Cerritos Advanced Conference 2020

United Nations Human Settlement Program (UN Habitat)

Topic A: Development in Slums

Topic B: Impact of Climate Change on Coastal Cities

Director: Kayla Kim

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To Delegates of CHSMUN Advanced 2020

Dear Delegates,
Welcome to CHSMUN Advanced 2020!

It is our highest honor and pleasure to welcome you all to our 2020 online advanced conference here at Cerritos High School. On behalf of the Cerritos High School Model United Nations program, we are proud to host our very first advanced conference, where you will become more knowledgeable on international issues, participate in intellectually stimulating discussions, and create new and everlasting friendships.

The CHSMUN program continues to compete around the world as a nationally ranked MUN program. Our delegates utilize diplomacy in order to create complex solutions towards multilateral issues in the global community. Our head chairs are selected from only the best seniors of our program, undergoing a rigorous training process to ensure the highest quality of moderating and grading of debate. Furthermore, all the topic synopses have been reviewed and edited numerous times. We strongly believe that by providing each and every delegate with the necessary tools and understanding, he or she will have everything they need to thrive in all aspects of the committee. We thoroughly encourage each delegate to engage in all of the facets of their topic, in order to grow in their skills as a delegate and develop a greater knowledge of the world around them.

Although this wasn't what we expected, our advisors and staff have put in countless hours to ensure delegates have an amazing experience at the online conference. Our greatest hope is that from attending CHSMUN 2020, students are encouraged to continue on in Model United Nations and nevertheless, inspired to spark change in their surrounding communities. With this strong circuit consisting of 6 schools and over 500 delegates, CHSMUN Advanced 2020 will provide a quality experience for intermediate delegates to enhance their speaking and delegating skills.

If you have any questions, comments, or concerns, please contact us! We look forward to seeing you at CHSMUN Advanced 2020!

Sincerely,

Anjali Mani and Karishma Patel

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Secretary-Generals

A Note From The Director

Delegates,

My name is Kayla Kim and I am excited to serve as your Director for UN-HABITAT. This is now my sixth year in Model United Nations and it has provided opportunities for me to become confident in my speaking abilities. From attending conferences, I have been able to make life-long memories and friends and I hope you do too. In school, I am a member of Track, California Scholarship Federation, the Lighthouse, and the National Honors Society. Outside of school, I take part in Civil Air Patrol. You can most likely see me in my uniform leading my squadron in various activities on the weekends! I also participate in CyberPatriot, a cybersecurity competition, where I have been able to attend Nationals. In my free time, I really enjoy listening to music, playing archery, and watching YouTube videos. My favorite artists include Lauv, Ruel, and NCT. Whether it be your first conference or your sixth, I encourage you to think outside the box and come up with innovative solutions. I look forward to the upcoming conference and I wish you all the best of luck. If you have any questions about the topic or committee, feel free to contact me!

Sincerely,

Kayla Kim

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Director, UN Habitat

Committee Introduction:

The United Nations Human Settlements Program (UN-HABITAT) has existed since 1978 but was revitalized to its current form in 2002 with urbanization. In June 1996, over 171 countries adopted the Habitat Agenda which contains over 100 commitments and 600 recommendations to the global deterioration of shelter and living conditions with urbanization. The Habitat Agenda is the founding document of UN-HABITAT in which it lays out the mandate and goals of sustainable development. It follows closely to Sustainable Development Goal 11 of ensuring shelter for all and improving living conditions. One of the main goals stated in Assembly resolution 55/2 focuses on improving the lives of slum dwellers through the “Cities without Slums” initiative which works to improve the lives of at least 100 million slum dwellers by 2020. Through initiating projects and initiatives, the UN-HABITAT plays a critical role in developing many areas through advocacy, policy development, and assistance.

Topic A: Slum Development

Background:

