



ECOSOC

PACMUN 2017

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TABLE OF CONTENTS

Director Letter	2
Sources: Topic A	21
Sources: Topic B	23

TOPIC A: WATER SANITATION

Topic Introduction	3
History	3
Past Action	4
Current Situation	5
Bloc Positions	6
Case Studies	10
Guiding Questions	12
Further Research	12

TOPIC B: RURAL INFRASTRUCTURE

Topic Introduction	13
History	13
Past Action	14
Current Situation	15
Bloc Positions	17
Case Studies	18
Guiding Questions	19
Further Research	20



PACIFIC MODEL UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL

Dear Delegates,

My name is Jason Snow, and I am so enthusiastic to serve as Director of ECOSOC at PACMUN 2017. I am a senior at Kentwood High School and I am going on my fourth year in MUN. I have attended 3 conferences as a delegate, and have served as Chair of ECOSOC at PACMUN 2016 and Director of JCC bloc II at KING-MUN 2017. I am currently serving as Vice President in my school's MUN club where we host an educational MUN conference for the local schools without MUN clubs. I hope to help all delegates have a fun and (hopefully) diplomatic experience at PACMUN this year.

I am privileged to serve with Beatrice Duchastel de Montrouge. Her experience in Girl Scouts has allowed her to have a variety of experiences she hopes to be able to bring to her PACMUN experience. She also will be working to better the PACMUN experience for every delegate in our committee. Our dais this year will be dedicated to making sure every voice is heard and no one feels left out. I am also privileged to have Sherveen Mehrvarzan serving as Chair with me this year. His experience as the secretary in his school's ASB will help him lead in the committee and listen to all delegates concerns and issues that may rise during the conference. He is dedicated to ensuring every delegate has the ideal MUN experience this year at PACMUN 2017.

This year we as the dais have selected two topics that are not only serious issues people all around the world face, but issues that anyone - even students - can help fight. Accessibility to clean water and developing more stable infrastructure, especially in times of crisis, are stepping stones to creating more stable environments in areas of the world where stability is a luxury few have. With more and more NGOs being involved in fighting issues that originate from unsanitary water - as well as combating natural disasters that are made worse from improper infrastructure - being able to cause real-world change has never been easier. As a dais, we hope after discussing and contemplating these real-world issues people around the world are suffering from, delegates will be inspired to go out and help. Together, we can all make a lasting difference in the world.

Signed,

Jason Snow

Director, ECOSOC

INTRODUCTION: WATER SANITATION

As of now, water scarcity affects 40% of the global population and roughly 1.8 billion people use a drinking source that is fecally contaminated (1). Along with the issues regarding people accessing clean water, about 2.8 billion people lack the most basic sanitation services, such as toilets.⁽¹⁾ As a result, the affected populations have increased health concerns, including an increased risk to many communicable diseases, especially those that are waterborne. Additionally, these populations tend to have less educational and economic opportunities due to the time and energy that is being devoted to the simple task of finding clean water. As due to one of the Sustainable Development Goals (SDG), ECOSOC is working towards providing clean water and sanitation to all by partnering with several Non-Governmental Organizations (NGO's) as well as fostering innovation to help make water and sanitation more accessible.

(1) <http://www.un.org/sustainabledevelopment/water-and-sanitation/>

HISTORY

Access to clean water is a significant factor in a society's Standard of Living. In 2006, the Inter-American Commission on Human Rights identified access to clean water a human right when Paraguay violated multiple articles of the American Convention against the people of Sawhoyamaxa. In doing so, the Inter-American Commission made a statement to the world declaring if a nation denied its people access to clean water when the nation had access to clean water, they were in violation of basic human rights. Countless other international agreements have also declared clean water a basic human right, including the UN Human Rights Declaration.

Recently, the United Nations just ended a "Decade of Action" against inaccessibility to clean water. From 2005-2015 countries gathered together to help each other establish sustainable ways of accessing clean water. The UN recognized issues that rose up, such as increasing populations and lack of resources. The Goal of the Decade of Action was to help reach goals previously committed to in the Millennium Declaration, the Johannesburg Plan of Implementation of the World Summit for Sustainable Development, and Agenda 21 that relied on access to clean water.

Many NGOs are also starting to tackle inaccessibility to clean water on a global scale. Companies like Water.org and charity:water are emphasizing the production of wells in areas where streams and other freshwater sources

are not easily accessible. Other NGOs work on establishing ways of cleaning water, such as boiling water, so that freshwater sources don't spread disease throughout populations. Together, these NGOs have brought clean water into thousands of communities worldwide.

