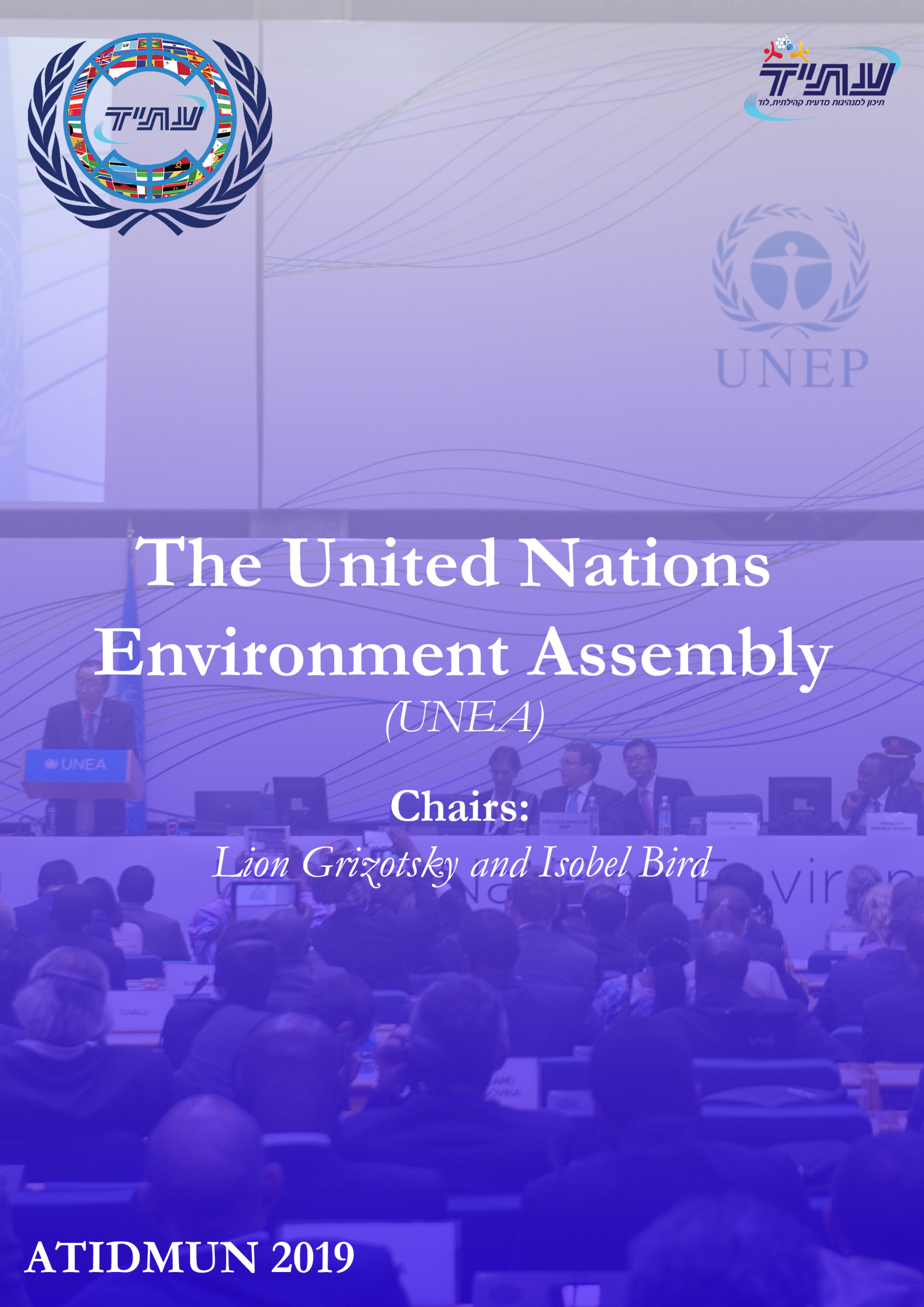

The United Nations Environment Assembly

(UNEA)