Globally, one in eight people live in slums today, which equates to an average of one billion people living in slum conditions. The UN-HABITAT defines a "slum household" as a group of individuals living under one roof in an urban area without access to one or more of the following: (1) durable and permanent housing that protects from extreme weather; (2) sufficient living space, meaning no more than three people share the same room; (3) consistent, easy access to safe water at an affordable price; (4) access to sanitation shared by a reasonable number of people; and (5) security of tenure that prevents from forced evictions. When an entire neighborhood is lacking any of the basic needs, that neighborhood is considered to be a slum. Not all slums encounter the same degree of deprivation, and rather it varies across the globe. In both developed and less developed countries, slums act as the center in urban poverty and deliver significant challenges to its residents and government. Many of these slums consist of high unemployment and poverty rates due to stigmatization and discrimination against these individuals. Due to not having an associated street address, these individuals are excluded from "full citizenship" within cities and are therefore not included in censuses. Social exclusion and political exclusion are also done to these individuals. With this in mind, many are unable to vote, get formal jobs, and participate in their national community resulting in stigmatization. Slums continue to grow and develop with the lack of formal jobs and education. Many children have to take up work at a young age to support their families, resulting in a lack of education. This creates a cycle of poverty resulting in these individuals being unable to build a life outside of slums. Around the globe, approximately 60 percent of cities with a minimum of 300,000 inhabitants are at high risk of natural disasters. Many of these cities contain slums that can be most impacted by cyclones, droughts, floods, earthquakes, landslides, and volcanic eruptions. In addition to this, more than 70% of flood deaths in Mozambique were located in urban areas and impacted many slums. With housing on slopes and being made with waste materials, these slum houses get impacted most directly with natural disasters. Climate change is a large issue impacting the global community and urban communities as well. Currently, cities contribute to 71 to 76 percent of carbon dioxide emissions and utilize more than half of global energy use. The effects of climate change have mostly impacted slums as many are located near factories and highways. Slum-dwellers are vulnerable to the negative health effects of air pollution and are more prone to developing respiratory diseases.In Mumbai, India, one slum known as Dharavi has one million people within one square mile. These tightly packed communities bring the issue of overpopulation, access to safe drinking water, and waste disposal. The overcrowding, lack of basic services, and the spread of disease are alarming within slums. With the issue of insufficient drainage, flooding, and improper disposal of waste, come the issues of vector-borne diseases such as dengue, malaria, and more. Physical exposure to extreme noise and temperatures impact their physical conditions as well. Evictions are rampant within slums, sometimes illegally

displacing 7000 residents at a time. Working to ensure that governments provide a security of tenure is crucial to prevent forced evictions. Ultimately, due to COVID-19, slums are heavily impacted. In Brazil, at least 1.5 million urban residents live in slum settlements and 1 in 4 individuals tested within these slum settlements have tested positive. This is the case impacting all slums across the world. Many residents of slums have reported a 70% income decline since the outbreak. Slums house people working in low wage and informal work, and work in employment with manual scavenging or small business work. Many slum dwellers are also being forcibly evicted to attempt at slowing the spread. Therefore, action must be taken to prevent the coronavirus in slums, and improve the livelihoods of the residents.

United Nations Involvement:

The United Nations have been actively involved in assisting sustainable urbanization and improving livelihoods in slums. The UN-HABITAT was created to focus on that aspect and have been working towards Sustainable Development Goal (SDG) 11. SDG 11 aims to "Make cities and human settlements inclusive, safe, resilient, and sustainable". It specifically highlights the provision of social protection, access to healthcare, and access to safe sanitation. Prior to this, urbanization was still a large issue in 2010, as the United Nations Millennium Declaration recognized the impact it had and the growing numbers of poverty. It specifically works to improve the lives of at least 100 million slum dwellers by 2020, and is mandated to the UN-Habitat. This goal was already achieved in 2013, however, the rates of urbanization have increased exponentially every year, resulting in a growth of slum dwellers. Three Participatory Slum Upgrading Programme (PSUP) principles have been outlined from the UN for slum development which includes "(1) Participatory Urban Profiling; (2) Participatory Action Planning and Program Formulation; and (3)Participatory Pilot Project Implementation". These guidelines work in collaboration with governments, international organizations, community members, and include a variety of stakeholders. With the adoption of a New Urban Agenda, these principles are clearly outlined for governments to implement. By 2030, it will assist with upgrading slums and providing access to healthcare centers, basic needs, and affordable housing. The World Health Organization has been working to overcome health inequities in these overpopulated urban settings. The UN-HABITAT and WHO have created guidelines stated in the New Urban Agenda to catapult action into educating slum dwellers about health and working with local governments. The United Nations established the World Urban Forum in 2001 to create the first conference regarding urban issues. It works to discuss the dire issues including climate change, urbanization, and impacts on communities. During the ninth forum, the Kuala Lumpur Declaration was formed and signed upon which reaffirms the UN member states and stakeholders' goals of improving areas for the urban poor. In 1999, the Cities Alliance initiative was launched by the World Bank and UN-Habitat to work toward ensuring prosperity in all urban cities. They work to provide policy development to incorporate an inclusive approach to politics including slum residents. By 2030, the Cities Alliance works to improve the livelihood of 60 million urban poor across 200 cities within 20 countries Over 609 community savings groups were created and are still active across sub-Saharan Africa. Cities Alliance and local NGOs were

able to construct approximately 2.2 million housing units in Brazil. Through implementing developmental programs of water and waste management as well as providing education opportunities, Cities Alliance has been able to improve over 140 cities.Various programs have been launched through the United Nations and the UN-HABITAT. Some programs such as the *Decentralization through Promotion of Good Urban and Environmental Governance* works to provide environmental sustainability while working to improve urban management and living standards in slums. Another program that has been implemented includes strengthening capacity building through the *Slum Upgrading Programme in ACP Countries*. These programs spanned across the globe and continue to assist the nations. Through collaboration with other United Nations organs such as the World Health Organization and United Nations Development Programme, the UN-HABITAT has been able to assist over two billion people in access to drinking water. This resulted in an over 23% increase in access to safe drinking water.

