

Surf City XIX

Huntington Beach High School

FAO

Topic A: *Child Labor in Agriculture*

Topic B: *Water Scarcity in Developing Nations*



Welcome Letter

Dear Delegates,

On behalf of the Huntington Beach High School Model United Nations Program, we would like to welcome you to our Surf City XIX advanced conference!

Our annual Surf City conference upholds the principles and intended purpose of the United Nations. Delegates can expect to partake in a professional, well-run debate that simulates the very issues that those at the United Nations discuss every day. Both novel and traditional ideas will be shared, challenged, and improved.

It is our hope that all delegates will receive the opportunity to enhance their research, public speaking, and communication skills as they explore the intricacies of global concerns through various perspectives, some of which may be very different from their own. We hope their experiences here give them new insight and values that they can apply outside of the realm of Model UN for the betterment of the world community.

Please do not hesitate to approach our Secretariat or Staff Members with any questions or concerns that you may have throughout the day. We wish the best to all our participants and hope that they may share a fulfilling experience with us!

Enjoy the conference!

Sincerely,



Zach Bernstein
Secretary General



Vivian Bui
Secretary General



Lauren Le
Secretary General



Alison Miu-Martinez
Secretary General

Meet The Dais

Madi Sewell

Hello Delegates! I am so excited to be your chair for Surf City XIX! My name is Madi, and I am currently a senior at HBHS. This is my fourth year in the MUN program, and I am so thankful for everything it has brought me over the years. FAO is personally one of my favorite committees because I think it has some of the most interesting topics on really important issues. Aside from MUN, I enjoy traveling, hiking, camping, reading, going to the beach, and watching movies. I love being outdoors and exploring new places, which I think is part of why I enjoy MUN. I also play softball and am a part of the school's team, as well as club. I have been playing softball since I was 4 years old, and I couldn't see myself playing something else. Best of luck, and I will see you all in committee!

Amanda Haidl

Hi Delegates! My name is Amanda Haidl and I am a senior at HBHS. This is my fourth year in the Model United Nations program. I have learned so much throughout these four years and am so thankful for getting to be a part of this amazing program. Outside of MUN, I am on the HBHS golf team and I love going snowboarding as much as I am able to. Aside from that, I love going to the beach, hanging out with my friends as much as possible, watching sports, and adventuring to new places with both my friends and family. FAO has been one of my favorite committees throughout MUN because of the interesting topics that are brought up and discussed throughout the committee. I am so excited to be your chair for this year's Surf City Conference. I am looking forward to meeting you all in committee. Good luck!

Michelle Phan

Hello Delegates! My name is Michelle and I am currently a junior at HBHS. Throughout my three years in the MUN program, I have watched myself stumble, fall, roll down the chairs (literally) and get back up every time; MUN has bolstered my growth journey as an individual and I would not be the person I am today if not for this extraordinary program. Aside from MUN, I enjoy baking, shopping, watching crime and medical TV shows, going to concerts, and spending time with family and friends. My favorite artists include SZA, Jhene Aiko, and Doja Cat. I've been looking forward to chairing since my freshman year and hope to provide an outstanding committee experience for you all. Delegates, as Big Sean once said "Used to tell me sky's the limit. Now the sky's our point of view."

All Papers are due on **JANUARY 30, 2022** by 11:59pm to
surfcitymun.fao@gmail.com

Topic A: Child Labor in Agriculture

Background

Child labor has been one of the most difficult world issues for global bodies to combat because of the sheer vastness of the issue. Intensive labor tasks that are potentially dangerous, extended unpaid work hours, work that interferes with education, and work in unsafe environments are all considered child labor, but supervised light tasks that are safe and accommodate schooling are not considered child labor. Any task that does not put the child's at health risk or demand long hours that mirror those of paid worker is not considered child labor. Child labor occurs in multiple sectors but most often in agriculture. The UNHRC has outlined the worst forms of child labor, and agriculture is part of that list as 70% of all child laborers between the ages of 5 and 17 work in the agricultural sector.¹ Additionally, the dispersion of child labor within made uneven by employer preferences of age or gender. Up to 50% of the children working in agriculture are younger than 11 and 42% of child workers in agriculture are female.^{3,4} Employers turn to child labor due to poverty, lack of educational resources, inadequate agricultural technology, access to workers, and high hazards. Poverty is the leading contributor as firms do not have enough money to hire paid workers, leading them to turn to child labor.

