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# Goal 11: Sustainable Cities and Communities

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**Forum:** Goal 11: Sustainable Cities and Communities

**Issue:** Ensuring Sustainable Housing for those living in extreme poverty in Southeast Asia

**Chair:** Douglas Lee

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## Introduction

Sustainable Housing has always been an issue debated around the world, but not many have acted thus far. Goal 11 of the Sustainable Development Goals (SDGs) takes aims at many aspects of cities and communities. For example, by 2030, the goal is that member nations can ensure access for all to adequate, safe and affordable housing and basic services. Yes, some people have already taken things into their hands and have built affordable houses for people that live in extreme poverty. However, the issue remains in the large region of South East Asia.

Extreme Poverty remains a large issue around the world and is largely evident in South East Asian Nations. Many NGOs and project have been funded to help cut down the amount of poverty around the region. But nothing has really worked thus far. In November of 2017, The Economist conducted a research and found out that the Philippines has the most persistent poverty in South East Asia. In addition, 90% of the poorest in ASEAN (Association of South East Asian Nations) come from Indonesia and the Philippines (the countries with the two largest population in SEA).

Ensuring Sustainable Housing for those living in extreme poverty as demonstrated is a crucial issue that has been hampering development of these SEA countries. This ultimately begs the question: How will society deal with this issue?

## Definition of Key Terms

### South East Asia

South East Asia is a region in Asia that includes continental countries and island nations. They are known as Maritime and Mainland South East Asia. Maritime Nations include Singapore, Philippines, East Timor, Brunei, Coco Islands, Christmas Island, Indonesia, and Malaysia. Mainland nations include Thailand, Laos, Myanmar, Cambodia, West Malaysia and Vietnam. Pertaining to this issue, East Timor in the region has the largest percent of being under the Poverty line. It is important to go into depth and understand the economic powerhouses in the region, and countries that will need financial help from the more developed nations in SEA.

### Poverty and the Poverty Line

There is no actual International definition of poverty, but poverty is defined in either relative or absolute terms. Absolute poverty is measured in relation to how much money is necessary for basic needs that include food, clothing, and shelter. It is important to either define poverty in their resolutions or find a way to work around the definition of “poverty”. The poverty line is the minimum level of income that is considered adequate in a country. All member nations have different poverty lines, so it will be important to distinguish accordingly.

## **Sustainable Housing**

Goal 11 of the Sustainable Development aims at having better Urban Planning, Management to make urban spaces more resilient and sustainable. This aligns with the topic of Sustainable Housing since the issue of Sustainable Housing is how we can help make eco-friendly and affordable homes for the poor in South East Asia.

## **Poverty Cycle**

The poverty cycle the idea that poor families will remain poor and fall below a certain level of resourcefulness. This cycle may cause a decrease in education, training and employment opportunities per generation. This means that the next generation will receive less opportunities which will continue on for generations and generations. Many people in many of the South East Asian need to be able to break the poverty trap to ensure a more Adequate, Safe and Affordable housing for all.

## **General Overview**

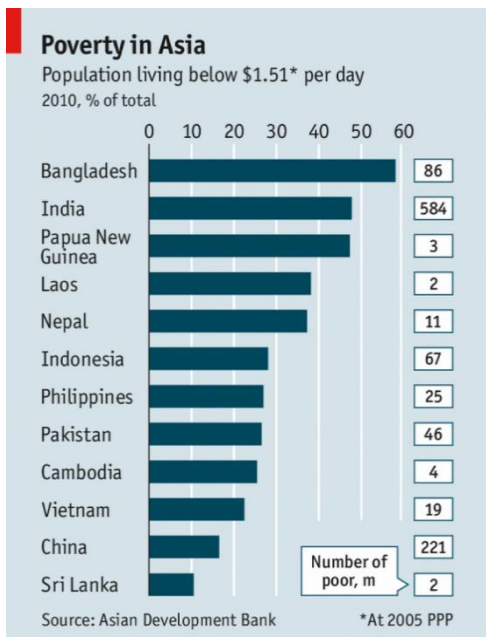
### *World Leaders*

The issue of Sustainable Housing and poverty has been an issue debated across centuries, and many are now looking for ways to solve the issue. Although China isn't part of the region of SEA, it remains a key power in Asia and has been looking for ways to end the “poverty line” of China. Xi Jing Ping, President of China has vowed to by 2020 lift all Chinese citizens out of the poverty line. Although this may seem like a false promise/utopian concept that will never be achieved, delegates will need to consider this idea of really raising the citizens of SEA nations above the poverty line in order to achieve Goal 11. Indonesia, a country in SEA has been vocal in the past with the idea of poverty as it has taken many lives. Joko Widodo issued a similar vow to the people of Indonesia as poverty has killed some 8 million people with most of them from Asia and Africa. This idea is very interesting and must be considered as it seems that Western Nations do not have as big of an issue as Asian and African nations. Delegates should consider the differences in policies to form a better understanding of the issue. The Lao President also issued similar remarks stating that 700 million people live in Extreme poverty in Asia. The Lao President also vowed to become a developed country by 2020 which shows their commitment