Case Study: India

An estimated 64 million Indian citizens are located in slums. Many of these residents move to the cities for improved job prospects and settle in slums for the affordable house prospects. Slums within India continue to grow due to issues regarding population growth and government. Slums in this country lack adequate space with over one million residents within one square mile. This results in sanitation and housing issues. During the rainy season, the water spreads various diseases such as cholera and malaria. Over 70% of households in India do not have access to toilets which results in 1.2 billion people defecating in the open. Education is vital for both children and adults to rise out of poverty, however an estimated 50% of Indian children do not attend school. Over 150 million children work as laborers to help provide for their families. Public schools within these communities are often inadequate and do not have the necessary materials to provide the same level of education as those in private schools. India's government is working towards becoming slum free, however the national and local government's policies are misaligned. The national government wants to give slum residents property rights as it will protect slum residents from forced eviction by developers. However, it is unlikely that this policy will be implemented. Many major cities such as Mumbai and Dharavi have yet to implement this policy resulting in it being ineffective.

Bloc Positions:

Western Bloc: Many countries within the Western bloc work to fund the development of slums in less developed countries. Since 2010, the European Union has provided more than 50 million euros in developing communities all across the world. However, working to eradicate slums within Western countries is also a prevalent issue. Many slums in this region form due to the lack of accessible housing and financial issues. For example, residents of the Roma slums in Europe

live in mud huts and have an unemployment rate of 74%. Due to racism from their living conditions, many individuals work in illegal labor conditions. Without opportunities for jobs, many Roma slum dwellers are unable to lift themselves out of poverty and move out of slums. This is the case for many slums in Western countries. One of the largest slums in Europe, Canada Real Galina is home to 30,000 people and has been around for more than forty years. This slum faces eviction in every minute that passes and faces high risks of demolishing homes and breaking apart families. Fines are issued to many of the slum dwellers and some amass over 3 million euros for rebuilding their homes. With the rapid urbanization, many cities in the Western bloc have been evicting those living on the land illegally or without giving proper amounts of time to relocate. Often, evicted families are unable to resettle and return to slums to continue their livelihood with houses made of worse materials than the last. Many build houses from cardboard, plywood doors, and more. Working to provide both affordable housing, improving financial opportunities, and eviction processes can assist in improving the livelihoods of those in slums.

Latin America and Caribbean Bloc: Since 2000, the number of slum inhabitants has increased by 55 million and continues to rise with high urbanization rates. Latin America and the Caribbean have been working on initiatives on improving housing structures, through public housing. Slums within these areas lack opportunities for social and economic equality. In San Paolo, Brazil, slums are rampant and have low education rates. Over 70% of the population has one to eight years of schooling whereas residents of formal urban areas have 12 or more. This correlates with high unemployment ratings which reach up to 49% and an increased rate of violence. In Bolivia, an estimated 58% of the population resides in slums. Many children from these areas continue to work in child labor of agriculture and hard labor. This creates an endless cycle of poverty with the lack of education, and unsteady work conditions and is not only in Bolivia, however, is applied to slums within the entirety of the bloc. Over three-quarters of the urban population in this bloc live in “informal housing”, otherwise known as slums. This is due to combined factors of economic opportunities as well as an exclusion of basic services and housing opportunities. Over 74% of Latin Americans lack access to safe sanitation as only 28% of the wastewater collected is treated. As a result, interventions must be made in planning for access to transportation, clean water services, education, and housing. With improvements in education and living conditions, slums in this region can be decreased.

African Bloc: With Africa’s urban population is estimated to triple in the next half a century, it is essential to upgrade pre-existing slums and work to improve future slums. With the arid and dry weather, many slums are prone to accidental fires. Working to improve the building conditions as well as access to healthcare is of importance. Many countries such as Morocco and Algeria have plans to develop their governmental strategies of urban development. Previously, African nations have been unable to develop slums with rampant diseases of HIV/AIDS, food insecurity, and terrorist activity spanning throughout their nations. As a result slums such as Kibera formed, and face issues of only 20% of the population having access to electricity and no access to healthcare services. Without proper living conditions, many slum dwellers in the African bloc are susceptible to diseases of tuberculosis, dengue fever, and malaria. The increasing number of individuals moving to slums results in the necessity for jobs, which in turn results in a large number of workers with no formal jobs. These jobs can range from being in

construction work that is not reported for tax or illegal work such as prostitution and black-market work. In Kibera, Nairobi, which is one of the largest slums, currently makes over three million from this type of work. Over 40% of a country's GDP can come from work in these illegal sectors which harm the workers. Working to develop large scale improvement plans are of importance in this bloc, regarding access to medical and economic conditions.