One of the complexities of child labor in agriculture is differing agricultural subsectors. Farming, fishing and aquaculture, forestry, and livestock farming are the most prevalent subsections of agriculture that have child labor issues. In the farming sector, children are often forced into long work hours that interfere with their educational opportunities and harm their social development. Both large and small scale farms turn to child labor as a method of furthering production in attempt to avoid paying workers. On large scale farms, child laborers are often trafficked in by labor recruiters who coerce families to give up their children in turn for money, or trick young children into following them. These large companies operate in both developed and developing regions, by searching for countries with nonexistent, weak, or loosely enforced child labor laws. The most common farming tasks given to children are preparation of land, seeding, tilling soil, fertilization, spraying pesticides, harvesting, and food processing. Hazards such as sharp tools, large machinery, wildlife, extreme weather, and exposure to chemicals are all related to farming. In early 2019, investigations into Starbucks' use of child labor in Brazil was released. The report showed children working forty hours in a week, despite inclement weather. Thousands of children were forced to work in fields planting and harvesting espresso beans without pay, while working a full-time shift. Although Starbucks denied any affiliation with these Brazilian espresso farms, shipment and trade records indicated that much of the crop harvested was due to ship to the company. In many regions, such as Africa and the Middle East, young children are expected to work full-time in unpaid positions on their family owned farms. However, it is important to note that not every job performed by children on farms is considered child labor. Working on family farms can be beneficial for passing down knowledge and trade skills so long as it is done in a safe environment.

In the fishing industry, child laborers are often found in small scale fisheries either on board, on shore, or offshore. On board workers are tasked with fishing, diving to catch fish or untangle nets, draining boats, repairing nets, performing crew work, and shoveling ice. On shore, child laborers often load and unload ships as well as clean and sort fish for sale. Offshore workers are often responsible for maneuvering cranes, which is extremely dangerous. When children man these cranes, they lack the proper training to operate them safely, putting other

crew members at risk. Oftentimes, the crew members at risk are other children. There is high risk for injury, inclement weather, and poor living conditions in this sector. Child laborers in this industry are often isolated and kept from schooling due to these conditions. Research by the International Labor Rights Forum demonstrated that isolated child workers struggle more with mental health than other child laborers because they lack social and emotional development. This lack of development puts these children at risk. Because of these physically demanding tasks, 85% of the child laborers in the fishing and aquaculture sector are male.⁵ The fishing industry is often overlooked when it comes to child labor but is still a contributor to the issue in countries that are big in fish exporter. For example, Ghana exports roughly \$50 million USD worth of fish to European countries, with 2.5% of its child labor occurring in its fisheries.⁶

Forestry and livestock have some of the lowest rates of child labor, but they have the highest risk factors. Livestock poses the risk of children being harmed by animals, yet in many nations tradition expects children to be responsible for this job. 47% of all impoverished livestock keepers reside in sub-Saharan Africa, specifically in the nations of Nigeria, Ethiopia, Burundi, Malawi, and Kenya. Consequently, children that live in villages where school is not easily accessible are expected to herd livestock as their contribution to the family. Livestock herding has become an increasingly common issue in Mongolia. A research study of two hundred and seventy children conducted by the International Labor Organization in Mongolia showed that 64% of boys and 36% of girls were involved with herding their employer's livestock. Child labor in the livestock industry in Mongolia has grown due to rising levels of poverty amongst rural livestock holders. As commonly seen in other agricultural sectors, children herding livestock in Mongolia have a high dropout rate, with roughly 15% of children not enrolled in school. Nations such as Nepal, Chad, India, Peru, and Morocco have shown similar results in surveys.

