and forcing civilians to flee from their homes.

The conflict in Darfur reached new heights with the establishment of various militias equipped with government-issued weapons to force farmers off their land. This government-supported policy of aggression spawned two rebel movements: the Sudan Liberation Army (SLA) and the Justice and Equality Movement (JEM), per Refworld. However, the state's response to the conflict manifested itself in the formation of the Janjaweed, a horseback militia group accountable for the destruction of over 400 civilian homes, notes Holocaust Memorial Day Trust (HMDT). Since 2003, the conflict between these factions has resulted in approximately 200,000 casualties and 3.57 million displaced, 350,000 of whom have fled to neighboring countries, according to UNHCR. While the government has made efforts to provide security to people in Darfur, it has been largely discriminatory towards settled farmers, who are left at the hands of the Janjaweed militia. The situation in Darfur persists, endangering millions in and around the region and threatening the long-term sustainability of rapidly shrinking farmland.

Although more recent, the origins of the conflict in Nigeria resemble the early causes of the conflict in Darfur. Just as the situation in Darfur was not directly caused by climate change, Boko Haram's activities were also started for ulterior reasons, as noted in Climate Diplomacy Magazine. Boko Haram has been primarily focused on weakening Nigeria's governmental forces to establish a stronghold for radical Islamists in West Africa. The terrorist organization has capitalized on climate-induced water and food insecurity, growing in size and legitimacy via agricultural monopolization. Many former residents of the Lake Chad Basin cannot find reliable food sources outside of Boko Haram-held territory. What was once a historically peaceful division of herders and settled farmers has been erased by intense climate change and opportunistic terrorist organizations, creating the ideal societal instability for recruitment by extremist groups like Boko Haram, as stated by IPS News.

Boko Haram's dominance in the re-

gion poses more than just an immediate threat to security; it has continually prevented the dispersion of governmental and international humanitarian aid. Boko Haram militants are actively seizing land in the Lake Chad Basin, making it unsafe as a source of fish and water. The shrinking of Lake Chad, paired with the militant presence of Boko Haram, has led farmers away from the area and into communities around the Lake Chad Basin that had once been defined by settled farming practices. This situation in northeast Nigeria has also been exacerbated by the subsequent lack of international humanitarian aid to the region. 11 million people in northeast Nigeria currently need humanitarian assistance - aid that is unlikely to arrive soon. UN humanitarian projects are consistently inhibited by the terrorist organization, as "attacks against aid workers in northeast Nigeria greatly impact the ability of organizations to provide life-saving relief to those in desperate need," states the Soufan Center. Along with the government's failure to provide security in the region, increasingly common violence has permanently altered the region's sustainability and environment.

Similar to Nigeria, Darfur has seen tensions peak with the absence of locally accepted government assistance, according to Al Jazeera. The UN peacekeeping forces were initially deployed in 2003 as part of the United Nations African Union Mission (UNAMID) to reduce ethnic violence

...increasingly common violence has permanently altered the region's sustainability and environment.

between the nomads and farmers and open corridors for humanitarian assistance. However, since the mission ended on 31 December 2020, the resulting power vacuum in the region elevated faction leaders among pastoralist and



Boko Haram has seized and destroyed farmland in Nigeria, depriving communities of their security and natural resources.

Courtesy of Roberto Saltori (Wikimedia Commons)

settled farming communities. The UN force's exit came at a critical time, as the conflict currently "puts vulnerable populations at increased risk and requires far more robust action than we have seen so far," writes the Hague Institute. Without the necessary security and humanitarian assistance organized by the Sudanese government, millions will continue to be left without aid in a region falling to rapid desertification. What had once started as an environmental issue in the Sahel has now graduated to genocide and further division between Darfurians.

Both conflicts feature similar contexts of social and agricultural differences between groups. The HMDT notes that much of the discussion of conflict in Darfur is centered around ethnicity, as experts mainly point to former President Omar Al-Bashir's campaign to equip settled farmers with weapons that contributed to what has officially been called a genocide. However, the conflict in Darfur, just as in Nigeria, traces back to environmental degradation from climate change, peaking with a drought that killed 100,000 people between 1983