Inaccessibility to water is still a major issue, however. An estimated 3.75 million people die each year from waterborne illness, most of those people being children. Many of these diseases are preventable if treated properly, however, an inaccessibility to proper clean water and medical tools inflates this number. An ability to access clean water will allow millions of lives each year to be saved.

PAST ACTION

There have been multiple instances where the issue of accessibility of clean water and proper sanitation in developing countries have been tackled through UN action. One of the more very known ones is called the Sustainable Development Goals for the year 2030. These are a set of 17 goals adopted by the UN in the September of 2015, which are set priority to accomplish by the year of 2030. The sixth goal in this resolution deals with clean water and sanitation around the world. Specifically, this goal deals with the "946 million people without any facilities" for water sanitation and hopes to "achieve universal and equitable access to safe and affordable drinking water" to all the 946 million people without it (Sustainable Development Knowledge Platform, UN Sustainable Development Goals). In addition to giving safe access to water, the development goal is also set to "improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials," and focuses on the reuse and conservation of water globally (UN Sustainable Development Goals). Each sub-goal directly attacks the problem of water accessibility and proper sanitation throughout the world.

Other minor example of UN action towards the accessibility of clean water and proper sanitation in developing countries were contributions of the General Assembly. Resolution 64/292 adopted by the General Assembly on July 28th, 2010. The resolution targets the human right to water and sanitation. The resolution clearly states that safe and clean drinking water "is essential for the full enjoyment of life and all human rights," and calls upon different international organizations to provide financial aid through technology transfer and international assistance (Resolution 68/292 First Operative). Other GA resolutions on water efficiency include "55/196 of 20 December 2000, by which it proclaimed 2003 the International Year of Freshwater, 58/217 of 23 December 2003, by which it proclaimed the International Decade for Action, "Water for Life", 2005-2015, 59/228 of 22 December 2004, and 61/192 of 20 December 2006, by which it proclaimed 2008 the International Year of Sanitation" (Res-

olution 68/292 First Operative). Each resolution provided a clear focus on clean water and the different factors that play into the goal of providing clean water to people all over the world.

Different Organizations and UN Bodies also contributed with different resolutions that partake in the battle against the pollution of dirty water. Some of their major resolutions include 64/24 by the World Health Organization, passed on the 24th of May in 2011. Simply, the resolution's core aspects include "national public health strategies, so that they highlight the importance of safe drinking-water," and the promotion "to strengthen the intersectoral policy frameworks and institutional mechanisms for integrated management of water" in different countries (WHO 64/24 Resolution). Also, the UNHRC (United Nations Human Rights Council) passed resolution 2/104 in the August of 2007, which underlines the "access to safe drinking water and sanitation as a human right, defined as the right to equal and non-discriminatory access to a sufficient amount of safe drinking water for personal and domestic uses" (The Human Right to Water and Sanitation). Overall, these different resolutions pertain to a single factor about water scarcity and sanitation or tackle the problem as a whole.

CURRENT SITUATION

On the 25th of September in 2015, the United Nations met in New York City, NY and established the Sustainable Development Goals (SDG). Among these, one goal was to broaden accessibility of clean water and sanitation to every member state by 2030.⁽¹⁾ Despite this being a daunting task, modern technologies and several non-governmental organizations (NGO's) make it possible. However, with each passing day this issue becomes more and more pressing. Clean water and sanitation is a worldwide issue, affecting developing nations far greater than developed nations.⁽²⁾

Everyday, people in developing countries travel for hours to collect water for their families, taking time away from education and work, creating barriers in society.⁽³⁾ Additional consequences that developing nations have to face concerning clean water were revealed, in a 2015 report by the World Health Organization (WHO) and sanitation charity WaterAid. Over a third of hospitals and clinics reportedly had nowhere for staff and patients to wash their hands. 40% did not have access to even a single source of water. These realities lead to even more startling numbers, like how half a million babies, not even a month old, die annually.⁽⁴⁾ An even greater concern for the international community is that these problems will only grow as a nation's population increases. However, there is some optimism to be found concerning clean water and sanitation.

(1) http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

(2) <http://www.geo-life.org/clean-water.html>

(3) <http://www.reuters.com/article/us-health-water-idUSKBNOMDOZI20150317>

(4) <http://www.geo-life.org/clean-water.html>

In a joint study by the World Bank, United Nations Children's Fund (UNICEF), and World Health Organization (WHO) published in January 2016, it was estimated that extending basic water and sanitation services to the unserved would cost US\$28.4 billion per year from 2015 to 2030, which is roughly 0.10 percent of the global product of the 140 countries included in its study. It also found that not investing in clean water and sanitation costs 4.3 per cent of sub-Saharan African GDP and 6.4 per cent of India's GDP.⁽⁵⁾ The cost of water and sanitation is not only attainable, but would help solve economic problems as well.