In the forestry sector, children are expected to climb trees to harvest crops, collect honey from beehives, and log trees. Logging trees entails cutting down large trees and processing them for other uses. Logging trees is potentially dangerous because it puts child workers at risk when they are given tools such as axes or chainsaws to cut trees down or when they are in the vicinity of falling logs. This puts these children at risk of falling, extensive bee stings, and injury from falling trees. Moreover, much of forestry work takes place far from villages, so children face isolation and loss of educational opportunities. Child labor in forestry occurs most often in cacao plantations, where children harvest and transport cacao pods. There are currently 1.2 million children working on cacao plantations in the Amazon and the Ivory Coast in order to provide for their families. Expansive corporate farms such as Hershey, Nestle, and Mars use child labor in their cacao groves to minimize production costs while they take majority of the profit. In 2021, eight children who claim to have been child laborers on these plantations and the International Rights Advocates have filed a lawsuit against the aforementioned companies on the basis of "aiding and abetting the illegal enslavement of 'thousands' of children on cocoa farms in their supply chains." The eight children claim they have experienced severe emotional distress, negligent supervision, and forced labor without pay from these companies.

Poverty is the umbrella root cause of child labor in agriculture. As aforementioned, many agricultural businesses can not afford to pay workers, causing them to turn to child labor as a source of assistance on their farms. This is the main cause of the correlation between developing nations and child labor in agriculture. For example, 72 million out of the 152 million child laborers worldwide are in Africa, with an additional 14 million in Latin America and 13 million in the Middle East.⁷ As for Africa, 60% of Ethiopia's child population is put to work in gold mines or as farm hands, 25% of children aged 4-15 in Burundi are child laborers in the agricultural sector, 30% of mining revenue in the Democratic of the Congo comes from child

workers, and 40% of children in Somalia take part in the worst forms of child labor, including working with hazardous equipment in agriculture.⁸ In the Middle East, 30% of children in Afghanistan work in food processing. It is important to note that child labor occurs outside of developing regions, in some of the top producing countries on the global market. In addition to poverty, accelerated economic growth and poorly enforced laws allow child labor to occur in developed nations around the world. 62 million children in Asia are child workers, with the majority found in agricultural sectors such as farming and fishing. India, Bangladesh, Nepal, and Pakistan have the highest rates of child labor throughout South Asia.⁹ In the United States, it is estimated that there are roughly 500,000 children performing ten hours worth of paid agriculture each day. Despite the country's leading economy, many businesses still struggle and look to maximize their profit by using forced child labor. Similarly, the United Kingdom struggles with ending child labor because of competition between businesses. Consequently, the percentage of child laborers in the UK increased by 60% from 2016 to 2017.

United Nations Involvement

The FAO is very involved with the issues surrounding child labor, specifically in agriculture. The FAO is guided by four specific principles. The first principle, which is inclusiveness, focuses on the gender, age, as well as the social and cultural contexts of the environment where the child labor is occurring. The next principle is sustainability. This focuses on the environmental, social and economic issues which impact child labor. Another principle is what is referred to as the integrated approach. This approach takes into consideration that when attempting to stop the issue of child labor, all causes of child labor must be focused on; one part of the underlying problem cannot be fixed without fixing the others. Each piece impacts the other. Finally, the FAO uses the principle of collaboration where work with external partners is imperative to targeting and eliminating child labor globally.¹⁰

The FAO director general, Qu Dongyu, has discussed many of the global issues regarding child labor, specifically with agriculture. He explained that child labor is a serious violation of human rights, and he wants to go along with the United Nations Sustainable Development Goals to make sure that child labor in agriculture can be a thing of the past. Due to the fact that 2030 is the deadline and it is coming up very quickly, these actions need to be taken quickly. The director general is trying to determine a quick and efficient plan to make sure he can have not only effective action, but also new leadership programs across the globe so that children can have a life without work. At the 109th International Labor Conference, Qu stressed the need to assist small farmers, and to make a greater investment in rural infrastructure. He stressed that education guidelines and policies need to be implemented. He also emphasized that every rural child should have access to the internet and satellite television so that they may learn new information and acquire varying skills. The FAO goes on to explain that child labor is a violation of human rights that takes away from childhood and can be very harmful to child development, both mentally and physically.¹¹

UNICEF has also been a strong UN committee that has brought new ideas to the table for ways to bring down child labor rates. To start, the Executive Director, Henrietta Fore, spoke about UNICEF's new plans, including providing income support for vulnerable families, expanding social protection for these families, giving child protection, and bettering both education and healthcare for children within child labor and their families.