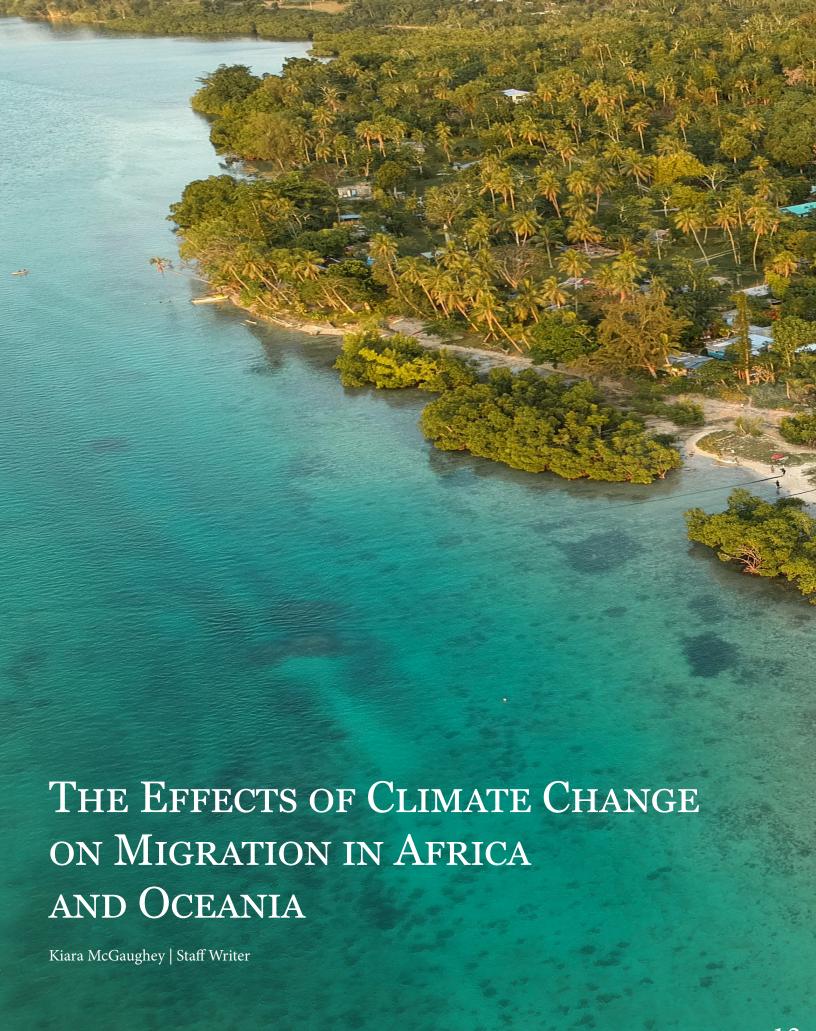
and 1984, says the Belkhir Journal. This degradation then multiplied with a massive ecological migration towards southern Darfur, leaving large parts of Darfur deserted and without humanitarian security. While the region allowed for a brief period of aid from humanitarian agencies, many international organizations have been expelled and numerous domestic agencies suspended. According to The New Humanitarian, this restriction of aid to endangered civilians has caused more than 305,000 refugees to flee into Chad alone. The case of Sudan serves as a warning to Nigerian efforts against Boko Haram, as it reveals the ineffectiveness of government-organized assistance in Sub-Saharan Africa.

Overall, climate change can multiply threats by weakening domestic agencies' ability to provide sustainable relief and security. Primarily, "in a changing climate, the context within which these groups operate changes significantly, creating a context within which [armed] groups can proliferate, grow and rise," states Climate Diplomacy Magazine. Both Sudan and Ni-

...the conflict in Darfur, just as in Nigeria, traces back to environmental degradation.

geria serve as examples to depict the full effect climate change has on weakening institutions and the growth of armed groups. There is a clear relationship between insecurity and conflict in Sudan and Nigeria, as militancy is easily spread across communities seeking water, food, and institutional security. As humanitarian aid and national actors are unable to reach impacted areas due to severe insecurity, militant groups prey on the isolated, fragile populations through short-term insecurity conflicts. The multiplying effect of climate change has marked Darfur and northeast Nigeria among the most insecure regions in the world, permanently altering the environment while expanding armed conflicts.

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Courtesy of Fábio Hanashiro (Unsplash)

In recent years, the effects of climate change have become increasingly evident across the globe, with many regions of the world experiencing an increased frequency and intensity of natural disasters with historic changes in climate patterns. As such, modern climate change has drastically affected the livelihoods and safety of a large part of the world population. According to the Climate Change Vulnerability Index, two of the most at-risk areas to climate changes are Africa and Oceania due to a variety of environmental, historical, and political factors. This vulnerability to climate change has caused a significant increase in migration from these areas, spawned mainly by environmental factors and the increased occurrence and severity of catastrophic natural disasters.