Modern technologies such as desalination are also helping the cause. This is the process of removing minerals from salt water, which is abundant, in order to make it fresh and clean. Unfortunately, desalination is still relatively expensive and uses large amounts of energy. However, implementing nanotechnology in filtration has been a new and promising breakthrough. For about US\$2.50 a year, microbially safe water can be provided for a family.⁽⁶⁾ But, none of these solutions have addressed the main underlying issue: the fact that developing nations do not have the proper infrastructure to be able to provide basic sanitation and clean water. Any potential solution will need to address this to be viable.

⁽⁵⁾ <http://documents.worldbank.org/curated/en/415441467988938343/pdf/103171-PUB-Box394556B-PUBLIC-EPI-K8543-ADD-SERIES.pdf>

⁽⁶⁾ <https://www.theguardian.com/sustainable-business/new-water-technologies-save-planet>

BLOC POSITIONS

Asia & the Pacific

There are a significant amount of people without access to improved drinking water and sanitation in the Asia and the countries that lie on the Pacific Ocean. This crisis hasn't been attended to for many years now and is starting to take influence onto the countries that are being directly impacted by it. Even though in the past the Asia-Pacific has reduced the amount of people who don't have access to sanitized water from 27% to 8 % still doesn't help the crisis that is going on today. For example, in places like Japan, the government has spent over %00 million dollars on the water crisis due to the contamination from Fukushima. The main problem in general in Japan is the lack of clean reusable water there because of all the pollution and outbreaks of radioactive waste in the area. In general, since people are moving to more urbanized locations there are more prone to drink more water, which causes a great flux in the amount of clean water that is distributed in the urban areas. However, the Asia-Pacific's water situation doesn't nearly encapsulate the problem that other continents are having like Africa, but if they don't tackle the problem they will only get worse and worse.

Singapore is a great example of how people from the Asia-Pacific that use recycled water, desalinization, and artificial reservoirs to meet water demand. Countries should be looking up to countries like Singapore in order get the research and help to clean their water too. In the past Asia and the Pacific have worked with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). In addition to the ESCAP, they have worked with other UN-Water Members to mitigate the problem in which they are having in the urbanized locations. Countries such as Australia are in trouble when it comes to the lack of accessible and clean water. Since rainfall has been lacking over the many years, people in Australia have decreased their water usage by over 8% in the past few years. But as of today, places in Australia like Perth are lacking water due to the climate which needs to gain attention.

Groundwater irrigation is one of the primary sources of income in countries in the Asia-Pacific region. However, over-exploitation of groundwater beyond sustainable limits in dry regions carries the added risk of threatening agricultural production and people's abilities to earn an income and feed their families. In general, the Asia-Pacific region is hesitant to work with other countries to fix the problem in developing countries across the world, unless they can mitigate the problems in their own developing countries by getting in touch with outside sources.

Middle East

The Middle East has had great improvement from the 1990's to today, but there is still a lot to be covered and to be tackled in the Middle East. Water is not only affecting the people; throughout Syria, Yemen, Jordan, Iraq, and Iran the crisis is also affecting the plants and the land itself. Through the process of desertification many of the suitable lands for agriculture have been destroyed due to the lack of any water in general, may it be clean or not. This effect most of the population in the Middle East because many sellers and traders rely on the product to sell and for people to buy from there farming places that are now just dried up. Leaving people starving and wondering on what to do. Moving on the facts of the situations the Middle East and North Africa combine only have the 1% of the world's renewable water resources.

A combination of factors causes this scarcity. Firstly, the region experiences arid conditions, low rainfall, and high levels of evaporation, leading to limited naturally available water resources. Yemen and Iraq are dealing with this problem as of now, where due to rapid climate change the people of both countries have started to run out of water and are resorting to use shipped water that comes to villages even once a while. However, that is still not suitable for the people because the amount of water that comes in is extremely minimal and doesn't last very long. Secondly, the Middle East suffers from ineffi-

cient usage and mismanagement; usage of old water networks; population growth; pollution; cultural and social issues; and inappropriate legal, political, and economic frameworks. Iran is one of the more prominent countries that fit these circumstances. Iran has lacked the economic structure and political direction in order to receive help from outside sources, or even beginning to develop a program to solve the water crisis in their country. Due to the lack of rainfall and the increase of pollution Iran is going down a hole many would regret.