towards Goal 11. As many nations in SEA aren't economically developed, delegates will need to first be able to address that issue before deciding to put all the pressure on the governments. Another issue is that many attempts to solve this issue from world leaders haven't completely wiped the issue off the table such as the 2005 pledge from World leaders to donate 50 Billion dollars a year to issue. The money has yet to have a significant impact on the issue, and delegates will need to decide if money is the way to solve the issue and commit to Goal 11.

**Impact of the Economy on Eradication of Poverty**

The economy has always been a large influencer on the poverty rates of nations. If a countries economy is not doing well, chances are that there is a more number of people in "poverty (again needs to be defined)". China, although not a region is SEA has been a key player in the fight against poverty. Analysts believe that China may be able to eradicate Poverty due to its wealth and economic growth. In SEA, many countries are also relying on the impact of the economy to solve its poverty issues. For instance, Malaysia's Minister of Communications said that Malaysia low poverty rates in SEA is due to economic growth that neighbor countries didn't have. Similarly, many analysts believe that Asia's rapid economic growth has put it on track to eradicate "extreme" poverty. Economic growth has also helped many SEA nations recover from the Asian Financial Crisis of 1997-1999 that increased poverty rates significantly. Delegates will need to understand the rend of these crises and prevent another one that would be detrimental to the trajectory of reaching goal 11.



**Caption #1: Poverty in Asia in 2010**

**Negative Effects of Poverty and Introduction to the Poverty Cycle**

There are many negative effects of Poverty such as not having necessities. However, there are more than just that. According to a research by UNHABITAT, poorer people are relocated to places far from economic opportunities and employment which relates to the Poverty cycle as defined above in the Key terms sections. Important aspects include protecting housing rights of the urban poor as they need the financial security of their houses. Poverty can cause many people to be evicted from the land they occupy. A statistic in the research showed that 30% to 50% of Asia's urban residents lack legal documents that entitle them to land they occupy. Moreover, in the same research, poor people in Asian cities aren't treated as Humans and aren't considered in the planning of a city's growth. These people are citizens just like the wealthy and need to be treated accordingly. In conclusion, delegates will need to be able to protect the housing rights of these people, relocate poorer people closer to economic opportunities and give more rights to these poor people.

## Timeline of Events

Date	Description of event
1997-1999	Asian financial crisis
Aug 26-Sep 4 <sup>th</sup> , 2002	Earth Summit, The world Summit on Sustainable Development
Dec 15-16 <sup>th</sup> , 2006	Asia-Pacific Ministers Conference on Housing and Urban Development
June 20-22, 2012	United Nations Conference on Sustainable Development
January 1st, 2016	Sustainable Development Goals are launched

## UN Involvement, Relevant Resolutions, Treaties and Events

- A/RES/47/134 (December 1992)
- Geneva UN Charter on Sustainable Housing
- A/RES/65/10 (November 2010)
- A/65/214 (December 2010)
- A/RES/65/174 (December 2010)
- A/RES/65/174 (December 2010)
- 2011/21 Human Settlements

## Possible Solutions

There are many practical solutions to this issue and delegates will need to come up with creative, unique and detailed solutions. The first issue that always needs to be addressed in many topics is international recognition of the issue. Yes, this issue is a part of the Sustainable Development Goals; but not many people are aware the goals, let alone the issue of sustainable housing for those living in extreme poverty. Delegates can also use this to raise awareness and funds that could help the government with their plans. Another viable solution is the funding of NGOs as many NGOs around the world are dedicated and have made some impact on the issue as a whole. However, delegates can also be creating a body under the United Nations or could form an NGO so that funding can be directly transferred to one place and thus can be used more effectively. Seeing as this topic is related to poverty, delegates will need to define poverty and come up with interesting ideas such as giving more proper education to break the Poverty cycle. Education is extremely important and has been known to analysts as the key to this issue. As if you educate the younger population and the future leaders of the nation, there is a higher chance of everyone being able to get out of the Poverty Cycle. The economy is also an important aspect that delegates will need to take in to consideration. Delegates will need to stimulate economic growth in nations such as enticing foreign investments and multinational cooperation's. Lastly, an important aspect of the issue is the introduction of policies to protect the rights of poor people and have better urban planning. The government of nations should be obliged to protect rights to these poor people with or without housings. Nations should also take the poor into consideration when building new fancy projects or build new factories in the places where the people in poverty live in. Ultimately, there are many solutions to this issue and delegates will need to be able to find the creative, unique and detailed solutions while considering their countries stance to achieve goal 11.