Oceania, as a region of mostly island communities, is one of the most susceptible regions to climate change, particularly rising sea levels. According to scientists, rising sea levels could submerge entire island states underwater in the next 50-100 years, which would leave its inhabitants in a life-threatening need of mass relocation, The Guardian reports. According to Forbes, 8 islands in the region have already become completely engulfed, including some small coral atoll islands in Micronesia and The Solomon Islands. Though these islands were uninhabited, their submergence demonstrates the threat that rising sea levels pose to small island nations, with many at risk of becoming almost completely submerged.

According to the Deutsche Welle, the rise in sea levels in countries such as Micronesia is also causing salt water to contaminate many countries' aquifers, which hold the main sources of drinking water for large amounts of the population. Higher sea levels also increase the frequency and severity of extreme sea-related disasters such as hurricanes, typhoons, tsunamis, and other like events, according to an article in The Annual Review of Anthropology. Coastal areas have already

seen large increases in flooding, which has only grown more severe in recent years due to rising waters, displacing many people and destroying homes.

Climate change has also had a devastating impact on the economies of many countries. According to Climate Analytics, frequent flooding has caused a decrease in tourist travel to island nations, many of which rely on tourism as a main source of income. Rising temperatures and changing acidity levels in oceans have also affected the fishing sector in many states, as the temperature changes have negatively affected swaths ocean wildlife. To further complicate the issue, research shows that ocean levels will likely continue to rise for centuries even after global temperatures stabilize, putting the

...rising sea levels could submerge entire island states underwater in the next 50-100 years.

safety of oceanic island nations at an even more severe and imminent risk,

The vast number of issues caused by climate change in island nations has caused many people and whole communities to migrate from their former homes. Most people displaced by climate-related issues tend to relocate to other parts of their country; however, some are forced to migrate abroad, such as the case of a family applying for refugee status in New Zealand after having to leave Kiribati, an oceanic nation that has been subject to severe sea level rise, Brookings reports. The family argued for refugee status solely due to climate change, making it one of the few such casesd. Though the High Court of New Zealand decided that one could not be considered a refugee based solely on factors of climate change, it shows the degree to which climate change is starting to affect the quality of life

of many citizens of island nations.

However, it is more common for migrants to leave their home countries due imminent climate change or as the result of a climate disaster. As seen in Oceania, these patterns of migration are not linear and often come in sporadic bursts as natural disasters and other major climate events occur and affect the rate of migration, the Annual Review of Anthropology further explains. With an expected increase in the rate of severe climate events, as well as predictions that many island nations may one day be rendered almost completely inhabitable, it is widely believed that there will be a continued increase of migrants displaced by climate change in Oceania.

Africa is another area that has heavily been affected by climate change and climate stressors. Many climate experts and bodies such as the United Nations and the Climate Change Vulnerability Index consider Africa to be the most vulnerable region in the world to climate change. Historical factors like colonialism and current factors such as war, conflict, governmental changes, and politics have caused many African states to become poorly adapted to dealing with exponential changes in climate. Many industries and cultures are very dependent on the globe's current climate systems, such as rainfall patterns and other weather seasons, according to BBC. Because the continent's weather patterns are intertwined with large scale climate systems, researchers are unsure what extreme weather events may occur in the future due to climate change. However, researchers can predict that there will be much less rainfall in the northern and southern regions of the continent by the end of the century, BBC further explains.

In recent years, Africa's monsoon seasons have shifted significantly due to global pollution, creating longer seasons of drought and heavier rains during wet seasons. Some areas in the northern and southern Africa have been hit with severe droughts due to



Climate change is driving mass migration and displacement in Africa. Courtesy of Flickr

this alteration, leading to failed crop seasons that have caused famines and economical harm to states, industries, and individuals. Increasingly severe flooding has started occurring during wet seasons in East Africa, with some of the worst flooding appearing last year in Kenya, Somalia, Uganda, and Rwanda. Over 260 people were killed and many homes and infrastructure were destroyed, leaving hundreds more homeless, according to BBC News.