Last is the overall access to water. In places like Syria to receive water people are required to travel long distances on the humid terrain. People there rarely get sent water to their local village or town, people go days or even weeks without access to clean water. Over 4 million people are lacking water in the city of Damascus, Syria. To solve or to mitigate the problem of water sanitation and accessibility to clean water, countries in the Middle East need to take on the sources of the problem and then they will gain a larger progress through this crisis. The Middle East; however, isn't always open to outside help and gaining allies varies with some countries.

Europe & European Union

Europe is on the other side of the problem of accessibility to clean water and sanitation. They have one of the lowest rates of people without clean drinking water throughout the entire world. Most people in Europe have access to drinking water of good quality, not only is it helping their people but it is also helping and improving their agricultural lifestyle and their ecosystem. However, European countries still do have a problem with chemicalized water and water that has been through different cooption of organisms like phytoplankton, algae, and macrophytes.

Pollution is the largest factor that is threatening Europe's water supply today, and countries like Germany and France are already working together to fix the problem. They have trouble with the diffusion of materials in water, and keeping it consistent throughout the many countries. But this problem is easily mitigatable through collaboration with the Western Blocs and the UN. On the other hand, the European countries are open to be working with other countries on the problem of pollution of water and are open to helping developing communities out with their access to water sources.

China

As of now China is on its way to becoming one of the largest countries to be affected by water crisis later in 2030 if they keep up what they are doing right of now. Because of that the Chinese government has taken precautions

on the water usage, and have also set aside money to be spent on water infrastructure between 2011-2020. 85% of the water used in China is for the agriculture and industries and the competition for water resources between agriculture and industry could impact global trade and prices of the good in China for a long time. China isn't really looking at how the industries and agriculture are overusing the water and are causing water sanitation and resources to decrease for urban populations and developing areas in China. Just like the Asia-Pacific there is depletion of groundwater through China, which will affect the economic state of China if it starts to deplete due to the lack of water in many areas. At the rate in which China is going at they are using more water than they can supply, which is one of their largest problems, and water sanitation due to pollution is after. China is open to get help from certain countries that they have trusted in the past, but aren't always open to countries with different political views.

Latin America

Latin America deals with the primary problem of the access to clean and sanitary water. As many of the countries in South America are near water and have access to water in general. They are not allowed to drink the water, because it is a health hazard. Around 36 million people are living without clean, safe drinking water. Brazil for example has a large population - 203 million people. While access to safe water and sanitation has increased since 2010, there are still deep inequalities in access among the country's geographical regions, rural and urban communities, and households. Currently there are four million people without access to safe water and 35 million without proper sanitation.

Another issue that different regions in Latin America have are that many people are extremely poor and are in poverty, which means that they live in rural areas and they have no access to water in general and can't afford the clean water. Argentina is in this situation as of right now where around 52% of Argentinians don't have access to clean correct sewage and around 21% don't have access to clean sanitize water. Even though Argentina has acted in the past, their efforts have been futile. Latin American countries need help through many of the technologies that that the Western Bloc has through the different sanitation methods and the different resources in which they would help the cleaning and treatment of the water making it more usable for the people there. The Latin American countries are open to help and are very open to be helped by surrounding countries.

Central Africa

Overall the continent of Africa has suffered the most from the water crisis. 43% of people in Africa are served unsensitized water, which results in killing 16,000 kids and adults each week. Many UN bodies have provided assistance with the problem of sanitations and accessibility of water. The World Health Organization and General Assembly are just a few that give a lending hand to countries in Africa that need it most. Countries including Niger, Nigeria, Sudan, Democratic Republic of the Congo, the Central African Republic, Kenya, and many more are suffering detrimentally from this crisis and need help instantly. Niger is the largest country in West Africa, but also one of the least developed. Much of it is desert, and droughts are common, making accessing water difficult. Around 17 million people in Niger alone doesn't have access to adequate sanitation, and of that 17 million; 8 million don't have access to safe water. Niger is only of the major countries that are suffering from this problem.

According to the United Nations, Kenya's people are one of the most struggling populations in the world. With a population of approximately 36.6 million, water scarcity in Kenya has been prominent for years now, only small pot of soil is suitable for agricultural growth, but beside that there isn't any suitable land for growth. Water sources in Kenya don't provide an even amount of water to every region throughout the country, leaving most of the population without any fresh water. Moving on to the Central African Republic, people there are facing an extreme water crisis. The lack of any infrastructure and political stability are contributions towards this major cause. The lack water leaves adults with a lifespan up to only 50 years old and leave many children to die every single day. Africa needs help throughout its water crisis, and only developed nations can really help. Africa's countries are all open to work with outside countries in order to mitigate the crisis in which they are dealing with today.