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<b>Forum:</b>	Goal 11: Sustainable Cities and Communities committee
<b>Issue:</b>	Addressing the role of climate change on the development of urban areas facing extreme weather events
<b>Chair:</b>	Shawn Kao

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## Introduction

Climate change has been foreseen as a major issue for global development, especially in urban areas. With massive increase of greenhouse emission and the trend of extreme weather events, it has been highly suggested by researchers and scientists worldwide to prepare for further hazards and perhaps catastrophes. Society will be facing a multitude of issues, including disinterest of the impending threat, deforestation, excess gas emission from farmed animals, and the erosion of the ozone layer. The main concern will be the adaptation and response of an urban area in the case of an extreme weather events. Events such as massive hurricanes, earthquakes, floods, droughts, or even tornadoes could cause havoc if a highly populated area such as a city isn't prepared for it. Steps for precaution and responses must be undertaken, as well as the development of new policies, infrastructure, and a general education of the populace to ensure the minimization of damage.

## Definition of Key Terms

### Global Warming

The gradual increase in the overall temperature of the earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of carbon dioxide, chlorofluorocarbon, and other pollutants. Global Warming has been attributed as one of the causes for the increase activity of extreme weather events due to its environmental impact to the atmosphere.

### **Extreme Weather Events**

Extreme weather includes unexpected, unusual, unpredictable severe or unseasonal weather. These events may include typhoons, hurricanes, floods, etc. These events are a hazards towards densely populated areas, infrastructure and societal collapse may occur if too much damage is sustained.

### **Urban Areas**

A highly developed area surrounding or part of a city. Usually populated by large infrastructure and a non-agricultural population, urban areas are often economic powerhouses and political centers. Urban areas are vulnerable towards any sort of hazard, especially when concerning extreme weather events as the highly populated area also contains key infrastructure for maintaining public order and resources.

### **Climate Change**

The change of global or regional climate patterns. Usually attributed to the excess usage of fossil fuel that leads to the excess amount of carbon dioxide in the atmosphere. Main cause of climate change may include the over consumption of fossil fuel, deforestation, and factors that may increase the greenhouse gas emission.

## **General Overview**

### **Emergency Response Organizations**

In times of crisis, especially in urban areas, there will be chaos and in a lot of underdeveloped nations, the damage done to a community may be too large for a local government to handle by itself. A prime example of one of these incidents is the infamous Hurricane that devastated Philippines infrastructure and affected around 6.2 million people. The Philippine government requested international aid which was provided for by the Humanitarian Country Team and, in a lesser but still significant extent, the international community. Thus, inspired by these facts, many people have gone to form non-governmental organizations to respond to these issues. Acting as a relief to the people that the government cannot give.

#### **Red Cross**



When referring to the Red Cross within an international standing, one is usually referring to the International Committee of the Red Cross. Sometimes the ICRC is also coined as the Red Crescent Movement, and this internationally neutral organization has over 97 million volunteers. Although the ICRC is usually based in nations that are suffering from ongoing conflicts with tens of millions of individuals that require humanitarian aid. However, historically, the ICRC have always been a major player when natural disasters strike an area. Although with more resources than one might expect from a NGO, the ICRC have been present in disasters such as the Pakistan Flood and Hurricane Bopha.

### **UNICEF**

The United Nations Children's Fund primary function is to protect the lives of children. Naturally, this takes them to areas under conflict and disasters, and UNICEF has been present not only as an actor, but also as a leader towards the funding and distributing of humanitarian aid. Like the ICRC, UNICEF is a go-to humanitarian organization, as it has wide support, however limited funding as UNICEF is stretched thin in areas that requires their immediate and sustained attention.

### **Humanitarian Country Team**

The Humanitarian Country Team is strategic decision-making forum that is consisted of representatives from the UN, International Organization of Migration, international NGOs, and the Red Cross. The HCT exists solely for the efficiency and cooperation of humanitarian response organizations. The HCT is often seen negotiated and have open discussion with the crisis' local government, as the utilization of HCT resources require the cooperation and coordination of the said government.



*Caption #1: ICRC Logo*

## ***Global Warming***

Global Warming has undoubtedly been attributed as one of the leading issues that the current generation and future generation will have to face. Studies show that the currently global temperature is 0.8 degrees higher than the beginning of the 20th century.