Coastal states such as South Africa and parts of Israel and Palestine have also experienced salinity issues in water supplies due to increased sea levels, much like what is occurring in island states, Deutsche Welle further explains. Air temperatures are also expected to rise by as much as 1.5 degrees Celsius by the end of the decade in regions in and around Namibia, Botswana, Zambia, and other states where temperatures are already incredibly high, further stressing the area's standard of living, according to the Thomson Reuters Foundation. Heatstroke rates have already increased in some regions, and it is estimated that temperatures will only rise further. Eastern Africa is also predicted to have a continued increase in rainfall, which would lead to further flooding and natural disasters and only exacerbate the region's economic struggles.

Increases in such extreme weather patterns and natural disasters have made it overall much more difficult to live in parts of the continent, causing many to migrate to different regions of their state or to other states and continents. The effects of climate change may cause some parts of the continent to become uninhabitable in the future due to changes in monsoons, sea level rises, and temperature changes, and some states may be severely impacted to the point of displacing millions of people. Currently, climate change has the biggest effect on migration around extreme natural disasters, which have become much more frequent and violent in shorter spans of time due to the changes in weather season patterns in regions across Africa, the BBC further reports.

It is unknown how the world would handle a large climate-based migrant crisis, especially one in Oceania or Africa which would see vast numbers of people displaced and unable to return to their original settlements. Efforts to combat the predicted extreme climates have increased on a global scale, due to international treaties such as the Paris Agreement. Regions such as Africa, Oceania and other island nations have been given increased priority and urgency for climate relief by global governing organizations such as the UN

due to how severely both regions have been affected, and the voices of these countries have been very influential in discussions on how to combat climate changes, the UN Chronicle reports.

Though sea level rise is difficult to correct, scientists and countries are trying to find innovative solutions such as building large dams, a report by the BBC explains. Countries such as Israel, Saudi Arabia, and the United Arab Emirates, which have experienced water contamination due to sea level rise, are also working on ways to increase and conserve their freshwater reserves by desalinating sea water. piping systems, and regulating water prices. Smaller countries such as Micronesia also gather rainwater for better access to drinking water, as desalination plants in the country are relatively small and expensive to maintain.

Many officials in the regions most affected, such as the President of the Republic of Maldives, urge the international community to combat climate change even further. Those who would not be willing to or able to relocate would become casualties of increased disasters and sea level rises. To prevent a migrant crisis from poor nations hit the hardest by climate change, all actors in the international system must recognize the dangers of ignoring the threat of rising temperatures.

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CLIMATE ACTION AND HUMAN SECURITY ARE IN THE HANDS OF THE G7



In recent years, our understanding of the climate crisis has evolved bevond a singular environmental perspective to a complex, multifaceted approach that recognizes the broader implications of climate change. Evidence shows that climate change significantly impacts long-term human security by undermining the livelihoods of people, compromising their cultural values and identities, perpetuating internal displacement and forced migration, and challenging the ability of states to overcome insecurity. Unfortunately, many of the countries already experiencing these effects are unable to make tangible progress simply because of their small economies and inability to influence international action. Resolving the climate crisis requires the collective action of the international community, with a particular emphasis on large-economy countries. Countries such as those in the G7 – the United Kingdom (UK), United States, Canada, France, Italy, Germany, and Japan – are some of the top contributors to climate change, being responsible for a combined equivalent of 9678.4 metric tons of carbon dioxide (MtCO2e) across all forms of greenhouse gas emissions, according to recent data collected by ClimateWatch in 2018. Crucially, these countries are also the ones able to bolster substantial climate action by leveraging their international influence and economic advantage to incentivize states to adopt universally beneficial policy initiatives. Moreover, the G7 and other large-economy countries have a responsibility to provide logistical and financial assistance to countries lacking the necessary infrastructure to support climate-sensitive policies, as well as a duty to reprimand private actors and businesses taking advantage of climate-affected economies. Meanwhile, small, developing nations continue to face human security threats as a result of climate change, despite contributing the least to the problem at hand.