CASE STUDIES

Case Study #1: WaterAid in Ethiopia

As a developing country, Ethiopia is in need of various resources. While the nation is working towards a better economy and healthier population, one of the main issues stagnating growth is the lack of clean water and healthy sanitation facilities. About half of the population of Ethiopia lacks clean water and about three-fourths (70 million people) lack access to toilets.⁽¹⁾

However, there have been several notable NGO's that have been working with Ethiopians in order to deliver a solution to the African nation. For example, Water.org has not only provided water, sanitation and hygiene to over 149,000 Ethiopians, but has also worked with local families by providing them

(1) <http://www.wateraid.org/uk/what-we-do/stories-from-our-work/catrin-finch-visits-ethiopia>

loans so they can fund their own sanitation centers.⁽²⁾

Another NGO, WaterAid, has also been working with communities in Ethiopia to support clean water initiatives. For example, in the Hidasie School community, over 1,700 students had to share a single squalid toilet block that had no running water. Many students, especially menstruating adolescent girls, would regularly miss school from the subpar sanitation facility. WaterAid was able to travel to the community and help not only build more, cleaner facilities, but also educate the community on how to build the facilities themselves. This sharing of information and education is the foundation model by which WaterAid works.⁽³⁾ By helping resolve the sanitation issue in this community, WaterAid helped ensure that not only were the school children now able to focus on their education, but also ensured that the Hidasie community was able to have the proper knowledge to combat further sanitation issues. For any solution to be possible, it will be vital that it includes community education to create sustainability.

Case Study #2: Community Involvement in Kyrgyzstan⁽⁴⁾

After the fall of the Soviet Union, the collective farms that controlled the rural water pipelines were broken up and the rural water pipeline service system liquidated. When the water service system was being rebuilt, several problems were discovered. Many pipelines had no sanitary protection zones and water treating facilities nor were they subjected to water disinfection. On top of that, deterioration of water mains exceeded 40% of their total length, with most existing systems needing capital repairs. This low access to clean water and sanitation aggravated gender politics and increased poverty in Kyrgyzstan.

In order to create a solution, the Kyrgyz Republic ensured that the water supply infrastructure was financed but allowed communities to be responsible for receipt and repayment of credits, operation and maintenance of water-pipes and would set water tariffs and water-pipe operating schedules. Later, in 2002, the government introduced the “Taza Suu” which included several projects aimed at rehabilitating the water supply and sanitation networks throughout several regions. These were to lead to an improvement in the quality of life. In order to get involved in these projects, the community made a contribution of 20% of the project costs (5% in cash and 15% in in-kind form).

Overall, these projects led to better access of rural people to safe drinking water, lower rates of infection and parasitic diseases, better drinking water quality in microbiological terms, positive changes in hygiene and sanitary skills, cooperation in solving the water supply problems, sense of ownership

⁽²⁾ <https://water.org/our-impact/ethiopia/>

⁽³⁾ http://www.theecologist.org/how_to_make_a_difference/cleaner_air_water_land/361004/case_study_supplying_clean_water_in_africa.html

⁽⁴⁾ http://www.gender.cawater-info.net/knowledge_base/case_study/kyrgyzstan_taza_suu_e.htm

and responsibility in local communities, improvement sanitation infrastructure. However, they were not all improved to the level wanted. For example, the cost of building materials rose, meaning the rural water-pipe construction and reconstruction volumes were reduced almost twofold. But despite some failures, for the most part the water and sanitation was greatly improved throughout Kyrgyzstan.

GUIDING QUESTIONS

1. What is your country's stance on helping others that lack water and the proper sanitation?
2. What can your country do in order to resolve the water scarcity crisis that is going on today?
3. How can your country provide to others that are in dire need of help?
4. Where will your country find the resources needed to mitigate the problem?
5. What has your country done in the past, and how can the country implement that to surrounding countries that lack the resources?

FURTHER RESEARCH

1. <http://www.un.org/sustainabledevelopment/water-and-sanitation/>
2. <http://data.worldbank.org/indicator/SH.H2O.SAFE.ZS>

INTRODUCTION: RURAL INFRASTRUCTURE

Currently, about 2.5 billion people worldwide have no access to consistent and reliable energy.⁽¹⁾ About 1.5 billion people lack access to phone service and only 20% of people in developing countries have access to internet- a modern amenity that is becoming a necessity.⁽²⁾ However deplorable infrastructure is not only an issue for developing countries. Many developed countries, like the United States, Australia, and South Africa, have infrastructure that has been slowly deteriorating over time. Improving infrastructure.