The FAO has strongly agreed with these ideas, as one of their main focuses right now is trying to boost the incomes of these rural families, so they do not have to have their children

work. This way they can focus more on getting an education and developing fully both physically and mentally. In the long run, this will allow for these children to be more successful and live a longer healthier life because they are able to learn and develop before going into the workforce.¹²

The ILO and UNICEF have worked together to try to explain what needs to be done on a global level to put an end to child labor within the sustainable development goals. Goal 8.7 within the SDG's was written by the ILO and explains that measures need to be enforced as soon as possible to put an end to forced labor, modern slavery, and human trafficking to ensure that there will be prohibition and elimination of not only the worst parts of child labor, but eventually all forms of child labor by 2030. This goal goes on to explain the effects of forced labor and how it can negatively affect children worldwide. Along with this, goal 16.2 has the promise of ending abuse, exploitation, trafficking, and torture against children, not only in general, but with the main focus of in the work place.¹³

The Decent Work for Domestic Workers Convention has also been a large contributor to putting an end to child labor, because they have gotten works and employers of many different organizations to work with local governments to make the child labor platform smaller and eventually a practice of the past.¹⁴

Case Study: Agricultural Child Labor in South and Southeast Asia

In a study conducted in 2020 on child labor in the agricultural sector in the South Asian nation, Pakistan, the prevalence of child labor and its detrimental effects on country are made clear. Although Pakistan has extensive documentation prohibiting child labor, it is still rampant throughout the region. In fact, 20 million Pakistanian children are not attending school; consequently, 10 million children are actively participating in child labor, most commonly in the agricultural sector.¹⁵ As a result of their time spent working rather than in school, 45% of the child laborers interviewed are illiterate.¹⁶ The driving force behind the abundant amount of child workers is poor economic conditions; families are forced to send their children to work to survive, with 51% of child laborers responding that they were working to sustain their family income.¹⁷ Child laborers bear the burden of working with heavy machinery, sharp tools, exposure to toxic pesticides, hazardous insects, all while under deleterious weather conditions. While Pakistan's Constitution and labor laws prohibit the employment of children under 15 and for more than nine hours a day, this has largely gone unchecked due to a lack of government enforcement.¹⁸

Similar to Pakistan, within the Philippines, child labor in the agricultural sector has gone unchecked. An astounding 2.1 million working children, or half of all working children, are involved in the agriculture industry. These working children suffer from exposure to sun and rain including chemical hazards from latex and formic acid rubber, and slippery trails (rubber) including cuts and wounds (sugar cane).¹⁹ Specifically, 442,000 children working in agriculture are exposed to these dangers. In addition, 687,000, or 7 out of every 10, working children in agriculture are injured due to workplace conditions.²⁰ The Philippines has acted to combat child labor in the form of social programs such as Philippine Program Against Child Labor; however, substantial progress has been deterred due to inadequate law enforcement and unclear penalties for labor crimes.²¹ The root causes of child labor in the Philippines can be traced to poverty, as a lack of decent work in the region leaves families with no choice but to send their children to work.

In India, there are 15 million child laborers who are made up of untouchables, or people ranked at the bottom rungs of the social caste. As much as 87% of these bonded children work in the agriculture industry for their masters, tending crops, herding cattle, as well as completing other field tasks.²² Some children as young as eleven may work for sixteen or seventeen hours a day, every day of the year; in addition to their inhumane work hours, Indian child laborers endure frequent physical abuse when their masters are unsatisfied with their performance.²³ The conditions are so uncompromising that children, even if they are sick, must continue to work or face the consequence of violent beatings. As a result of their lengthy hours, Indian child laborers are unable to attend school.²⁴ Because they are bonded at ages as young as eight or nine, these children fail to benefit from the essential components of their education. In the long run, the decline of skilled workers prevents India's economy from flourishing.²⁵ Forced labor, in all industries, is illegal under India law, which calls for laborers to be liberated, rehabilitated and their employers indicted. Additionally, children below the age of 14 are also prohibited from dealing with pesticides or insecticides; however, all of the aforementioned policies have failed to be enforced by the government, allowing child labor to run rampant.²⁶ For as long as poverty and ineffective child's protection rights plagues those in rural areas, children will continue to be forced to work in the agriculture industry as child laborers, being exploited by feudal masters and industrialists within urban developments.