## ***Climate Change***

Climate change will be the primary obstacle that must be overcome in the case of global development. Large droughts, floods, or increase of extreme weather activities will be detrimental towards urban development. Climate change is largely influenced by deforestation, greenhouse emission, and the response of the ecosystem due to climate change.

## ***Hurricanes***

Hurricanes will always be one of the greatest natural disaster that may occur on a community. Destruction wrought from Hurricanes can be utterly devastating towards even more economically developed countries as seen in the United States after Hurricane Katrina.

## **Urban Infrastructure and Communities**

### ***Organizational and Institutional Capacity for Adaptive Responses***

Education and recognition of the issue will forever be the first step towards a solution to the given problem. An awareness of the surrounding geography as pertaining to local environment as well as technological advancements that may assist in an urban area's ability to adapt is critical to the success of a prepared city. Cities such as England and Paris have already actively developed a research institution with missions to identify and hopefully find ways to counteract likely weather events. Furthermore, in nearly all communities, there are people that actively opposes the notions of climate change and global warming, acting as barriers towards development, hence the education of a populace will be a factor when regarding an institutional wide mandate towards adaptation.

### ***Infrastructure***

A concern that immediately arises after a crisis is the critical infrastructure and if its functionality is compromised. Transportation, rations, medical access, and government agency will need to continue functioning to maintain order as well as protect the lives of unfortunate people in times of crisis. The maintaining of these critical infrastructure has historically been easier towards more economically developed countries such as the United States in light of the recent Hurricane Katrina, however will be a major issue when dealing with lesser economically nations.

## Timeline of Events

You must include short sentences to explain the timeline. Otherwise you have to follow the format specified below:

<b>Date</b>	<b>Description of event</b>
November 25, 2012	Typhoon Bopha (accounted for 1067 fatalities)
October 23rd 2017	Hurricane Patricia (largest hurricane in the western hemisphere)
August 30th, 2017	Hurricane Irma

## UN Involvement, Relevant Resolutions, Treaties and Events

The United Nations have been aware of the threat of climate change and global warming on global development since reports first began flooding in. Resolutions have been drafted to counteract these issues. "Climate Change and Urbanization: Effects and Implications for Urban Governance" is an example of a United Nations report specifically regarding the threat of extreme weather events on urban areas. United Nations organizations such as UNICEF and other emergency response organizations have worked together with other NGOs and local governments for the dozens of disasters that occurred throughout the world. However, the UN has always been more focused on the LEDCs as they are the most susceptible towards major damage.

## Possible Solutions

Extreme weather events are often incredibly specific towards the geographic location of a given urban area. Cities bordering lakes or rivers are under more threat than say a drought. However, the opposite may hold true for cities that are located in more dry climates. Hence, solutions are widely ranged, and creative solutions such as the introduction of vegetation towards urban areas to cool down the environment are recommended as dozens of other specific solutions are available. On the more general side, bolstering the significance of the scientific communities and their work will be extremely helpful for the identification of the issue. Emergency response and adaptation should be the main focus for solutions, as the two givens encompasses the short and long term of the issue, covering a wide range of ideas. Since the topic also address extreme weather events as its primary concern, the topic also expands to environmental factor, therefore the halting of climate change or global warming is also a valid solution to address.

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**Issue:** Clean water and sanitation as a prerequisite to facilitating an adequate social and economic living standard

**Chair:** Eugenia Madeleine Lin

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## Introduction

As former UN Deputy Secretary-General Jan Eliasson once told *The Guardian* "Sanitation is cross-cutting: if you make progress on sanitation, then you dramatically improve the achievement of at least four other goals."

Goal 6 - Ensure availability and sustainable management of water and sanitation for all - is an issue that concerns people all around the world, regardless of their race, gender, or age. There is sufficient clean water for all organisms on the planet to share. What matters most is how it is allocated to each household. The United Nations has stressed that clean water and adequate sanitation facilities are a fundamental human right, not a privilege for the wealthy. There have been many efforts aimed to combat this issue, some successful, and some not. Yet as of 2017, United Nations International Children's Fund (UNICEF) and World Health Organization (WHO)'s joint health program reports that 844 million people don't have clean water and 2.3 billion people don't have a decent toilet.

This goal is not one that stands independent of others, but one that can support the achievement of many more. Once clean water and sanitation become affordable and accessible to all, everyone will benefit from better health, which corresponds to Goal 3: good health and wellbeing. And once the global population becomes healthier, attention can be turned towards employment, hence contributing to the process of economic growth on a national and international level, parallel to Goal 8: decent work and economic growth. Though this issue cannot be solved in merely a few years, alleviating its severity can shine a light on how to address other urgent Sustainable Development Goals set by the United Nations. Most important of all, the achievement of this goal would greatly contribute to the central focus of this committee - sustainable cities and communities. A sustainable city must also be a well-organized one; and this calls for plentiful sources of clean, affordable water and sanitation.

