



Economic and Social Council

Chairs:
Jemma Shroder
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Letter from the Chairs

Dear delegates,

Welcome to the 2021 MIT Model United Nations Conference (MITMUNC)! We are excited to have you on our committee, the Economic and Social Council (ECOSOC). We are Jemma Schroder and Sophia Li, and we will be your chairs for this conference.

Hi everyone! My name is Jemma Schroder and I am honored to welcome everyone to the Economic and Social Council (ECOSOC) 2021! I am a first-year at MIT hailing from the SF Bay Area planning to major in course 18 (math) or 8 (physics). I am a huge humanities lover and have been involved in Model UN since my sophomore year of high school. While I never attended MITMUNC, I attended many conferences in Northern California, including Berkeley Model UN, Stanford Model UN Conference, and Harvard Model Congress. This is my first time head chairing a committee in college which I am super excited about, especially as I am very interested in both of these topics, and I look forward to hearing the various global perspectives during debate!

Hello everyone! My name is Sophia Li and I'm excited to be chairing for ECOSOC this year! I am a junior, majoring in 2A-15, which is mechanical engineering concentrating in management. This is my third year chairing for MITMUNC, and the first time chairing for ECOSOC. Although I did not participate in MUN in high school, I did public forum debate for all four years. I am excited to hear from you all develop innovative approaches to the problems we have provided you!

We expect that you will use the information presented in this background guide as a starting point for your own research on these issues. Take your time to understand your delegation's position on these topics, since a deeper understanding of these topics will only make the conference more enjoyable for yourself and your fellow delegates. We also expect that each of you will submit a single page position paper to the following Google Form - <https://forms.gle/iUxSPHsPFwc5qhTWA>.

Good luck in your research and preparations, and we look forward to hearing your great ideas at the conference! Stay safe in the meantime.

Sincerely,
Jemma Schroder and Sophia Li
MITMUNC 2021 ECOSOC Chairs
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Topic 1: Addressing the Needs of Marginalized Communities in a post-COVID-19 world

Background

In December 2019, COVID-19 appeared in China. Initially a local epidemic, it quickly spread across the globe, and this pandemic became a defining event of the year. As of November 27th, it has spread to 218 countries, infected 61.9 million people and killed 1.4 million people (Worldometers). Due to the rapid growth of the disease and the uncertainty related to a novel virus, the resulting government responses have been diverse and dynamic, and the results have varied; as well as directly impacting disease spread, health, education, economic, financial, and social systems have been affected. In particular, marginalized communities have been disproportionately affected, being more exposed, having less access to resources and services, and overall facing increased disease burden.

At the time of this writing, the pandemic has not yet ended. However, in November, nearly a year after the outbreak of this disease, potential vaccines have made headlines as they publish results showing safe and effective protection (Gallegher). Combining the effects of a valid vaccine and appropriate government responses, the end of the pandemic is in the near future. Keeping that in mind, it is important to start developing support and recovery plans to address the severe disruptions caused by COVID-19. Although there is no one-size-fits-all solution to address the harm this prolonged pandemic has caused, ECOSOC is committed to help develop a plan to help everyone to recover from the social and economic disruptions related to COVID-19, especially marginalized communities who would benefit from increased support. This pandemic has highlighted the great inequalities that exist in our social and economic systems, so returning back to

a pre-COVID world is not sufficient; we need to be innovative and develop plans that promote collaborative compassion.

Key Terms

COVID-19

COVID-19 is a contagious respiratory illness caused by a coronavirus. Besides showing more severe symptoms than the seasonal influenza, COVID-19 is more contagious, has a longer incubation period (no symptoms yet still infectious), and currently has no vaccine to combat the spread (CDC). Although most people recover completely, some individuals develop long term symptoms that can affect day to day life, while organ damage and other long term damages are being observed and studied (Mayo Clinic). COVID-19 is spread through droplets, so most institutional responses focus around preventing gatherings and disinfecting surfaces; oftentimes, these policies also highlight the importance of personal responsibility in these times, like wearing facemasks, avoiding large gatherings, and practicing good personal hygiene.

Marginalized Communities

Marginalized communities are groups of people confined to lower or peripheral edges of society. Some reasons that lead to marginalization are age, gender, disability, race, education, citizenship status, poverty, and other factors (Turkovich). Marginalized communities often have specific needs that are not met, and therefore are at higher risk at getting sick, among all risks. The social and economic disparities marginalized people typically face also make it very difficult for marginalized individuals to change their circumstances or the perceptions other people have, which could further marginalize them (Keith).