(1) <http://www.un.org/sustainabledevelopment/infrastructure-industrialization>

(2) <https://www.usaid.gov/what-we-do/economic-growth-and-trade/infrastructure>

HISTORY

Infrastructure failure is a leading cause in a nation's inability to become developed and self-sustaining. Many issues can come from inadequate infrastructure, such as no power, lack of sanitation, lack of education, lack of housing, and lack of efficient transportation. All of these things are necessary to help nations become more stable and self-sufficient.

In 2012, the Center for Development Research (ZEF) published a paper on the importance of infrastructure in a growing economy. ZEF declares that proper infrastructure will not only increase economic output and stability, but will also improve political economies and political strength. ZEF also suggests that proper infrastructure will allow nations to have stable population growth and decay, with longer life-expectancies and better quality of life.

USAID, a US government sanctioned international aid project, has been active in providing reliable infrastructure in unstable or developing nations. Since 2001, USAID has been involved in countless projects, such as construction of a power grid and roads in Afghanistan. Programs, such as USAID, help nations become more self-sufficient when the nation is unable to develop their own infrastructure.

Many NGOs also help develop infrastructure needs in developing nations. The development of schools in developing countries is a particularly large issue many of these NGOs are tackling, such as Building Schools for Africa. Building Schools for Africa has built over 280 classrooms in almost 90 schools across the continent, as well as establish teachers through partnerships with AidChamps. By not only providing a proper environment for learning, but establishing teachers as well, they believe they are paving the path for a more stable economy in African countries.

Other NGOs also focus on other aspects of infrastructure. Impact Construction is an NGO that focuses on infrastructural needs not only in developing countries, but also helps aid in shortcomings in developed countries as well. The current rating of America's infrastructure is a D+, which is an improvement from the 1998 grade of a D. While Infrastructure issues are most obvious in developing countries, even developed countries need to revisit their infrastructural needs.

PAST ACTION

On the topic of improvement of infrastructure in rural areas, yet again there is a sustainable development goal that deals with the problem. Based off the UN resolution's ninth goal, by 2030 there will be "resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States" (Sustainable Development Goals). On top of that, the goal will "increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020," which will allow many different industrialized buildings to have access to outside information using the web (Sustainable Development Goals). The goal tackles all aspects of infrastructure in more than just rural areas and developing countries. In addition, the goal set by this resolution are in connection to many other resolutions that provide more information on how the process will be tackled on a smaller scale. Another goal that is in the sustainable development goals that is set on "infrastructure and technology to boost agricultural productivity" is goal 2 (Sustainable Development Goal 2). Not primarily focusing on the general concept of infrastructure, however the goal deals with the agricultural and security part of infrastructure. By promoting to build different facilities and roads for transportation of materials.

On the smaller scale, other resolutions have been passed by the Economic and Social Council (ECOSOC), such as resolution 2011/17 on science and technology for development, which was adopted on July 26, 2011. By focusing on "rural development in such areas as infrastructure, telecommunications, and processing facilities," the resolution clearly directs all its efforts towards the support and finance for industrialization throughout developing countries, and especially in rural areas (Resolution 2011/17). Another resolution that emphasises infrastructure in rural areas is resolution 69/279 passed on August 7th, 2014 by the General Assembly. The resolution hopes to provide a "supportive rural infrastructure" in both agriculture and education. 69/279 addresses the improvement of these two subclasses of infrastructure by supporting small-holder farmers and increasing resilience throughout rural areas.

Other resolutions from the General Assembly include resolution A/70/386, which is on the safety and improvement on global road safety, the resolution opens help from the World Health Organization (WHO). Finally, another main resolution passed by the GA that deals with the inadequate infrastructure in developing countries and calls to improve existing roads and buildings in rural areas is resolution A/RES/S-19/2. Mainly, all of these resolutions have one concluding goal: the improvement and adaption of infrastructure in rural areas.

CURRENT SITUATION

Crumbling infrastructure can cause huge problems for developed and developing nations both. For developed countries, the problems arise when infrastructure is unable to be improved, leading to buildings, bridges, and other public works becoming dangerous hazards that could topple when disturbance occurs. For developing countries, many times they do not have the proper funds to set up the infrastructure properly, and it exists very minimally. This means that any potential solution will have to address both nations who are developed and developing.