## Definition of Key Terms

### Basic sanitation

According to the United Nations, sanitation is a system that allows proper disposal of human and animal wastes, use of latrines, and avoidance of open space defecation. Some facilities that ensure basic sanitation is achieved can include:

- Flush or pour-flush toilet/latrine to a piped sewer system, a septic tank or a pit latrine.

- Ventilated improved pit latrine.
- Pit latrine with slab.
- Composting toilet.

## **The right to water**

Comment No. 15 from the Economic and Social Council (ECOSOC) states that the right of everyone to sufficient, safe, acceptable and physically accessible and affordable water for personal and domestic uses. The right of water is a basic human right that can serve as the first step to tackling other issues such as malnutrition and infant mortality.

## **Open defecation**

UNICEF's defines open defecation as the practice of "passing out excreta in an open field and indiscriminately." This means that bodily waste, or feces, can easily make its way into the soil and sources of drinking water. If a person goes on to consume the contaminated drinking water is, there is a chance of him or her getting diagnosed with excreta-related diseases.

## **General Overview**

### **Health Concerns**

Clean water and sanitation play a significant role in keeping a person healthy and free of infectious diseases. Contaminant-free water and good personal hygiene go hand in hand when it comes to preventing diseases. If a person has good personal hygiene but does not have access to clean water, he or she is prone to infectious diseases. If the water source is clean, but a person does not have proper sanitation facilities, diseases will remain a critical problem. The lack of safe water and adequate sanitation can lead to bacterial and viral water-borne diseases: cholera, diarrhea, dysentery, polio, and typhoid, just to name a few. Moreover, any person who has consumed water infected with Nematode larvae will become liable to dracunculiasis, more commonly known as the Guinea worm disease.

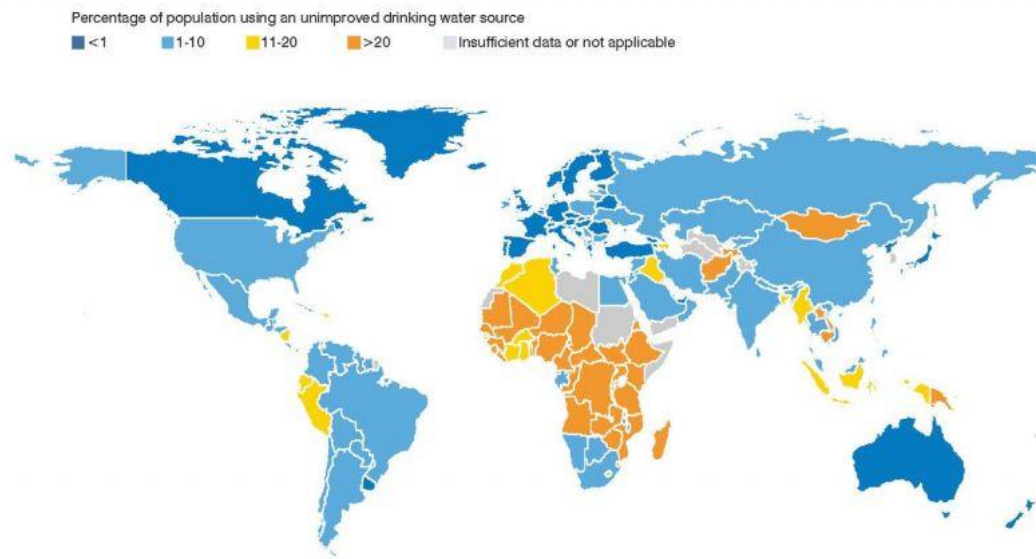
Though the United Nations has noted improvement in recent years, The World Health Organization estimates that 525,000 children dies due to diarrheal diseases each year. Providing families, not just children, with access to a clean water source and reliable sanitation facilities such as ventilated pit latrines can yield drastic decrease in deaths tolls.

### **World Health Organization's Guidelines for drinking water**

The World Health Organization's universal guideline for drinking water quality has served as the basis of many national standards. Although the council added many details to clarify standards in 2017, they all stem from the original requirements that differentiate water from drinking water.