Asian-Pacific Bloc: An estimated 64% of people who live in slums are from the Asian-Pacific Bloc. Poverty rates are lowest within large cities and therefore, impact many of the slum dwellers. With the fast rates of urbanization, an increase in urban planning and development is crucial to prevent more individuals from falling into urban poverty. With many natural disasters and the effects of climate change, this region has been prone to floods, earthquakes, and other natural disasters. Asia's largest slum, Dharavi, is located in Mumbai, India, and is home to an estimated one million people. Slum residents share one toilet for approximately 500 residents, and face a constant threat of eviction. The land that the Dharavi slum is located on is in India's most expensive city and is looking toward redevelopment by eradicating the slums. Jakarta's Tambora slum is also one of the most densely populated places with an average of four people per one square meter. Small fires occur multiple times monthly as a result of poor construction of houses. The issue of clean water has continued to be addressed within the region with the "Cities Without Slums" initiative which works to address issues within slums such as water. The UN-HABITAT has been providing water through the "Water for Asian Cities Program", however with the growing population rates these programs have been unable to reach many slum areas with long term development goals.. With overpopulation in mind, improved and affordable housing and sanitation are necessary to assist in the development of slums within this region.

Basic Solutions:

When planning development in slums, it is crucial to be detail-oriented in recognizing the multifaceted issues that come with improving the livelihoods of its residents. This includes proper sanitization methods, access to clean water, providing tenure to prevent evictions, education, and more. Both long term and short term solutions should be created to address these issues. Education is a valuable resource that many children in slums do not have the opportunity to get due to working to support their families from a young age. Therefore, some programs such as the SCALE-UP Program provide for an opportunity to have night classes in designated epicenters of a slum. Topics for classes range from business development, entrepreneurship, and personal finance education. Classes also include improving health services through proper education in waste management and proper sanitation measures. Volunteers also provide childcare services which allows for many of the women and girls to attend. This organization also provides training in the production of saleable items such as embroidery and clothing. Tourists often buy these items and therefore, it allows for the children to be able to grow in their education and gain economic empowerment. It has been able to improve the livelihoods of over 15,000 children in a Yerwada slum with economic empowerment and education. The aforementioned solution is a general solution and therefore does face issues in regards to scalability. For example, it is limited to slums within certain regions of the Middle East and

India. In addition, many educational programs do not actively incorporate women as some countries deem them inferior. When working to address particular issues, delegates must take into consideration scalability and accessibility and how to improve solutions to incorporate all residents in slums.

Questions to Consider:

1. What is the current situation in your country with regard to urbanization and slums?
2. What rights should slum dwellers have?
3. How can more effective ways for slum development be created?
4. Are there any programs or frameworks that your country has implemented?
5. What can be done on an international, regional, and local level to provide improved access to basic services in slums?
6. How does COVID-19 affect slums? What has your country done to slow the spread of coronavirus and other illnesses within these highly populated areas?

Sources:

1. "About the Sustainable Development Goals – United Nations Sustainable Development." *United Nations*, United Nations, www.un.org/sustainabledevelopment/sustainable-development-goals/.
2. Borgen, Clint. "Poor Living Conditions for Those Who Live in Slums." *The Borgen Project*, Clint Borgen Http://Borgenproject.org/Wp-Content/Uploads/The_Borgen_Project_Logo_small.Jpg, 22 Mar. 2018, borgenproject.org/poor-conditions-in-slums/.
3. "Cities Alliance - Cities Without Slums." *UN*, www.fukuoka.unhabitat.org/programmes/detail04_06_en.html.
4. Hart, Maria, and Robin King. "To Fix City Slums, Don't Just Knock Them Down: Involve Residents in Upgrading Efforts." *World Resources Institute*, 20 Nov. 2019, www.wri.org/blog/2019/11/fix-city-slums-dont-just-knock-them-down-involve-residents-upgrading-efforts.
5. "History, Mandate & Role in the UN System: UN-Habitat." *UN*, unhabitat.org/history-mandate-role-in-the-un-system.
6. "Monitoring the Performance of the Cities Alliance: Cities Alliance." *Home*, citiesalliance.org/who-we-are/accountability/monitoring-performance-cities-alliance.
7. "Poverty and Urbanisation - IN India." *United Nations*, United Nations, in.one.un.org/poverty-and-urbanisation/.
8. Project, Borgen. "Poor Living Conditions for Those Who Live in Slums." *The Borgen Project*, Borgen Project

Https://Borgenproject.org/Wp-Content/Uploads/The_Borgen_Project_Logo_small.Jpg, 16 May 2020, borgenproject.org/poor-conditions-in-slums/.
9. Reeves, Philip. “COVID-19 Infection Rate In Rio's Favelas Far Exceeds Official Count, A New Study Says.” *NPR*, NPR, 25 June 2020,