The increasing effects of climate change on human security have dire consequences for the future. As noted in United Nations General Assembly resolution 66/290, "human security is an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges

Countries such as those in the G7...are some of the top contributors to climate change.

to the survival, livelihood, and dignity of their people". The correlation between climate change and human security indicates that insufficient environmental management and resource governance could give rise to difficulties safeguarding people's fundamental rights and freedoms. Moreover, because human security refers to the security of people and communities as opposed to the security of states, it is recognized as a human right under Article 3 of the Universal Declaration of Human Rights (UDHR). The concept of human security also encompasses other rights present in the UDHR, such as that to life (Article 3), an adequate standard of living (Article 25), and freedom from fear (Preamble). As perpetrators of climate change, not only do states compromise their responsibilities under international human rights law by contributing to the crisis, but their failure to address the impacts of climate change on human security can also be considered a human rights violation. Of course, many states have committed to improving their climate considerations through vital policy initiatives such as the Paris Agreement, a landmark international treaty that has received near-universal adoption. However, these developments are hindered by key states who are failing to set strong targets or take substantive action to reduce

their emissions. In truth, the consequences of climate policy stagnation are not felt by those states with the ability to enact sizeable change – instead, small, developing countries are the ones with insufficient resources to mitigate the effects of climate change.

In the context of climate change, human security is threatened by the effect of rising sea levels and extreme weather events on the operation of markets, the state, and civil society. The Intergovernmental Panel on Climate Change (IPCC) identifies the deprivation of basic needs, such as the loss of household assets and agricultural land, increased water scarcity, and the loss of property and residence, as direct results of climate stressors on state resources. Moreover, changes in hydrological regimes have been linked to increased riverbank erosion, floods, and groundwater deprivation. The alteration of these regimes -seasonally variable patterns in the water flow, sediment, and nutrients of rivers and streams - affects access to agricultural land and food security. Meanwhile, sea-level rise and extreme weather events have led to the destruction of property and infrastructure. As these conditions perpetuate human insecurity and increase the volatility of living conditions, populations are experiencing mass levels of internal displacement and migration.

UN Secretary-General António Guterres, who was once the UN High Commissioner for Refugees, raised the issue of forced displacement and its ambiguity under international law. He notes that, despite climate change being named the key accelerator of all other drivers of forced displacement, climate refugees find themselves in a "legal void" if they cross a border since forcibly displaced persons are not covered by the refugee protection regime. Moreover, internal displacement and climate migration not only constitutes a growing threat to regional stability and intensifies intra- and inter-state competition for resources, but also perpetuate national security concerns by exacerbating border tensions and increasing the potential for disease outbreaks. As climate patterns gradually worsen, the international community must reconcile with the need for appropriate legal recourse and accompanying institutional frameworks to accommodate and protect climate refugees.

Another dimension of human security that is affected by the climate crisis is the preservation of cultural values and identity, particularly with rising sea levels which threaten to submerge small island developing states (SIDS) and eradicate their populations. States facing such realities include Maldives, Tuvalu, and Fiji; in the United States, many coastal cities including Houston, Virginia Beach, and New Orleans are also at risk, according to the World Economic Forum. While displacement and forced migration trends escalate, cultural norms, religious customs, and social support systems are similarly at risk of being lost as individuals adjust to new cultural settings that change their perceptions of identity and concepts of self. Since culture - the sum of characteristics such as language,

morals, and social habits – is shaped through factors like geography, lands must be recovered in the aftermath of disasters to mitigate the negative effects of cultural dilution on climate migrants. Additionally, host governments often encourage "precarious" housing arrangements to dissuade migrant populations from putting down roots along with a lack of political will to craft long-term climate-resilience plans that cater to the needs of climate

While displacement and forced migration trends escalate, cultural norms, religious customs, and social support systems are similarly at risk.

refugees, reports The New Yorker. The United Nations Framework Convention on Climate Change (UNFCCC) notes that SIDS share certain characteristics that underscore its overall vulnerability to the climate crisis, including limited natural resources, highly-concentrated coastal infrastructure, susceptibility to natural disasters, dependence on water, and

insufficient financial, technical, and institutional capabilities that are necessary to mitigate the adverse effects of climate change. Additionally, due to their geographic location and limited physical size, SIDS are heavily influenced by large-scale water movements responsible for sea-level changes and weather pattern variation. As a result, not only are SIDS more susceptible to sea-level rise, but they are also at the mercy of increasingly volatile weather patterns and natural disasters that can result in economic damage and loss of life. The GermanWatch Institute (GW) reports that over the past two decades, more than 475,000 people lost their lives as a direct result of over 11,000 extreme weather events - eight out of the ten countries of the most affected were low and lower-middle-income, with half being least-developed countries. The Global Climate Risk Index (CRI) developed by GW identified Mozambique, Zimbabwe, the Bahamas, Japan, and Malawi as the five most affected countries in 2019; compared to the long-term CRI (which analyzes the period from 2000 to 2019) Puerto Rico, Myanmar, Haiti, the Philippines, and Mozambique, rank as the five most affected



Members of the G7 pose outside the Carbis Bay Hotel and Estate in St. Ives, Cornwall, England.