Natural Disasters

Rural areas tend to be more vulnerable when natural disasters strike, to to how spread out buildings and people are. Another factor is that many of them do not have the most modern technologies.⁽¹⁾ When nations are hit with natural disasters, recovery becomes harder when the infrastructure is weak or nonexistent. According to a study by global risk analytics group Maplecroft published in 2011, countries that lack economic robustness and proper infrastructure have severe obstacles when trying to recover from natural disasters. While this applies more to developing nations, the study also found that the United States and Japan most economic costs as a result of natural disasters.⁽²⁾ Many developed nations have been working to create infrastructure that is more resilient to natural disasters. For example, after Hurricane Sandy hit the eastern coast of the United States in 2012, The city of New York built 16 foot walls to prevent storm surges from wrecking the city.⁽³⁾ Unfortunately, ideas like this have mainly been implemented only in large cities in developed countries, with rural communities and developing nations still at huge risk.

Economic Growth

Proper investing in infrastructure may cost more in the beginning, how-

(1) <https://today.ucf.edu/study-how-rural-communities-cope-with-natural-disasters/>

(2) <http://www.homelandsecuritynewswire.com/developing-countries-highest-risk-natural-disasters>

(3) <https://www.envisagenow.com/communities-alter-infrastructure-to-improve-disaster-preparedness/>

ever it can simulate high economic growth. In Australia, funding for road, rail and runway construction of US\$55 billion over 10 years will support growth from Western Sydney to Western Australia. This will help create thousands of jobs, allowing private-sector spending and increased household consumption to happen and boost Australia's economy.⁽⁴⁾ Investing in infrastructure allows millions of jobs to be created and boosted economies for the nations.

Increased Security

The Kayole-Soweto settlement in Nairobi used to be labeled as extremely dangerous with constant instances of theft, armed robbery, assault and gang-related crimes. Seeing this, Kenya Informal Settlement Improvement Project (KISIP) created proper infrastructure in the camp such as recreation centers and community facilities. This allowed the people living there become more educated, develop job skills, and engage in sports and arts. This led to a lower crime rate and a safer community.⁽⁵⁾

(4) <https://www.bloomberg.com/professional/blog/australia-focuses-infrastructure-growth-doubts-linger/>

(5) <http://www.environmentguru.com/pages/elements/element.aspx?id=4936982>

BLOC POSITIONS

North America

The United States of America shows the utmost concern about the use of technology in terrorism. Many of the countries in the Western bloc have the financial ability to attempt to provide solvency and implement procedures to reduce the threat that cyber terrorism poses. The United States itself has been the victim of cyber terrorism. This block is also very concerned due to the widespread use and accessibility of the internet in people's everyday lives, which increases vulnerability to attacks.

South America

Alongside the positions of the United States, members of the European bloc are majorly concerned with new and increased threats of terrorism in the digital age. If a major terrorist act were to happen to European nations, it would cause an enormous detriment to its area of impact. Due to the widespread availability of digital devices, an attack could devastate the economy and political spheres. The European Union has already taken action against the threat that cyber terrorism poses, including requiring baseline rules addressing enforcement and counteractions on cyber attacks, with Europol

overlooking enforcement of this.⁽¹⁾ The European Union included how they plan to combat this issue, using a strategy that is focused on four main pillars: prevent, protect, pursue, and respond.⁽²⁾

Europe

The United States of America shows the utmost concern about the use of technology in terrorism. Many of the countries in the Western bloc have the financial ability to attempt to provide solvency and implement procedures to reduce the threat that cyber terrorism poses. The United States itself has been the victim of cyber terrorism. This bloc is also very concerned due to the widespread use and accessibility of the internet in people's everyday lives, which increases vulnerability to attacks.

Middle East and North Africa (MENA)

This bloc of nations contain countries with differing accessibility to technology. Nations with large access to digital devices tend to be the ones with the biggest vulnerabilities. Countries in this bloc still feel like other issues occurring should take priority over this particular issue; however, they believe that this needs a plan for solvency.

Asia-Pacific

Both the regions of Africa and the Middle East should develop positions that both have the main goal of preventing cyber terrorism in the future, and do not place priority on immediate plans of action. For these areas, cyber security and the threat of terrorism through digital devices is not as of much concern, due to the lack of resources and the minimal availability of the internet in most of these areas. Instead, they should be pushing the UNODC to help provide solvency to the issues that are occurring right now, such as domestic terrorism and crime.