Topic B: Impact of Climate Change on Coastal Cities

Background:

Climate change has been a recognized ongoing issue since the mid-1990s, and it poses a large threat to our international community. Although climate change is caused by a multitude of factors, the most notable factor is carbon dioxide and greenhouse gas emissions. These two factors result in the rising of temperatures to be over four degrees Fahrenheit above pre-industrial levels. The rising temperatures result in the polar and ice sheets melting into the ocean, causing rising sea levels. In the last century, sea levels have risen from 1.7 to 2.3 millimeters yearly. In some areas, the average sea level has risen about 8-9 inches. This poses a threat to an estimated half a billion people across the international community. 8 of the world's largest cities are located near a coast, according to the U.N. Atlas of the Oceans. In addition to this, an estimated 670 cities and approximately 800 million people will be exposed to the rising seas and effects of climate change. With this in mind, the UN-HABITAT works to ensure that coastal cities and low-lying island countries are prepared to face these adverse effects. In both the Middle East and North Africa, many refugees have been fleeing these areas due to political and economic turmoil. With climate change impacting the global community, the emergence of the climate refugees have become more common. It is estimated that around 650,000 and 1.7 million people from the Pacific region may be forcibly displaced to flee the adverse effects of rising sea levels. Many of the refugees come from coastal cities and low elevation islands. In a study done in 2017, it was estimated that 18.8 million individuals will be displaced from natural disasters. Many small island residents such as Tuvalu and the Maldives have begun seeking asylum. Currently, many of the individuals that have been seeking asylum have not granted due to it not being explicitly stated in the 1951 Refugee Convention. The UN-HABITAT must advocate for human settlements in coastal areas to be prepared for any disasters coming. This can be done through proper urban planning and climate-proofing strategies. Delegates must prepare to carry out the UN-HABITAT's mandate by identifying risks at all stages of urban development and preparing contingency plans such as evacuation centers. Climate proofing infrastructure must also be put into place given the uncertainties of natural disasters. Cities located on the coast are more prone to severe and frequent natural disasters and must take measures to be prepared. Climate proofing infrastructure involves updating pre existing measures against certain hazards to include the severe natural disasters from climate change. Disasters such as storms, cyclones, hurricanes, and earthquakes can cause cities to suffer from flooding and transportation damage. It can cause airports to close, houses to collapse, telecommunications to stop, and ruin the quality of lives. All levels of government and its stakeholders must form urban planning initiatives with accurate risk assessments to mitigate any social, economic, and environmental harm to all cities. Institutionalized disaster relief and prevention plans must also be implemented in the international community to combat the effects of climate change. According to the EM-DAT, an estimated 6,873 natural disasters occurred worldwide in the last twenty years. It has shown to have an increase of 10.5 disasters every year resulting in an additional one-billion-dollar disaster every four years. Policies must be institutionalized within to successfully have disaster relief preparation. Rather than just early warning systems, all members of the community must be educated on what to do if these disasters do occur. Most importantly, establishing partnerships

with both the government and various sectors must be institutionalized to implement climate change initiatives that reduce emissions, uplift the urban poverty, and assist climate-proofing infrastructure. Coastal cities depend on their environment of water and seafood to grow their economy. However, with the increase of global temperatures, an increase in chronic flooding has risen and it is estimated that as little as 670 coastal communities will be impacted annually. This is a rising threat of chronic flooding and this can harm coastal cities infrastructure, economies, and its residents. With this in mind, coastal cities must take flood management systems into consideration. For example, many Asian cities have begun climate-proofing their cities through having retention areas and swales. These areas allow for stormwater to be absorbed by grass and other alternative methods should be implemented in cases of flooding. Urban planning and infrastructure must account for these methods to reduce damage in cases of emergency.

UN Involvement:

The issue of climate change has been recognized by the United Nations in 1994, with the creation of the United Nations Framework Convention on Climate Change. It has near-universal membership with over 197 countries that have ratified it. This Convention works to decrease the greenhouse gas concentrations and emissions to allow the environment to adapt to climate change. The United Nations have been actively working to combat climate change through international cooperation. In December of 2015, the United Nations Climate Change Conference was held to address the pertinent issues of climate change. The outcome of the conference resulted in the 2015 Paris Agreement which has signatures from 195 countries to work towards reducing the global temperature by a minimum of 1.5 degrees Fahrenheit. It builds upon the Convention to undertake efforts to combat climate change and adapt to its effects. This Agreement allows for an in-depth framework and support for developing countries. Sustainable Development Goal 13 works to address Climate Change and implements the Paris Agreement. It recognizes that the adverse effects of climate change are impacting the global community with weather events becoming more frequent, sea levels rising, and the detrimental effects on the global economy. The United Nations includes this goal for “cooperation, green transition, green economy, sustainable, and inclusive growth”. The United Nations Human Settlement Programme has been active in combating this issue with the Cities and Climate Change Initiative. It works to “help counterparts to develop and implement pro-poor and innovative climate change policies and strategies.” The CCCI assists developing countries in making sustainable choices and urban development choices for coastal cities. It works to focus on the difference between adaptation and mitigation. The CCCI defines adaptation for the cities and government to implement measures against the immediate effects of climate change. Meanwhile, mitigation involves reducing greenhouse gas emissions and the causes of climate change. The CCCI spearheads the UN-HABITAT’s efforts in urban development and green energy development in cities and has been able to decrease carbon emissions in Nigeria by over 15%. Urban development must remain sustainable and remain in accordance with the UN-HABITAT’s mandate for development in coastal cities. A large issue of climate migrants has recently arisen, with the increasing sea