Courtesy of Wikimedia Commons

countries overall. Relatively speaking – except for Japan – these countries lack the international influence, political power, and economic means to incentivize the international community to act beyond the scope of their individual, short-term interests and respond proactively to climate issues. Until they do, the efforts made by other states will continue to be undermined.

It is therefore vital that countries, such as those in the G7, prioritize policies that produce long-term global benefits for climate change over those that satisfy short-term interests. Despite accounting for 20 percent of global carbon emissions, the G7's current pledges to cut emissions do not provide a significant contribution to what would be a fair share of the global effort. In fact, according to the Climate Action Tracker, none of the G7 countries' climate commitments appear to be enough to hold global

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warming below 2 degrees Celsius, let alone the 1.5 degrees Celsius required under the Paris Agreement. The UK, Italy, and France, and Canada all received "insufficient" ratings from the EU27+UK assessment, while Japan and Germany were "highly insufficient", and the U.S. "critically insufficient." As the world's largest industrialized countries, the G7 could play a vital role in fast-tracking climate-friendly policies, assisting developing economies, and instilling confidence in energy transitions while taking responsibility to decarbonize their economies. Instead, governments continue to implement contradictory policies and exploit climate-affected countries. In the UK, for example, the Committee



The cultures of small island developing nations are at risk due to rising sea levels.

Courtesy of Flickr

on Climate Change (CCC) found that the country remains off-track from its carbon budget, policy implementation, and plans to protect the country from growing climate risks. Carbon Brief reports that Lord Deben, chairman of the CCC, explained the government "understands the seriousness of the challenge but they do not seem to be able to link that to action". Thus, the UK has fallen behind on adapting to the changing climate and failed to maintain a coherent plan to reduce emissions. On the other end of the spectrum, the U.S. faced enormous setbacks in the wake of President Donald Trump's hostility towards climate action and withdrawal from the Paris Agreement. Alongside the active censorship of climate science research, Trump also attempted to roll back the Obama-era Clean Power Plan. The inauguration of President Joe Biden in January, however, has improved the outlook on American climate action. Since taking office, he has pledged an emissions reduction of 50-52 percent by 2030 compared to 2005 levels, according to statements from the White House. The executive action is one of five signed by Biden within his first 100 days in office that redirect the Trump administration's negligent policies and elevate climate change as an essential element of U.S. foreign policy and national security. Among the executive actions were two direct reversals of Trump's policies, in which Biden led the U.S. to rejoin the Paris Climate Agreement, cancel the Keystone XL pipeline, and direct agencies to further review over 100 of Trump's environmental actions.

Ultimately, the G7 would need to act diligently to reduce global emissions through setting targets in conjunction with the coherent policy packages in place to deliver those objectives. It is also vital to extend financial support for energy transitions to developing countries to facilitate the global effort; these financial pledges, however, need to be offered alongside firm budgetary outlines. Despite promises of extra climate finance during the 2021 G7 Summit, global leaders failed to offer further details on these financial commitments with the exception of Canada and Germany, who pledged a twofold and threefold increase in funding, respectively. Without substantial advances in G7 policies and renewed action against climate change, the G7 will become increasingly responsible for its adverse effects on global human security.

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The international community is not doing enough on climate change, and our everyday lifestyles are partly to blame for the negative effects of global emissions. These routines highlight the fact that many of the issues that the world faces are interconnected - problems as simple as food waste contribute to degrading environments around the world. According to Feeding America, the United States alone wastes around 108 billion pounds of food each year, leading to a significant amount of wasted energy in growing crops and increased emissions from food processing. Like food waste, there are many ordinary problems that must be addressed with climate issues instead of individually.

International climate cooperation, despite some past successes, has proven difficult. One effective treaty, the 1987 Montreal Protocol, signed in 1987, was an agreement that mainly dealt with the reduction of chlorofluorocarbons (CFCs) to protect the ozone layer. This effort was successful because there were incentives for every country involved. An exclusive trade regime established by the deal created a desire for countries to be included. since CFC-producing countries not involved in the regime would be unable to trade with other producer countries. Non-producer countries not involved in the agreement, meanwhile, would have no access to CFCs. Developing countries also received some exceptions and had an adjustment period longer than developed countries to phase out their CFCs. A fund was also established to help these countries receive environmentally friendly technologies. If a country did not comply, there was the fear of being taken out of the trade regime.