Throughout South and Southeast Asian countries, many children face many more hardships and challenges throughout their childhood including being employed and oftentimes working more than one job. Nearly 11 percent of the child population between the ages of 5-17 are apart of child labor. Having children work at such a young age strongly influences their brain and body development. With this being said, children not only miss out on many educational opportunities, but they also are unable to develop in the ways they should. Without having correct development, these children will be at a different status than many other individuals as they get older because they did not have the same opportunities. This in turn sets these children up for failure and diminished opportunities as they were forced to work throughout their entire childhood.

Questions to Consider

1. What is your country's approach towards mitigating child labor in agriculture? What have they done in the past? Were they successful?
2. How can governments strengthen enforcement strategies to ensure that child labor laws are abided by?
3. How can the United Nations come together as a committee to ensure that child labor is not happening illegally throughout countries?
4. How can child labor affect the development of children, compared to children who did not grow up in the labor force?
5. What preventative measures can be taken to combat the root causes of child labor?
6. How can countries provide farmers with support to discourage turning to child labor? How can farmers benefit from using alternative forms of labor outside child labor?

Endnotes

1. <https://www.fao.org/childlabouragriculture/en>
2. <https://www.ilo.org/ipecc/areas/Agriculture/lang--en/index.htm>
3. <https://www.fao.org/3/ca0177en/CA0177EN.pdf>
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24. <https://globalmarch.org/child-labour-in-agriculture-and-covid-19-the-tale-of-two-pandemics/>
25. <https://www.deccanherald.com/national/60-working-children-are-in-agriculture-says-report-739862.html>
26. https://nhrc.nic.in/sites/default/files/SPEECH_2012_10_25.pdf

Topic B: Water Scarcity in Developing Nations

Background

One of the most basic human rights, water, is a resource that is vital to human health, socio-economic development, food security, ecosystems, and education; yet, almost two billion people are without clean water.²⁷ As a result of their fragile infrastructure and economies, developing nations are especially vulnerable to the crippling consequences of water scarcity. Rapid population growth is a water shortage intensifier, seeing as supply fails to meet the burgeoning needs of a growing public sector. By 2050, when the global population reaches 10 billion, the strain on water resources will be so eminent that half the world will be plagued by water shortages at least one month in the calendar year.²⁸ A nation is considered water scarce when the benchmark of available freshwater falls below 1,000 cubic meters or less per person annually.²⁹

The lack of water undermines agriculture productivity seeing that farming constitutes for 70% of all water expenditure, and up to 95% in developing countries such as Somalia, Mali, Nepal and Afghanistan.³⁰ Without water, nations that are dependent on agriculture as its main source of revenue will suffer drastic economic repercussions.³¹ In underdeveloped countries, 80% of all diseases are correlated to water scarcity and poor sanitation conditions. In fact, globally one out of every five deaths for children under the age of five is at the hands of water-related illnesses.³² On average, women and girls within underdeveloped regions walk a tedious trek of six kilometers a day just to obtain water, a chore that takes more than 15 hours a week and deters them from pursuing vocational or educational opportunities.³³ With the strenuous responsibility of finding a resource necessary for life being placed upon the women of the household, they are unable to live up to their full potential. In fact, water is a necessity to not only the educational and financial fulfillment of women, but also their health and safety. Consumption of unsafe water and the physically demanding task of transporting clean water across long distances is dangerous for pregnant women and their children, as lack of sanitation can lead to complications before or during childbirth and carrying heavy loads (44-110 pounds of water every day) can lead to early labor or miscarriage.