levels. This increase results in many low-lying coastal cities and islands to be impacted. This displaces the inhabitants, and causes these individuals to seek asylum or refuge. The United Nations High Commissioner for Refugees has been working to specify the term of climate migrants and refugees in cases of disaster displacement. They have been able to create a planned relocation guidance plan with its partners that countries can implement in cases of disasters. The UNHCR has been providing legal advice in regards to rights of climate change and this is significant for those in coastal cities who have the potential or have already been displaced from rising sea levels. Various strategies have been created such as the *United Nations International Strategy for Disaster Reduction* that works to address the increase of natural disasters that occur. The UN has also created the Inter-Agency Task Force on Climate Change and Disaster Risk Reduction which puts forth information and recommendations such as the one aforementioned. It includes expanding knowledge for climate change to all communities to understand hazards and climate change development. It has succeeded in assisting coastal countries such as Vietnam through the implementation of sea walls.

Case Study: The United States

All countries are at risk of human resettlement from climate change, including the United States. The United States continues to have the fastest urban growth rates in its coastal cities. The National Oceanic and Atmospheric Administration (NOAA) has projected that the increase of greenhouse emissions will result in over 4.3 million Americans having to relocate due to chronic flooding. This is only one of the many natural disasters, and the numbers grow exponentially larger with other disasters. The United States utilizes its coastal cities as tourist sites and has the major issue of urban planning. It is estimated that by 2050, the United States will be required to have an approximate of $35 billion due to damage on Florida's coast. The region currently has 15 million people living in the coastal regions who will likely have to relocate. These regions are popular due to the natural environment of beaches and the local attraction. This region will have to safeguard its infrastructure to withstand the increasing number of natural disasters. The United States has begun decreasing its carbon dioxide emissions with the Clean Power Plan. It works to reduce carbon production with limits on the energy sector. By 2030, it is estimated that there will be 870 million fewer tons of carbon pollution. Although the aforementioned solution decreases contributions to climate change, the safeguarding of coastal cities is left up to individual states. A national plan should be introduced to climate-proof American states and cities. If no action is taken, it is estimated that by 2025, over $4 trillion will be lost in gross domestic products and an additional 2.5 million jobs. A collaborative effort across the nation is imperative to curb the effects of climate change on coastal cities.

Bloc Positions:

Western Bloc: 35 of the largest 40 cities are coastal cities as they are located near oceans and rivers. The Western bloc has been spearheading ventures in climate-proofing the countries. For example, the Dutch coastal cities have been proactive in managing sea levels through

implementing methods that are outlined by the United Nations. They have begun constructing flood protection and have created a 3,700km network of dams. This city of Rotterdam has been able to begin measures of protection as it is 90% below sea level. Although this may be the case in some nations, others have yet to begin planning and implementing measures against the imminent danger of climate change. Many coastal cities in the United States are prone to chronic flooding in upcoming years. It is estimated by the National Oceanic and Atmospheric Administration (NOAA), that by 2100 an estimated 13.1 million individuals will be forced to relocate. Cities such as Miami, Florida, are estimated to lose over 3.5 trillion USD from the impacts of flooding by 2070. To prevent this, countries in this location must continue to make efforts to reduce their carbon emissions as well as preventative measures for their cities. Issues to address include urban planning and revitalizing coastal communities in regard to tourism. Many countries in this bloc gain revenue from coastal cities due to its natural environment and its popularity. Over $1.9 trillion USD from coastal industries contribute to the United States economy, and remains a large portion for countries in the Western bloc. It is of utmost importance to implement climate-proofing measures in both short and long term capacities to ensure that economies and coastal populations will be less impacted.