### **Sufficient**

Firstly, there must be plenty of water for both domestic and personal usage. Domestic use includes laundry, food preparation, and personal cleaning, whereas personal use includes drinking, showering, and other forms of personal hygiene practices. The suggested amount of clean water accessible for one person is 50 to 100 liters (190 to a little less than 380 gallons) per day. Below is a map showing the distribution of drinking water source around the world:



***Caption #1: Proportion of national population using at least basic drinking water services (World Health Organization, 2015)***

### **Safe**

Needless to say, drinking water must be free of harmful chemicals and safe to consume. Some common microorganisms that can be found in drinking water are E. coli and C. jejuni. Areas that have not experienced radioactive disasters may also have other chemicals in water sources. The WHO is keen on ensuring that the quality must match with national and/or local standards for drinking water.

### **Acceptable**

Each nation's specification on the tolerable amount of a certain element in drinking water may vary, but they always include guidelines on the acceptable color, odor, and taste. It is important to the WHO that countries make it a priority that all water sources in the nation meet each requirement. Stepping aside from drinking water facilities, sanitation facilities must be sensitive to gender, lifecycle and privacy requirements, though the organization does not have a specific definition of the term "sensitive."

### **Physically accessible**

Having a reliable water source is not enough to fix the issue. It must also be within one kilometer of a household, educational institution, workplace or health institution. In some areas of the world, clean water exists, but collection time is extremely long, sometimes tempting people to opt for closer but dirtier water sources. Keeping this issue in mind, the WHO has also stated that total water collection time must not exceed 30 minutes.

### **Affordable**

As a basic human right, uncontaminated water for consumption as well as everyday use cannot cost a fortune. In fact, the United Nations Development Programme (UNDP) suggests that water fees should not exceed 3% of a household's income.

### **Improve safety for women and girls**

Insufficiency of proper sanitation concerns the safety of women and girls when their only choice is open defecation. There are many possible reasons for why women and girls need to leave the house to find a place to relieve themselves. According to an article written by the United Nations, many women and girls who openly defecate come from families that are too poor to afford proper toilet installment in their homes. In other cases, communities don't even have communal toilets for residents to use. This leaves them with no option other than to look for places outside in the open. Not only does this increase their risk of getting infected with various diseases, they are exposed to rape and physical attacks.

The safety of women and girls are put in danger when they are practically forced to relieve themselves out in the open with no privacy. One of the most effective steps of tackling this issue would be to cut down the distance people have to travel to find a proper toilet. Organizations such as World Toilet Organization (WOT) and Sewa International are continuously building toilets that are within close proximity to each neighborhood. Once toilets are more accessible, women and girls will be encouraged to defecate in a safe environment, therefore reducing the fear of having to find a place to relieve themselves every time.

### **Major countries and organizations involved**

#### **India**

As of 2014, as much as 50% of the population, an equivalent of almost 600 million people, practice open defecation. India has the highest rate of open defecation in the world. In terms of access to clean water, Water.org estimated that 21% of contagious diseases in India are related to unsafe water and the lack of hygiene practices. To address the many dangerous consequences of these issues, the government has initiated three main programs that deal with clean water and sanitation in recent years: Swachh Bharat Abhiyan, the National Rural Drinking Water Programme, and Namami Gange. Part of the Swachh Bharat Abhiyan program includes monetary compensation for families that use communal toilets instead of open space. Families can earn up to



\$37 a month for using public toilets regularly. The program started off small, with eight families who participated, but as of February 2017, 15,000 Indian families are now part of the program. Part of the reason why this plan was a great success was that the government noted there was less need for toilets and more need for a motivation to use them. In collaboration with other programmes, the proportion of Indian households that had access to water sources jumped from 68% to almost 91% in just 2011-12. Though 59% of rural households and 8% of urban households did not gain access to better sanitation facilities, India is on its way to improving the situation in all regions of the nation.

### *Germany*

Germany is perhaps the global leader in wastewater management mainly because the government puts a lot of effort into "making today's trash into tomorrow's treasure-trove." Already one of the countries with the most developed infrastructure, Germany takes it even further when trying to achieve Goal 6 of the Sustainable Development Goals. After signing the Alpine Convention, Germany agreed to collaborate with the six other Alpine countries to preserve the environment of the Bavarian Alpine region. The Alps provides drinking water for the countries that surround it. Therefore, ensuring that the water source must be kept free of any agricultural contaminants. Countries are part of the convention regularly see to it that work done by farmers, forest owners, and forest administrators do not cause serious impacts the sustainable development. In terms of wastewater management, Germany's Wastewater Charges Act encouraged the use of sewage sludge and bio-waste as organic fertilizers, preventing these contaminants from entering drinking water. Developing countries can look up to Germany's means of preservation of natural ecosystems to create a long and lasting system for extensive sanitation.