Furthermore, climate change exacerbates water scarcity as it disrupts weather patterns, causes unpredictable conditions, and contaminates water resources.³⁴ Out of all the water on Earth, 97% consists of saltwater, which is undrinkable and fruitless for agriculture. Of the remaining 3%, 1% is found within the atmosphere, 1% within frozen glaciers and icecaps, leaving the other miniscule 1% of available freshwater found mostly in lakes, swamps, and underground.³⁵ As a repercussion of harmful carcinogens, pesticide use, and insufficient water refining infrastructure, high levels of toxins have compromised the efficacy of water resources, such as the Niger River, which hampers the access to clean water within African communities.³⁶ Furthermore, Lake Chad has diminished in size by 95% since 1960, impeding the water and food supply of neighboring nations, Cameroon and Chad.³⁷ In Saudi Arabia, where there are no lakes or rivers, desalination facilitates its water supply; however, desalination practices are costly and energy intensive.³⁸ Evidently, rising global temperatures allow water to evaporate at a faster rate, which increases atmospheric water vapor and heat energy, fueling climate events such as hurricanes.³⁹ Subsequently, the aftermath of natural disasters can be detrimental to critical

infrastructure and contamination efforts, further amplifying the water crisis. Climbing evaporation rates leads to global warming, creating a feedback loop that disrupts the water cycle and causes intense droughts within developing countries such as India, Bolivia, and the Philippines.⁴⁰

Water scarcity is an issue present in virtually all developing countries, but it is exceptionally exacerbated in the Middle East and North Africa. This can be attributed to the hot, drought-prone climate and rising demand that pushes water resources into extreme stress. With countries facing high water stress using 80% of their available surface and groundwater supply annually, it is clear that combatting unequal supply and demand relationships for water is a necessity. Water stress is the occurrence of the demand for safe, usable water exceeding its supply. With multiple factors leading to water stress, water scarcity is labeled as a multifaceted issue encompassing both human and natural origins. There are two sides to water scarcity—the physical scarcity and economic scarcity of water. Physical scarcity, where there is an ecological shortage of water supply in an area, is the most acknowledged situation. However, it is also important to recognize that economic scarcity of water, which refers to inadequate water infrastructure, is an equally pressing issue and can prevent communities from obtaining water despite having abundant water resources in the first place. In actuality, Georgetown University experts on water management have claimed that physical scarcity has no relation to the issue of obtaining drinking clean water. Instead, it is the financial and political burdens of supporting and maintaining infrastructure to transport inaccessible clean water. Even in wealthy and water-abundant countries, a lack of investment in satisfying demand for water or poor management of water resources can lead to water scarcity. For example, Mexico City, a region with enough rainfall to support the metropolitan area, loses 40% of its water due to damaged pipes and unsustainable withdrawals from aquifers. Thus, it is imperative to take into account the economic and infrastructural aspects of water crises.

Moreover, in underdeveloped countries, discrepancies are prominent within tourism and non-tourism water expenditure. While tourism accompanies economic benefits, water use within hotels and other tourist attractions pose inherent challenges for local communities already suffering from water shortages. Evidently, the presence of tourism increases the demand for water supply as well as output of wastewater, with water consumption per hotel guest varying significantly between countries worldwide.⁴¹ The distribution of water resources in substantial quantities towards the tourism industry calls into question the morality of water equity, specifically among commercial and household sectors.⁴²

Especially in light of the COVID-19 pandemic, sanitation and proper handwashing is of utmost priority; yet, the most elementary defense against COVID-19, water, has become an unattainable necessity for 40% of the world's population.⁴³ The world's most impoverished faced the impacts of the pandemic on top of preexisting water and sanitation pitfalls, overwhelming an already precarious humanitarian crisis.⁴⁴ Investing in the access of clean water and sanitation also functions as a method to improve socio-economic conditions in developing areas. The reason is because communities with safe water results in improved health, and therefore, less medical costs, less time wasted and more productivity. The current health crisis has undoubtedly slowed down progress towards Sustainable Development Goal (SDG) 6, which aims to ensure access to water and sanitation for all. Since water utility companies are experiencing a decline in profits, their ability to make pivotal capital investments in developing countries is debilitated.⁴⁵

Enacting international interventions to improve water access within developing countries will lead to both short and long-term economic, social, and environmental advantages.