Key Issues

Identification of Needs

The unfortunate reality is that research and policy making dedicated to help marginalized individuals is not consistent; the little attention and resources dedicated to understanding and helping these communities have been diverted during this pandemic. While it is important to use all possible resources to address the pandemic, this diversion of support increases risk for at-risk marginalized individuals, as well as further marginalizing them. To be able to effectively develop support and recovery plans would require governments and organizations to correctly identify their needs. However, marginalization makes it difficult for researchers and policy makers to identify the needs of these communities, and even more difficult to implement plans and deliver support (Sevelius et al.).

Economic Recovery

COVID-19 has negatively impacted the economy worldwide. In early stages, unemployment rates skyrocketed, the stock market crashed, and many industry sectors and businesses struggled to stay afloat (Palumbo & Jones). However, as the initial shock passed, economies recovered in a K-shape. A K-shaped recovery is when wealthy individuals and large corporations not only recover from the initial shock, but also continue to grow; while smaller businesses and individuals who work in sectors hard hit by COVID-19 are not recovering, and falling further into poverty and economic hardships (Brotman). Since economic status contributes to marginalization, COVID-19 has been a reinforcing event that has marginalized more people and put them in a more disadvantaged position. This great disparity caused by COVID-19 is also at risk of worsening if the recovery plan relies too much on globalization. Hyperglobalization, or a dramatic increase in size, scope, and speed of globalization, has the potential of driving inequality through trade and investment liberalizations that

affect wages growth, which further encourages weaker employee protections and exploitation of migrant or foreign workers (UNCTAD). Marginalized workers are likely to be exploited in the name of economic recovery.

Economic Recovery: A New Debt Crisis in Africa

When discussing global economic recovery, it bears to note that African countries have historically been economically marginalized (United Nations). There has been a lot of fear that Africa will enter a debt crisis prior to the pandemic as 24 countries have surpassed the 55% debt-to-GDP ratio threshold set by the International Monetary Fund to indicate a weaker government ability to respond to recession. The drivers of rising debt now are similar to that of the drivers that caused the 1980 Africa debt crisis (Onyekwena & Ekeruche). Amid a pandemic, debt-to-GDP ratio in many countries have risen to be higher than 100%. The continent could potentially lose up to \$500 billion due to the economic impact of COVID-19, potentially putting 50 million more people at risk of extreme poverty (United Nations). A recent G20 summit calls for “immediate and vigorous measures” to address the debt crisis in Africa, and that a multilateral effort needs to be developed to protect economically marginalized countries.

Addressing health care inequality

As addressed previously, COVID-19 disproportionately affects marginalized populations. One major factor is the poor access to health and medical care within these communities. These communities are either physically distanced from a doctor, cannot afford to visit a hospital, do not have enough health care workers for quality care, or are refused treatment due to their marginalization (Shadmi et al.). The health care inequalities that caused the deaths from COVID-19 have existed prior to the crisis; this pandemic has served to highlight the lack of equity in health care, and by addressing the failings in our system can prepare countries for future pandemic

responses while saving more lives in the interim (Holmes & Goosby). Health equity is something national governments and multilateral efforts have tackled, but this crisis has shown that the previous methods and movements have been fairly hollow (Gorongu et al.). Oftentimes, health care equity efforts focus on specific diseases; we should be cautious how we move forward in addressing the accessibility in health care and not have tunnel vision when rebuilding during and after COVID-19.

Parties Involved

Developed Countries

Developed countries typically have infrastructure and support systems for marginalized communities. While making post-pandemic recovery plans, these countries should find a balance between developing recovery plans to improve their infrastructure and help developing countries to build infrastructure to support their marginalized communities. In addition, developed countries should be cognizant of how their recovery plans could impact the recovery of developing countries, especially those that have marginalized economies. Developed countries should hold each other accountable for developing sustainable and equitable recovery plans.

Developing Countries

Developing countries typically have less infrastructure for supporting marginalized communities. These countries should push so that more developed countries can help them develop recovery plans suitable for them, and commit to recovery plans that support their marginalized people.

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Topic 2: Promoting international collaboration in environmentally sustainable technological development

Introduction

For almost all of human history, technological development has been a main civilizational priority as due to technology's ability to improve virtually every facet of everyday life. While today is no different, we have begun to realize the many unintended consequences of development on our world, most notably the question of sustainability. This background guide will focus on two lesser-discussed topics in technological sustainability: energy, as it is the fundamental backbone of all technology and progress, and waste management, as true sustainability makes use of technologies and resources that have already been created.

Key Terms

Circular economy - an economic system where every resource is continually reused and repurposed, effectively creating zero waste.