Latin America and the Caribbean Bloc: The Caribbean and coastal cities of this bloc are at high risk of losing their land from the rising sea levels. This region consists of over 7,000 individual islands and 13 sovereign island nations. This region contributes less than 7% of global greenhouse gas emissions, however, faces severe threats from the adverse effects of it. This region is projected to be one that is prone to high risk as over 14 million Latin Americans reside in areas of high risk. Many cities and countries continue to utilize oil and fossil fuels for energy. Over 89.9% of electricity in Jamaica comes from these sources resulting in an increase in carbon emissions. Countries in this region must strive to reduce carbon emissions. Barbados has been investing in green economy initiatives by moving its energy sources to renewable energy. It is estimated that they will save over 280 million USD from this venture, and also assist in decreasing emissions in this area. Many of the islands in this region are also predicted to disappear completely with the increasing sea levels. This will create a strain on the countries that are not coastal, as many of the climate refugees will begin to make efforts to seek asylum. According to the Intergovernmental Panel on Climate Change, over 613 extreme climate events have occurred within this region over a span of thirteen years, and will continue to worsen. Extreme weather such as droughts and heavy rains have led to water scarcity in this region. Freshwater availability has significantly been decreased due to lower precipitation rates and higher sea-level rise. It is estimated that coastal infrastructure damage would amount to approximately $940 million dollars for the largest cities in this bloc, with an additional $22 billion from the Caribbean over the period of 2050 to 2100. These countries must make efforts in coastal communities and landlocked areas to improve their energy sources and prepare for adaptive capabilities to increase extreme weather.

African Bloc: Nationally low elevation coastal zones consist of 134 inhabitants per square mile however in Africa, it amounts to a population density of 491 inhabitants per square mile. With the increase of urbanization, it is estimated that Africa's population will rise at a rate of 3.3% over the span of the next thirty years. In Senegal specifically, it is estimated that the population will rise to over 50% by 2060. With this in mind, the African bloc is severely at risk of the

effects of climate change which includes a decrease of access to clean water, food production, and economic activity. Annually, an estimated 2 million Africans are exposed to floods and an additional 28 million live in high hazard zones. Abidjan is one of the coastal cities that have faced the adverse effects of floods and has an asset exposure of $42 billion. Many coasts of the African bloc have begun implementing climate-proof structures such as that of mangroves. These allow protection from storm surges by absorbing water and directing it elsewhere, these projects are cost-effective. However, with the increased salinity from rising ocean temperatures, it's effectiveness has significantly decreased. Action must be taken to improve climate-proofing measures to ensure the adaptability of the environment in this region. Saline water has been encroaching onto inland water especially in coastal areas. This results in many freshwater sources to become salinated and decreases the amount of drinking and irrigation water. African nations already suffer from weak sanitation and addressing clean water sources is imperative. In Ghana, over 2.2 million people depend on fishing for their livelihood and with the increase of temperatures, ocean acidification has damaged many fish species. Adaptation to climate change is necessary in this area with long term planning in infrastructure, sanitation, and economic avenues to allow for sustainability in the coastal cities.

Asian-Pacific Bloc: Eight of the ten countries that are most at risk of rising sea levels are a part of the Asian-Pacific region. The People's Republic of China alone is estimated to have chronic flooding which impacts approximately 145 million people. One of the countries most at risk is the Maldives, which is one of the flattest countries on the earth. This island has approximately 50,000 inhabitants and the number continues to grow. Much of the freshwater in this area has been impacted with the rising sea levels and saltwater infiltration into these sources. It results in the whole island population relying on water from the center of the island, which is predicted to diminish in the next century. However, this island has begun its climate proofing ventures of land elevation to protect its coastal resorts which assist their economy. Although this has occurred, contingency plans are being formed such as moving to another island that has a higher elevation in case of their island being washed away. Some countries in this region have begun to build resilience towards climate change, meanwhile most have not. Many countries in this region have recently begun transitioning towards utilizing renewable energy sources. In Asia, India accounts for 24% of deaths from natural disasters. The implementation of climate proofing infrastructure can assist in developing cities to prevent further human devastation. Many of the coastal cities within the overall bloc lack access to basic needs of shelters, and with the implementation of climate proof infrastructure, the quality of living can be greatly improved. Countries within this bloc must develop short term climate resilience strategies to protect citizens and infrastructure from the chronic natural disasters. In addition, urban development in coastal cities must account for the effects of climate change and plan for long term strategies to manage settlement issues from the rising sea levels.

Basic Solutions:

When combatting the effects of climate change on coastal cities, it is necessary to address the plethora of issues that arise. Both long term and short term solutions must combat the rising

sea levels, lack of climate-proofing infrastructure, scarcity of clean water, relocation, and lack of disaster relief initiatives. One solution that has been gaining support from the international community is the Sponge City Concept. This technology has been widely implemented within China to combat flooding in urban areas and is a part of climate-proofing. It works to create ecosystems within urban environments such as the Nangang Park. This park includes permeable pavements, rain gardens, grass swales, artificial ponds, and wetlands, to assist stormwater management. The excessive rainfall and flood waters are absorbed through soil infiltration and stored in underground tunnels and tanks. This excess water is then discharged into rivers following the levels of water in them are low enough. Although it takes extensive urban planning, it has been able to retain 70% of storm water within Wuhan. The solution that was previously mentioned is one of the ways that nations have been combatting the effects of climate change. It is a general solution and requires further in depth ventures to assist the scalability. These parks are not time-effective and cost-effective, thus making it not as applicable to less developed countries. To remediate that, delegates must come up with detailed long-term and short-term solutions to protect coastal cities.