United Nations Involvement

The United Nations has been an advocate for increasing access to water for all peoples, but especially in developing nations. In September of 2015, the United Nations General Assembly adopted A/RES/70/1 that set the 2030 Agenda for Sustainable Development, or as they are more commonly known, the Sustainable Development Goals (SDGs). Water scarcity takes part in this resolution under SDG 6: Ensure Access to Water and Sanitation for All. More specifically, the Sustainable Development Goals address water scarcity in developing nations under Goals 6.1 (Safe and Affordable Drinking Water), 6.A (Expand Water and Sanitation Support to Developing Countries), and 6.B (Support Local Engagement in Water and Sanitation Management).⁴⁶ To further the SDG's work on expanding water access, the General Assembly adopted the Water Action Decade, to take place from 2018 to 2028. The goal of the Water Action Decade is to mobilize action that not only increases accessibility to water, but also management of wasteful water usage. Under the Water Action Decade, nations are urged to advance sustainable development, endorse existing programs, and mobilize action. The action planned outlined by this initiative entails increasing access to education on sustainable water usage, informing individuals on new developments regarding SDG 6, pursuing new partnerships, and strengthening communication to increase action.⁴⁷ Despite pledges from 193 nations, under the Water Action Decade and Sustainable Development Goals, the world is not on track to achieve the 2030 goal.

Another monumental document that is significant to this issue is A/RES/64/292 in which the UN General Assembly specifically adopted access to clean water as a human right. Adopted in 2010, A/RES/64/292 affirms “the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights.”⁴⁸ This resolution pushed for the allocation of financial and technological resources towards increasing accessibility to safe, clean water. However, the significance of this resolution lies mainly in its influence on other UN bodies to take action. Following the passing of A/RES/64/292 was A/HRC/RES/15/9 which made adequate water availability a standard of living. Calling water a standard of living made it a binding necessity for member states to address, increasing the action on the topic. Moreover, A/RES/70/169 made it clear that access to clean water and water sanitation were two equally important human rights, furthering the push for implementation of programs to resolve the issue. The influence of A/RES/64/292 and succeeding resolutions has created significant progress on making access to clean water a priority for nations. Improvement has been seen in many developing countries such as Qatar and India.

In addition to resolutions, the United Nations has created programs, projects, and UN bodies to solve water scarcity in developing nations. UN Water, created in 2003, helps coordinate the responses of UN organizations and non governmental organizations that are actively combating water scarcity issues. UN Water aims to support member states in their endeavors of increasing water accessibility by suggesting policy reform, monitoring and reporting water scarcity, and providing action plans. UN Water has been responsible for creating World Toilet Day in November, the 2014-2020 Strategy to help meet the Sustainable Development Goals, and the Integrated Water Monitoring Initiative.⁴⁹ In order to track our progress with meeting these goals, the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation keeps detailed records of water accessibility and usage for specific countries in their households, schools, and health care facilities. This programme helps the UN and member states monitor their progress through this data, which in turn, aids them in adopting new programs and policy reforms pertinent to the issues.

Case Study: Integrated Water Resource Management in Myanmar

Myanmar is the largest country in South East Asia that is connected to the mainland, and though it shares many borders, it also borders a large portion of the coast. Myanmar has put much of their focus on water scarcity and finding new ways to make water more accessible throughout their entire nation. Currently, 10 million people are without water and 11 million are without a toilet. As a result, over 3,000 children under the age of 5 die each year. The water throughout the country is unevenly distributed, which makes the water supply crisis an even larger issue.⁵⁰ This is unfortunate since Myanmar has many natural resources and cultivable land which fosters eco-diversity throughout the region. The favorable climate makes it easier for residents to get access to water through rainfall, yet many still struggle to access water due to seasonal rain and lack of infrastructure to capture and effectively redistribute the water. Because access to water in upper Myanmar is so ineffective, most people are forced into acquiring their water through other means or praying for donations. For example, over 120 households in the Indaw Village rely on donations for their drinking water, or they purchase 50 gallon barrels for an equivalent of \$14 USD. In searching for a solution to the water scarcity issues, the United Nations has explained that countries like Myanmar should use improved legal framework, new technology, and capacity development in order to decrease the water scarcity. The UN explains that by implementing these ideas, countries like Myanmar should not only work closely with their allies, but also involve more of the government staff and citizens in what is happening in their country. There are also conflicts occurring in Myanmar, thereby putting stress on the scarce water supply. The current conflict between the Myanmar government and the Rohingya Muslims also contributed to the unequal distribution of water. Rohingya, which is confined to the Rakhine State, is often not provided with water from donations, and so they are forced to rely on digging for groundwater and other methods. Also, there is an increasing pressure on the use of water and extraction of groundwater to the point where more management is crucial to creating a more sustainable country in the future.