Electronic waste (e-waste) - discarded electronic or electrical devices. E-waste is sometimes renamed as “used electronics” as a way to bypass regulations

Global South - another term for developing or “third world” countries

Planned obsolescence - the strategy of purposely designing items to fail after x years or y uses, usually as a business model to ensure continued sales & profits

Foreign waste - waste originating in a country other than where it is presently located

Greenwashing - a marketing technique used by companies to mislead consumers into believing that the company is pro-environment without actual action.

Key Issues & Past Action

Energy

No discussion on international technological development can ever take place without discussing energy: a dependence on energy sources is a fundamental part of humanity and therefore

plays a prominent role in technology's past, present, and future. While the specific sources of energy and their externalities have shifted throughout time, the fundamental character has remained untouched: the externalities flow down the gradient of power. Prior to the invention of machines, slavery was used as a means to capture and reallocate energy towards projects beneficial to the group in power. As machines grew in prominence, the negative effects of these new power sources merely shifted, still benefiting the groups in power at the expense of low-income communities and those of color. Therefore, when discussing sustainable development, a discussion of sustainable¹ energy sources must take place concurrently.

Solar power is undeniably the future of energy, especially in the Global South and geographies lacking a pre-existing grid. With production capacities becoming evermore efficient due to Chinese innovation and vertical integration and with the potential for decentralized power, solar is the key to bridging the energy gap in an increasingly interconnected world. However, what is commonly ignored is the afterlife of solar waste—like all products, Photovoltaic (PV) panels break and lose efficiency over time. Due to the hazardous chemicals in solar cells, incorrect waste management leads to widespread health issues, environmental damage, and loss of economic potential.

According to Chowdhury et. al., only the European Union has passed legislation requiring manufacturers to take care of solar waste, and very few countries require solar recycling efforts. Containing harmful chemicals such as lead and cadmium, solar panels in their current form are difficult to recycle safely, with the large majority of these panels being shipped to foreign waste

¹ While the main topic of sustainability is with the environment, there is an aspect of human sustainability (ie. health) that is undeniably linked. In fact, air pollutants have actually been linked to increased COVID-19 spread. (DOI: 10.1016/j.allerg.2020.05.004)

dumping sites. As a result, harmful chemicals leach into the groundwater (Chowdhury et. al.), damaging both the surrounding ecosystem and human health.

Of course, solar is not the only option: wind, hydro, and biofuels all hold great potential to replace current energy scenarios. This said, each alternative has its own set of negative externalities. However, solar's current dominance in the field means that it is the most pressing concern: in the next five years, millions of tons of panels will expire, and by 2050, 78 million metric tons of solar panels will have reached their end of life—yet little global thought has been dedicated to tackling this impending crisis.

Waste Management & Pollution

The second key aspect of sustainability is waste management: what to do with the tonnes of products and materials produced daily, as well as those in the past and future. The processing of electronic waste is extremely expensive due to its intricacy (a problem that is exacerbated as technology becomes smaller and smaller), and requires expensive machinery that many waste dumps and recycling plants do not have access to. Naturally, when considering solar waste it is vital to understand the cultures and geographies facing the brunt of these issues: Africa and China.

Case study: Africa

Africa has a widespread custom of reuse: as such, it is no surprise that “in Kenya, 65% of solar products are kept or left in the home when they stop functioning” (Cross & Murray 105). When the solar component of a product fails, it is common that the working parts of the system are repurposed and made work through other means. For example, a report by Cross and Murray detailed how a Kenyan home used a car battery to power lights with broken solar components, constantly recharging them through the electricity grid. These sorts of work around are both a

display of African ingenuity but also a means through which e-waste can first be reused, then recycled, in small scale scenarios.

Considering that Africa consists of many rural villages without access to the repair services offered by device manufacturers, self-taught repairmen postpone the return of electronics to waste dumps by reusing and repairing them in a similar fashion. However, not all these repairs are successful: the stark lack of technical assistance and official repair sites in rural areas means that overly engineered and complicated technology is left unrepaired, its economic and energetic potential locked. This geographic variable also explains the inability of centralized recycling services to be successfully implemented, as more often than not the cost of collection far exceeds the profit generated through recycling and reselling. Moreover, it also highlights the complicated reality of managing solar and other electronic waste: the interests of home, local, and official repair sites often contradict one another, and forcing the implementation of centralized and official systems (regardless of net cost) risks damaging the micro economy of repair created in this void.