Questions to Consider:

1. Does your country include coastal cities, or is it landlocked? If you have coastal cities, how has it been affected with the increasing sea levels?
2. Has your country begun implementing climate-proof infrastructure into development? How has your country seen improvements to the adverse effects of climate change? If no ventures have yet to be taken, how has the coastal cities been impacted?
3. What methods has your country taken up in regards to disaster relief measures?
4. What are your country's policies regarding climate refugees and migrants? Has your country had to relocate individuals from disaster related events?
5. Does your country currently utilize renewable energy sources to decrease greenhouse gas emissions?
6. How can the international community assist island countries that are at risk of losing land from the rising sea levels? What preventative or contingency measures should be taken into consideration?

Sources:

1. “Cities and Climate Change Initiative: UN-Habitat.” *UN*, unhabitat.org/cities-and-climate-change-initiative.
2. “Climate-Proofing Coastal Cities against Rising Sea Levels and Floods.” *URBAN HUB*, www.urban-hub.com/energy_efficiency/climate-proofing-coastal-cities-against-rising-sea-levels-and-floods/.

3. Ki-moon, Ban, and Patrick Verkooijen. “Climate Change Threatens America's Cities. We Need to Act Now to Protect Them.” *USA Today*, Gannett Satellite Information Network, 21 Jan. 2020, www.usatoday.com/story/opinion/2020/01/21/infrastructure-investment-needed-climate-proof-u-s-cities-states-column/2821100001/.
4. “The Future We Don't Want - Staying Afloat: The Urban Response to Sea Level Rise.” *C40*, www.c40.org/other/the-future-we-don-t-want-staying-afloat-the-urban-response-to-sea-level-rise.
5. “The Human Cost of Natural Disasters: a Global Perspective.” *The Human Cost of Natural Disasters: a Global Perspective | PreventionWeb.net*, www.preventionweb.net/publications/view/42895.
6. “It's Time for Latin America to Adapt to Global Climate Change.” *World Bank*, www.worldbank.org/en/news/feature/2016/07/18/america-latina-llego-hora-adaptarse-calentamiento-global.
7. Lu, Denise, and Christopher Flavelle. “Rising Seas Will Erase More Cities by 2050, New Research Shows.” *The New York Times*, The New York Times, 29 Oct. 2019, www.nytimes.com/interactive/2019/10/29/climate/coastal-cities-underwater.html.
8. Mbaye, Ahmadou Aly. “Confronting the Challenges of Climate Change on Africa's Coastal Areas.” *Brookings*, Brookings, 30 Jan. 2020, www.brookings.edu/blog/africa-in-focus/2020/01/16/confronting-the-challenges-of-climate-change-on-africas-coastal-areas/.
9. Morrison, Jim. “The Cost of Rising Seas: More Than $400 Billion .” *Wired*, Conde Nast, www.wired.com/story/the-cost-of-rising-seas-more-than-dollar400-billion-and-lots-of-angst/.
10. Nicola Jones is a freelance journalist based in Pemberton, et al. “How Fast and How Far Will Sea Levels Rise?” *Yale E360*, e360.yale.edu/features/rising_waters_how_fast_and_how_far_will_sea_levels_rise.
11. Parker, Laura. “Sea Level Rise Will Flood Hundreds of Cities in the Near Future.” *National Geographic*, 3 June 2020, www.nationalgeographic.com/news/2017/07/sea-level-rise-flood-global-warming-science
12. Poon, Linda. “UN Climate Report's Dire Warning to Coastal Cities.” *Bloomberg.com*, Bloomberg, 26 Sept. 2019, www.bloomberg.com/news/articles/2019-09-26/un-climate-report-s-dire-warning-to-coastal-cities.
13. “Sea Level Rise: Risk and Resilience in Coastal Cities.” *Climate Institute*, climate.org/sea-level-rise-risk-and-resilience-in-coastal-cities/.
14. *Unfccc.int*, unfccc.int/news/global-sea-level-rise-is-accelerating-study.
15. “UNITED NATIONS Climate Change - Summit 2019.” *United Nations*, United Nations, www.un.org/en/climatechange/.
16. United Nations High Commissioner for Refugees. “Climate Change and Disaster Displacement.” *UNHCR*, www.unhcr.org/en-us/climate-change-and-disasters.html.