### *Water.org*

Water.org is an organization founded by partners Gary White and Matt Damon in 2009. Even before the creation of this now well-known organization, White and Damon have been bringing clean water and sanitation to people all around the planet in need. The organization currently works in 13 countries spread out over three continents; they include Tanzania, Ghana, India, Cambodia, and Brazil. Water.org stands out from the average charity organization because they find a solution that would work best in each country. If none of the existing solutions is likely to yield significant effects, they will create a brand new solution. WaterCredit is the organization's micro-financing loan, a banking system that lets impoverished individuals and groups borrow up to \$25,000 worth of money for them to become self-sufficient (Investopedia, 2018), allows running water to become a possibility, making it one of the most versatile methods of all. In addition to carrying out action, Water.org researches innovative ways to make uncontaminated water and adequate sanitation part of everyone's lives. They emphasize the extensive effects having that comes with access to clean water by sharing

stories of real people they've helped. It is Water.org's ultimate goal to make sure that every household can enjoy clean water and sanitation.

### ***World Health Organization***

The World Health Organization oversees progress made on improving accessibility and quality of contaminant-free water and sanitation facilities. One major contribution from the WHO is its guideline of safe drinking water quality. Some other responsibilities they hold are analyzing data for member states and donors. They research and publish reports to provide information on sanitation safety planning, guidelines on safe use of wastewater, excreta and greywater, and forthcoming Sanitation and Health Guidelines and Global strategy on water.

Especially in when it comes to this issue, WHO partners with UNICEF as an effort to end preventable child deaths by 2025. The WHO also cooperate with other organizations such as Save the Children and Action Against Hunger to fight for the similar causes.

One of the goals they wish to achieve is to expanding universal access to drinking water, sanitation, and hygiene in healthcare facilities and homes by 2030.

### ***World Toilet Organization***

Founded by Singaporean businessman Jack Sim, the World Toilet Organization (WTO) was established in 2001. Before the establishment of this international organization, Sim's other brainchild the Restroom Association of Singapore had already been running continuously for two years. Driven by how toilets are a taboo topic in many parts of the world, the organization strives to improve toilet and sanitation conditions through the use of empowering local individuals. This way everyone can be involved in advocating for clean sanitation facilities through the use of education and construction. The WTO currently has three main projects in Cambodia, China, and India. With the help of local partners, they started the Rainbow School Toilet project in China, which has provided almost 4000 children with clean, spacious toilets at school. Teachers used this opportunity to teach students why proper sanitation is important to their overall health. In Cambodia, they used a market-based approach by setting up Sanishop, a store that produced low-cost toilets using locally sourced materials. Another major component of the WTO is their institution World Toilet College (WTC). Unlike what the name may suggest, the World Toilet College does training courses on sanitation marketing, hygiene promotion, behavioral change, public policy, social entrepreneurship and performance of small repairs for anyone. Last but not least, they were also the reason the UN designated November 19 as World Toilet Day. The World Toilet Organization may have started as a local institution, however, 17 years later its impacts continue to benefit more and more people globally.

## **Timeline of Events**

Date	Description of event
March 1977	Mar de Plata UN Water Conference. Recognizes water as a fundamental human right for the first time by stating that “All peoples, whatever their stage of development and social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs”.
December 1999	UN General Assembly Resolution passes A/Res/54/175 “The Right to Development”, which states that “in the full realization of the right to development, inter alia: (a) The rights to food and clean water are fundamental human rights and their promotion constitutes a moral imperative both for national Governments and for the international community”.
September 2002	World Summit on Sustainable Development. Held in Johannesburg, this was an event that brought together leaders, delegates, NGOs, and businesses to find ways to improve people’s living standards while conserving resources. The political declaration stated that access to “basic requirements such as clean water, sanitation, energy, health care, food security and the protection of biodiversity” need to be quickly increased.
November 2002	Comment No. 15 passes in ECOSOC. It states that “The human right to water is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights”.
March 2003	Third World Water Forum in Kyoto, Japan. This where the first edition of the UN World Water Development Report, a project with UN agencies that assesses the progress made on water-related goals, was issued. This conference’s intentions was to further progress made on the World Summit on Sustainable Development in 2002.
2005	Start of “Water for Life” International Decade for Action. Efforts from various organizations and institutions worked hand in hand the United Nations to help 2.1 billion people gain access to improved sanitation in the forms of a latrine or even a flush toilet at the end of the decade.
May 2008	HRC appoints an independent expert to monitor and report on the implementation and right to water as well as related violations in each country “on the issue of human rights obligations related to access to safe drinking water and sanitation.”
July 2010	Resolution 64/292 was passes. Resolution calls upon all member states and international organizations to provide funding “financial resources” and perform technology transfer for LEDCs
April 2011	Extended the appointment of the special rapporteur mentioned previously for another three years.