The Montreal Protocol worked because it considered that not all countries have the same resources. It is important to note, though, that this protocol was also dealing with the ozone issue, which was much more manageable than broader climate change. The ozone directly affected

human populations and only a few producer countries were responsible, so the problem was not as widespread. Comparatively, the climate problem is not the responsibility of just one country or industry. Politically, this makes climate change harder to tackle because politicians who try to enact laws to limit emissions, which do not directly impact humans, will receive less support when people do not see the need to change.

Therefore, effective action on climate change is difficult because of the interconnectedness of the problems it creates. There are a variety of issues – each with their own sub-issues – that

...the issues that the world faces are interconnected – problems as simple as food waste contribute to degrading environments around the world.

must be tackled before confirming the root cause. For example, issues like loss of biodiversity result from a variety of overarching problems like overexploitation, habitat loss, entrance of invasive species, and many other things. These largely result from human actions and technologies, yet each sub-issue requires a different course of action. This is one of the biggest challenges that comes with environmental issues, as some governments will ignore the need to change their practices without first researching and confirming the consequences of their actions. Moreover, the gradual nature of environmental problems can make climate change seem distant and irrelevant to the public. The answers to climate-driven problems are also insufficient, as the vast body of research available leaves us with solutions that are either not effective enough or extremely expensive.

This reality frequently places states in the position to make a choice: economics versus the environment. Re-

sponsibility for tackling these wide scale issues does not fall on just a few countries or industries, but includes every country, actor, and organization within the international system. Creating an effective solution to climate change, however, cannot disregard many of the other issues that plague the global community. Gender, social, and economic inequalities, hunger, poverty, and numerous other problems all factor into the severity of climate issues today. The foundations of cooperation on climate and environmental problems will require strong coordination in other areas.

Besides international agreements like the Montreal Protocol, some states are working toward domestic climate action. In the United States, the Green New Deal is a bill recently reintroduced by Representative Alexandria Ocasio-Cortez and Senator Edward J. Markey in Congress that discusses the importance of working towards a cleaner environment by addressing other issues like racial injustices and economic inequalities. However, even if it is passed, the resolution's nonbinding nature means that state governments would not feel pressure to enact any drastic changes to improve their environmental situation. Despite this, the proposal will still play an important part in determining the future of global climate change and cooperation. Since the Trump administration did not seem to believe in the reality of climate issues, reintroducing the bill was a relatively important action taken under the Biden administration. The Green New Deal aims to shift the U.S. away from fossil fuels toward clean, zero-emissions energy sources by creating economic safety nets to bolster healthcare and jobs.

The bill's goals were supported by research from federal scientists and the United Nations which showed that the United States economy could lose billions of dollars by the end of the century due to climate change, according to the New York Times. "For so long, our movement toward

a sustainable future has been divided with really just this false notion that we have to choose between our planet and our economy. And we decided to come together in a sweeping legislation that not only rejects that notion but creates a plan for 20 million union jobs in the United States..." Ocasio-Cortez mentioned at a news conference.

The Green New Deal differs from other past climate proposals action because it combines environmental issues with traditional political matters to appeal more to everyday Americans. Seemingly distant environmental problems are becoming relevant to the greater public because there are now social and economic considerations. Scholars from Yale and UC Santa Barbara conducted research and found that bringing jointly addressing environmental and social issues makes climate issues more understandable to the general public. The Pew Research Center reports that concern for climate change has been growing, with almost 60% of Americans seeing it as a major threat to the country. Many surveyed also believe that the government is not doing enough and that it should be taking more action to mitigate the negative effects of climate change. To address this concern, the resolution would make the government responsible for providing new economic development and training in communities that rely on fossil fuel industry-dependent jobs. New development, along with a push to invest in electric vehicles and upgrades for energy-efficient buildings, aims to move towards a cleaner global environment with the United States taking a "leading role." By examining economic issues through an environmental perspective, the Green New Deal addresses both simultaneously.

...the Green New Deal is a bill that discusses the importance of working towards a cleaner environment by addressing other issues like racial injustices and economic inequalities.