(1) <http://www.europarl.europa.eu/eplibrary/Cyber-security-in-the-European%20Union.pdf>

(2) <http://www.consilium.europa.eu/en/policies/fight-against-terrorism/>

CASE STUDIES

Case Study #1: Infrastructure & Poverty Reduction⁽¹⁾

The Kurung Kumey District is a rural community located in the state of Arunachal Pradesh in northeast India. The level of poverty is extremely high,

(1) <https://www.slideshare.net/TarhRamya/the-role-of-rural-infrastructure-in-poverty-reduction-a-case-study-of-kurung-kumey-district-arunachal-pradesh>

with 78% of families in 1997-1998 and 54% of families in 1992-1993 estimated to be below the poverty line. According to Kessides, better rural infrastructure promote economic growth and social development, as well as reducing poverty due to the employment opportunities that better infrastructure provide.

A study was done in order to investigate what infrastructure existed in Kurung Kumey and what infrastructure was needed. Several problems were immediately discovered. For example there were an inadequate amount of several facilities such as police stations, post offices and roads. Additionally, the majority of roads were not tarred. Of the existing facilities, some are in very poor conditions due to inadequate maintenance. Additionally, the government has little interest in building such facilities in rural areas.

Through this study, it is clear to see that the state of infrastructure in rural communities correlates directly with the level of poverty and education. Worse infrastructure will lead to a higher level of poverty and vice versa. While there is currently no solution for Kurung Kumey, it is a clear example of a community that desperately needs help.

Case Study #2: The 1996 Peace Accords in Guatemala⁽²⁾

Throughout much of the world, it is common for poor households to have little access to modern utility services, much less than wealthier societies. As a result, they rely on traditional services and tend to have a lower quality of life. This is especially true in the poor, rural, and indigenous communities of Guatemala. There, several factors explain why these communities have lower access to utilities, with one of those major factors being the inadequate development of physical infrastructure. By improving infrastructure throughout Guatemala, these excluded communities would have more access to utilities and lower rates of poverty due to the increased efficiency provided by these utilities. Additionally, the quality of life would be much higher and there would be a lower rate of disease with the clean water and sanitation provided through a stronger infrastructure.

The 1996 Peace Accords acknowledged the importance of these modern utilities and made a commitment to improve coverage to the excluded communities to make up for historic neglect. Electricity and telecommunications have undergone massive structural changes and the volume of resources funneled to rural service expansion have tripled in order to accomplish this additional coverage.

It is clear to see the change the Peace Accords have made in Guatemala. Social fund resources for rural infrastructure programs increased from US \$17 million in 1993-1996 to US \$152million in 1997-2001. Additionally, new connec-

⁽²⁾ <http://bit.ly/2wKGm2C>

tions for each service rose from 80,000 new connections per year in the period from 1993-1996 to 115,000 new connections per year for each service in the period from 1997-2001, with the traditionally excluded sectors containing the poor, rural, and indigenous communities being twice as likely to benefit from a new infrastructure connection than they would before the Peace Agreements.

The areas that have had the most significant improvements have been in telecommunications, where the teledensity index increased by a factor of five from 4.2 in 1997 to 19.7 in 2001. Additionally, in rural communities, 80% of households now live within 6 kilometers of a public telephone. However, other sectors have not been as successful in providing coverage to rural communities, such as the electricity sector. This is because 60% of poor households are not connected to electricity and those who are use so little electricity that they only capture 10% of the subsidy given by the government. Another less successful sector has been the water sector. While this sector had no reforms, tariffs have been kept well below costs at US\$0.10 per cubic meters leading to a household monthly water bill of about US \$1 to US \$2 or about 0.5% of the household budget. Yet only 70% of households reported paying their water bill with three quarters of total consumers choosing to buy bottled water or self treat what water they get. This is due to the little confidence the community has in the water quality.

However, overall there has been significant improvement of infrastructure coverage in poor, rural, and indigenous areas. This has led to a lower rate of poverty and a higher quality of life. Guatemala is hopeful to one day achieve universal access to modern utilities.

GUIDING QUESTIONS

1. What has your country done which has improved the infrastructure throughout the rural areas?
2. What economic and political resources may your country give to others that are in need of it?
3. What are the biggest barriers in enforcing criminal punishment against cyber terrorists?
4. How can your country develop strategies in order to improve the infrastructure in rural areas?

5. What economical benefits come from improving infrastructure?

FURTHER RESEARCH

1. <http://www.un.org/sustainabledevelopment/infrastructure-industrialization/>
2. A paper about electronic surveillance rights: <http://www.irma-international.org/chapter/electronic-surveillance-civil-rights/7454/>
3. A brief overview of the topic: <https://cs.stanford.edu/people/eroberts/cs181/projects/computer-crime/abstract.html>

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