Located in Accra, Ghana, Agbogbloshie is the largest e-waste dumping site in Africa. With no training or precautions to protect against harm from hazardous chemicals contained in this waste, Agbogbloshie serves as a large detriment to both environmental and human health. At Agbogbloshie, workers depend on recovering valuable components to survive. Most commonly, the path of least resistance for recovering these components is the most unsafe: burning. According to Adam Minter at the Smithsonian Magazine, at the edges of Agbogbloshie lie burning sites where the plastics in materials such as tires and insulated wire can be inexpensively and efficiently removed, leaving behind the valuable steel and copper remains. The toxins produced by this recovery method include carbon monoxide, dioxin, heavy metals, and other hazardous chemicals that pollute the air and surrounding communities.

Considering Agbogbloshie's geographic position near Accra, Ghana's capital, as well as bordering agricultural centers, the released contaminants spread far and wide. According to a report published by Orisakwe et. al, Agbogbloshie and other waste dumps lack unfortified ground, meaning that chemicals released by burning and other improper waste management is released directly into the ground and air. Subsequently, heavy rainfall allows for toxic runoff into farmlands—therefore into the food chain—as well as into the water source itself. In this way, the communities surrounding e-waste waste dumps face a constant background level of exposure from all angles, leading to toxic buildup and widespread health issues.

However, the noxious ramifications of e-waste dumping are not reserved for just West Africa. Dar es Salaam, Tanzania, and other cities in East Africa also lack proper recycling plants. Coupled with the increase in hazardous waste from the widespread use of solar panels, the East African environment suffers from just as harmful levels of contaminants. According to the New York Times, quoting a paper published in 2018 in the Journal of Scientific Research and Reports, levels of chromium, copper, and lead in the Msimbazi River area surpass the safe levels as recommended by the World Health Organization by far. In East African waste dumps, acids and chemicals from solar panels, lead-acid batteries, and lithium batteries are commonly drained directly into the ground to allow the metal components to be melted down and resold. And while there have been attempts at building and increasing access to facilities able to properly handle this waste, widespread success and implementation have yet to be seen.

The Geopolitics of Waste Management

According to McElligott, 44.7 million metric tons of e-waste was produced in 2016, 76% of which remained unrecycled. This statistic directly contradicts the prevailing narrative that all technological waste is recycled in full, which is usually cited as a defense for the idea of planned

obsolescence saturating the industry. Considering how the majority of electronic waste, both solar and otherwise, is shipped offshore, the population primarily affected are the uneducated, low income workers of the global south. Europe, second largest producer of e-waste, collected and properly recycled 35% of their waste, largely due to the even higher recycling rates of the Nordic countries. There is also a notably high amount of inter-European waste movement, with 78% of European waste exports destined for the Netherlands, Germany, and Belgium (Lepawsky). In this way, European countries are closest to the sought-after circular economy, though there remains a 6% leakage rate of illegal exports as discovered by the Basel Action Network (BAN). However, when compared to the United States, European policy has been extremely successful in reducing electronic waste.

The third largest producer of electronic waste, the United States has no legislation prohibiting the cross border movement of its electronic waste and as such, exports 40% of collected waste (BAN). In the United States, recyclers often cite their relationship with accredited agencies and environmentally friendly groups as proof of never exporting, a direct contradiction to waste-tracking studies. As a result, the government inadvertently endorses these companies, by neglecting to follow up with companies complying with regulations at face value. As a result of this greenwashing coupled with weak domestic environmental legislation, recyclers accredited by the R2 standard actually export at a higher rate than even their non-accredited counterparts, meaning that 96% of exports are overtly illegal (BAN). Of these exports, 93% are destined for the extralegal Asian recycling market, many of whose practices result in more environmental damage than the waste itself.

Within Asia, the amount of waste is higher than ever and still rising, a combination of the production heavy domestic market and extralegal exports. This standing is only exacerbated by the

global trend of renewable energy, as China is the primary producer of solar related electronics and thus bears the burden of both manufacturing and end of life considerations. The final destination of 70% of electronic waste, China even banned the import of foreign waste in 2018, but the legislative variation between the mainland and Hong Kong has left a loophole for imports to enter through Hong Kong ports (Wong). This extra legality results in large percentages of this waste entering China's informal e-waste recycling market. Commonly located near agricultural centers, these recycling plans routinely burn e-waste to extract metal, polluting the surrounding environment and by extension the food and water sources of the surrounding population (McElligott). As such, this informal recycling process harms not only the workers in direct contact with hazardous materials but damages both the region's environmental and economic ecosystems.