In this sense, the Green New Deal seems to have a focus similar to the United Nations Sustainable Development Goals, or SDGs. The SDGs are seventeen goals to create a better world by 2030, with each aiming to tackle a different global issue. While the Green New Deal addresses many of the environmental SDGs like goals seven and 13 (Affordable, Clean Energy and Climate Action, respectively), it also addresses many non-environmental SDGs like goals two and 10 (Zero Hunger and Reduced Inequalities, respectively). The inclusion of these issues shows the recognition of the fact that it is not possible to resolve these problems one at a time; rather, fixing these issues must be completed simultaneously. Though the SDGs do not seem to be on track to be completed by 2030, the progress that has been made since they were first introduced in 2015 cannot be denied. The goals are non-binding and therefore fairly ambitious; this way, even if states do not entirely achieve the goals, it will

encourage them to take larger strides towards making a positive change in the wider international sphere.

While the SDGs are a broader group of international goals set by the United Nations, 196 countries in 2016 adopted a legally binding climate treaty: the Paris Agreement. Compared to the Green New Deal and SDGs, this agreement does not pay much attention to issues that may indirectly affect climate quality. The focus, rather,

fect climate quality. The focus, rather, is on bringing global temperature levels down by 1.5 degrees Celsius compared to pre-industrial levels. The implementation system of the Paris Agreement depends on nationally-determined contributions, or NDCs, which are actions that countries will take to reduce their own greenhouse gas emissions and contribute toward the agreement's overall target. These plans were submitted in 2020, and the agreement will work on a five-year cycle with increasingly ambitious goals after each cycle.

To track progress under the Paris Agreement, participants will adhere to an Enhanced Transparency Framework, or ETF; beginning in 2024, countries will transparently report on their actions combatting climate change. Though the U.S. has now rejoined the agreement, its withdrawal from the treaty under the Trump administration was a significant blow, given America's status as one of the largest carbon emitters in the world. However, unlike many expected, the U.S. stood alone while all other signatories remained in the agreement. While the treaty lacks an overarching enforcement mechanism, its system of voluntary contributions and accountability has been working well. The unfortunate reality, however, is that emissions and temperatures are continuing to rise. The drastic cutbacks in travel and economics due to the pandemic will only be enough to meet the goals of the agree-



The Paris Agreement was ratified at the COP21 international climate conference in 2015. Courtesy of Flickr



Representative Alexandria Ocasio-Cortez and Senator Ed Markey are key sponsors of the Green New Deal.

Courtesy of Wikimedia Commons

ment if they continue after the end of the pandemic – which is highly unlikely.

While the SDGs seem to have a broader scope compared to the Paris Agreement, both instruments are not internationally mandated, meaning that they depend on national-level implementation. This represents a bottom-up approach where states must take their own actions to create change, as opposed to a top-down approach where an international organization like the United Nations enforces treaties.

Effective international climate cooperation must include elements of these three distinct projects. It is evident that future work on environmental issues will shift to include other problems which are more directly relevant to the common public, as well as viewing non-climate issues in an environmental lens. Presenting these issues as interconnected will be important in bringing more awareness. It will make it more evident that certain lifestyle choices can have a ripple effect that will affect multiple seemingly unrelated issues. Future cooperation on these issues will also continue to be primarily state driven. Given some general guidelines and goals, states will have the autonomy to continue creating policies and legislation that work with the resources available to them while addressing global problems. The reason the Montreal Protocol, for example, was successful was because it took into account the resource disparities between developed and developing countries and created mechanisms to lower those inequalities. It will be fundamental for future climate cooperation to look back to elements of different agreements and plans to create new policies that consider what did not work in the past and create new solutions.

Still, implementing climate policy is challenging, as is seen with the SDGs and Paris Agreement. Many economies are dependent on energy sources that emit greenhouse gases. This means that one country's prosperity from fossil fuels may be bad for the rest of the planet. As such, it is difficult for states to find a

Many economies are dependent on energy sources that emit greenhouse gases.

balance between the use of fossil fuels and clean energy sources, with states often opting for the former. To incentivize states to support climate initiatives, agreements could implement measures such as granting access to scarce natural resources through an exclusive trade regime, such as in the Montreal Protocol, in exchange for promising to reduce emissions. Economic measures like this would give states something they can materially use to benefit their country.

Without natural resources, states and human beings would not have the means to survive. Significant progress in solving climate problems and other interconnected issues can only be made if states and policymakers take lessons from past efforts to understand which mechanisms work to motivate nations to act. If international actors continue to degrade the environment and ignore the importance of other issues in relation to climate problems, the conversation on the state of the environment might shift to a question of human survival.

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