September 2011	Resolution 18/1 passes. Human Rights Council asks governments to save money for sustainable delivery of water and sanitation services.
2015	The UN's Sustainable Development Goals adopted.
April 2018	United Nations Special Rapporteur on human rights to safe drinking water and sanitation will visit Mongolia to inspect the availability and quality of sanitation.
July 2018	The high-level political forum will review the progress of Sustainable Development Goals 6, 7, 11, 12, and 15.

## UN Involvement, Relevant Resolutions, Treaties and Events

### Resolutions and treaties

- Comment No. 15, November 2002
- Resolution Human rights and access to safe drinking water and sanitation 7/22, 28 March 2008 (A/HRC/RES/7/22)
- Resolution The human right to water and sanitation 64/292, 28 July 2010 (A/RES/64/292)
- Resolution The human right to safe drinking water and sanitation 16/2, 8 April 2011 (A/HRC/RES/16/2)
- Resolution Drinking-Water, Sanitation and Health 64/24, 24 May 2011 (WHA64.24)
- Resolution The human right to safe drinking water and sanitation 18/1, 12 October 2011 (A/HRC/RES/18/1)

### Main Events (Refer to timeline for details)

- Mar De Plata Water Conference
- World Summit on Sustainable Development
- Third World Water Forum

## Possible Solutions

### Infrastructural improvement

A well-organized water management infrastructure is the first step to making water safe, accessible, and plentiful. In different parts of the world, different approaches will need to be taken. If freshwater sources are badly

polluted, having city workers regularly remove debris has been proven effective in the city of Sorocaba, Brazil. Cape Town's newest program utilizes simple but innovative technology such as improved leak detection to cut down water wastage. In Bangalore, India, the government found a way to distribute water from lakes to nearly 10 million people who live in the area. Lakewater penetrates down into underground aquifers, which supply neighborhood wells across the region. The topic of improving infrastructure covers a variety of different solutions, therefore it should be noted that the effectiveness of a solution in a particular region must be carefully considered.

### **Continuation of the appointment of an expert on the issue**

The UN first appointed Ms. Catarina de Albuquerque as the Special Rapporteur on the human right to safe drinking water and sanitation in 2008. Her job included presiding multiple debates over issues concerning water and sanitation. She also provided suggestions to different governments and United Nations on the most suitable solutions in different situations. The current Special Rapporteur Mr. Leo Heller has similar responsibilities. He will also be taking a trip to Mongolia this April to inspect to observe and report on the accessibility of safe drinking water and sanitation facilities. The appointment of an expert on the issue is effective because they are constantly updating their knowledge of conditions around the world. Once they have the most recent information, they are able to advise the process of drafting new solutions.

### **Water awareness programs**

Over decades, tens of hundreds of programs have been initiated by governments and organizations. However, ones that are still running are quite rare. When implementing programs as a solution, one can either expand on a preexisting idea by working with an organization or pitch a novel approach on the issue. Seeing that the issue of how to make clean water and sanitation accessible to all has been ongoing for decades, it may be difficult to come up with a solution that has not been used in the past. That being said, it is just as critical to making sure that changes are being made to existing solutions so there is continuous improvement. India's Swachh Bharat Abhiyan is a good example of this: the government built communal toilets that barely anyone used. The government offered monetary compensation to families who vowed to regularly use these toilets. As a result, the rate of open defecation in the area has significantly decreased, which also contributed to a drop in preventable infectious diseases. Effective programs can take place in educational settings as well. In Lima, Peru, the government realized that part of the reason the city constantly lacked water was that citizens were not aware of the climate of the city and the issue of water shortage. The government organized national writing competition for school children in 2014. The best 50 stories were then published in a book called "Mitos y leyendas del agua en el Peru" (Myths and legends of water in Peru). Since then, children have particularly become more informed about the importance of using water wisely in Lima. Programs can yield promising results as long as it directly addresses the specific issues a location encounters.

### **Temporary fixes**

While long-term solutions are in progress, the importance of short-term fixes should not be overlooked. Inventions such as Lifestraw allows people to drink clean water from a contaminated source. The hollow fiber filter traps pathogens when dirty water enters through one end and clean water comes out of the other. These would be ideal in areas that have yet to get a reliable water source. To get people into the habit of stopping open defecation, micro-flush toilets or pit latrines can be set up fairly easily. It is extremely crucial to keep in mind that although these inventions may seem like a quick alternative to digging a well or building communal toilets, they do not solve the problem from the root. Diarrhea will still spread if proper toilets are not installed, and there are contaminants that filters cannot remove from water.

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