Developments on improving water scarcity are increasing quickly throughout Myanmar, because the country has opened up their economy quickly to meet their goal of urbanization. It is very challenging to achieve sustainable development throughout Myanmar compared to other countries due to the fact that there are many sought after resources. Thus, through urbanization, deforestation has contributed to the rising temperatures that are causing this water crisis. Additionally, resources, such as water, are seasonal and hard to come by given the geography of the country.

Royal HaskoningDHV, a Dutch consulting and engineering company, is working with many organizations to discuss possible solutions to address the ecological issues going on throughout Myanmar. To begin, they created a list of “building blocks” to help with development policies within the country for the present and future, along with adding new infrastructure requirements throughout the country to be overseen by the government. This is a very strong start to addressing the shortage of water and other necessary resources throughout Myanmar but it is only the beginning, as much more progress must be made in integrating the water systems throughout the region.⁵¹

The Integrated Water Resource Management (IWRM) is a program developed by Royal HaskoningDHV that has been helping Myanmar with their water crisis since 2011. The IWRM’s ideas help to better methods of water management within the country, along with creating new

development and infrastructure ideas, such as deltas, to aid sustainability using the land that they have. This management also provides overviews and updates of how different sources of water can have an effect on Myanmar's citizens as different stages of clean water can be used for different purposes around the country. This will allow the country to get the most use out of reusable water, rainfall, and other resources. As time has progressed, the IWRM has continued to work closely with Myanmar to make water scarcity less prone throughout the country. As of 2019, they launched a second phase of implementation ideas and planned to continue working in the nation for roughly four year, contingent on the outcomes. The new implementation strategies included water quality monitoring, waste management, and improved gathering of trash and other materials.⁵²

Furthermore, Water, Sanitation, and Hygiene, or WASH, is a solution by UNICEF to support Myanmar's efforts to increase accessibility to water. WASH has been active in Myanmar for over 20 years, but recent improvement in the program has demonstrated significant reduction in water scarcity. Now, 82% of WASH households have access to drinking water, and 41% of households are using a safely managed service. Poverty throughout Myanmar has worsened the crisis, because even though water is accessible, it often is too expensive. Families involved in the Rohingya crisis do not earn enough to afford these bottles and are turned away from banks when seeking a loan. With the rise of COVID-19, WASH provisions are even more beneficial to the public.


The northern region of Myanmar is experiencing extreme cases of water scarcity, due to the extra sanitation measures put into place with COVID-19. With these extra measures, the use of water has gone up significantly, to the point where the country's supply cannot keep up. Citizens are now finding themselves with no water to use as sanitation, hindering citizens from performing basic hygiene, such as washing hands. While many small villages are a priority when it comes to distributing water, they are still experiencing extreme levels of water scarcity. In these villages, citizens have to go on two hour "trips" just to get a 5 gallon bucket of water. They then carry this bucket all the way back to their homes, a task that is performed by women 80% of the time. Water scarcity has resulted in many other difficult issues that make many citizens weak because they do not have access to sanitized water without a strenuous journey.⁵³

Questions to Consider

1. What factors of the economy does water scarcity affect?
2. Considering that there are many extra sanitary measures being used due to illnesses, how is the water supply being changed and affected?
3. How should water management between the commercial tourism and household sectors be regulated to protect local communities?
4. What modern technologies can be used to alleviate the water crisis within developing countries?
5. How can countries dealing with other conflicts and other issues, like Myanmar, increase accessibility to water in all regions?
6. What can nations without natural steady water supply do to bring in water for their citizens?

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