As for Africa, according to Smithsonian Magazine, citing the United Nations Environment Programme, "85 percent of the e-waste dumped in Ghana and other parts of West Africa is produced in Ghana and West Africa." However, this use of the word "production," is misleading, standing on shaky ground to dispel scrutiny on western states. With little electronic manufacturing plants in Ghana and West Africa, common logic shows that the majority of e-waste could not have originally been produced there. This statistic instead shows that much e-waste imported to West Africa is actually reused by local enterprises seeking to extract as much value from this extralegal waste as possible.

Stepping out of a Western point of view, the more nuanced reality of the situation is made clear. Using the best techniques available, the populations of West Africa have repaired the so-called "used electronics," a common moniker for electronic waste, reusing the components to their full potential. Like every electronic device, these repurposed machines eventually become part of the 85% of African-originated waste in Agbogboshie, though not after they have provided value to

populations that would otherwise have been lost. While this sort of reuse has been spun to frame West African e-waste as their own problem, the truth is that these populations have displayed creative resilience in the face of the poor circumstances that plague the Global South.

Within Ghana, the majority of working components—as well as those with the potential to be repaired—are routed to computer repair shops, not directly to Agbogbloshie. Considering how Ghana imports 150 thousand tons of used electronics per year (not even taking into account the massive amounts of extralegal imports), what the West considers e-waste is merely just untapped potential, transforming the waste dumps into industrial hubs. According to an article published in *Africa Times*, African entrepreneurs are beginning to formalize this ecosystem: in 2017, the Agbogbloshie Makerspace Project launched an online marketplace where e-waste collectors and buyers can better community and where health and safety information can be published. Fully making use of the electronic “waste,” in Tanzania and Ghana, companies are building 3D printers entirely from e-waste scrap. In Togo, a startup is repurposing e-waste into computers and other technology to give to students, fully harnessing the potential of e-waste for innovation and societal betterment. Repurposed e-waste can also be an expression of art, at least according to Kenyan artist Cyrus Kabiru. Through upcycling trash, he has shown that e-waste is not just a visual representation of the West’s use of Africa as a dumping site, but also a mode of displaying the true spirit of African ingenuity.

With the knowledge that e-waste contains many precious metals and other valuable materials, therefore economic potential, companies will likely begin to construct better recycling plants in Africa in the coming years. In Ghana, this is already starting to happen, with the government working with the United Nations Environmental Program to establish a proper e-waste recycling plant at Agbogbloshie. While the development of these initiatives is certainly a benefit to

African countries—reducing pollution, improving health, and increasing profits—with all lucrative economic potential comes the chance of self-interested foreign involvement. To this, Africa is no stranger. As such it will be imperative for African nations to forge a path away from the potential of exploitation, not only to protect their interests but also to preserve African ingenuity.

The Circular Economy & the Indigenous Perspective

Throughout the West, the idea of a circular economy is rising in popularity as scientists and politicians begin to realize that every action will result in unforeseen consequences, and that harming the surrounding environment has a measurable detriment on Western lifestyles. However, this fact is embedded within many indigenous belief systems. In Māori (indigenous population of New Zealand) culture, for example, they see their community as integrated with the surrounding ecosystem, all making up a single equilibrium point. If the balance is disrupted one way or another, all facets suffer: a decline in natural resources will lead to a loss of culture. In this way, a functional circular economy has been successfully implemented for years in indigenous tribes (albeit not with modern technology).

The ideal scenario of a circular is as follows: every product is designed with its end-of-life in mind. Each product's end of life plan is unique, but many rely on the following two ideas: either a method for the efficient and cost effective decomposition of the object into its base components is devised, or the object as-is is immediately given another use without any sort of phase-change. Processes like this often happen at small scales, such as within individual households, however, no real action has been taken at a governmental level or international level.

Questions to Consider

1. The switch to renewable energy and state-of-the-art technology is often an expensive undertaking requiring large initial investments. How can lower income communities and

nations, many of which are seen as unprofitable investments, take advantage of solar technologies?

2. By nature, solar farms require large swaths of well-lit land -- land that was generally considered useless prior to solar. How can energy sovereignty, or a community's claim to the energy generated with their land, be insured in poorer nations & how can they be protected against foreign exploitation? For example the Noor solar power plant in Morocco supplies energy to the European grid through an undersea cable through the Strait of Gibraltar.
3. How can the ECOSOC better promote international action towards a circular economy?
4. Almost anything that has been manufactured can be recycled given sufficient funding, tools, and time. Considering that the majority of electronic waste is located in areas lacking all three, how can recycling processes be designed to fit the needs of the user group?
5. How can state-of-the-art recycling techniques be implemented in waste dumps without killing native ingenuity and allowing for exploitation?

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