Chairs:

Lion Grizotsky and Isobel Bird

ATIDMUN 2019

Table of Contents:

Chair Letters 3

Chairs Introduction to the Committee 5

Introduction to the Committee 6

Topic A: Preserving Biodiversity Across Physical International Borders 7

Background 7

How do border barriers hurt the local biodiversity? 7

Construction 7

Genetics 8

Natural migration 8

Current situation 9

US-Mexican border 9

Other Examples 9

Questions to Consider 10

Suggested Reading 10

Bibliography 11

Topic B: Promoting Urban Sustainability in Megacities 12

Definitions 12

Mega Cities 12

Urbanization 14

Urban Sustainability 14

Background to the Issue 15

Notable Events 15

Current Situation (Status Quo) 16

Beijing 17

Tokyo 17

Additional possible solutions 18

Questions to Consider 18

Suggested Readings (or Watchings) 18

Bibliography 19

Chair Letters:

Hi, everyone!

My name is Isobel Bird, and I'm looking forward to being one of your UNEA chairs at ATIDMUN 2019!

I'm from England, and I've lived here in Israel for 5 years now. Before that, I lived in Portugal, and although it's a bit weird to keep changing lifestyles, I'm very grateful to have experienced so many things. In highschool I majored in Chemistry and Biology, but most of my free time is spent working on various MUN things. I enjoy reading, chocolate and good food (who doesn't?). I also enjoy travelling a lot, and among the perks of having a wide-spread family is travel! Apart from that, I take care of my pet rabbits, and I am a HUGE Harry Potter fan.

ATIDMUN 2019 is my twelfth conference, and my fifth time chairing. I know that for many of you, this is going to be your first conference, but don't be afraid! We have some great topics, and my co-chair and I will try and make sure that you have a wonderful conference experience. Don't be afraid to raise your placard and participate, research, concentrate and you should have a great time!

Of course, if you have any queries, concerns, or need any help with preparation, please don't hesitate to contact me at aminah.pilot@gmail.com .

Isobel Bird

Dear Delegates!!!

I'm Lion Grizotsky, I'm a senior from Ramat Gan, Israel.
I am happy to welcome you to ATIDMUN 2019 UNEA committee that will be chaired by me and my fellow chair Aminah Bird. I hope for all of us to have a great time debating, researching and "going out of the box", but don't forget that MUN is also an opportunity to meet new people from different places and find new friends. This will be my 8th conference at total, my third ATIDMUN and my first time on the chair seat.
I study at Ohel Shem HS in my hometown, and I'm a very good student in general, I major in physics, computer science and software engineering (that also includes enhanced maths and English lessons). I also take Open University courses in my free time (B.Sc in computer science). My hobbies are being with my friends, watching YouTube videos studying (yes, I know I'm weird), and playing the piano (I have 11 years of experience at playing, varying from Chopin nocturnes to the Baroque sonatas of Scarlatti).
If you have any problems writing your papers or researching, you can always contact me by mail or phone, I'll be happy to help you (I usually answer questions approx. 12 hours after they were sent). Aminah and I are here for you to have a fun experience.

With wishes for a good committee,
sincerely, Lion.
Email: Lion.grizotsky@gmail.com
Phone: 0547476611

(BTW: it's kind of a closure for me, since the first two committees I delegated were UNEA committees)

Chairs Introduction to the Committee:

Dear delegates,

We are Lion and Aminah, and we would like to welcome you to the UNEA committee of ATIDMUN 2019! We are glad to have you all as delegates and hope you have interesting and fun experience. The UNEA is known for its interesting topics, good debate and its ability to adapt to advanced delegates and beginners alike. This year's topics should be very interesting, and we hope that your research is going to be as joyful as ours was.

We would like to express our deepest welcome to the new delegates, which this conference is going to be their first. We will try to do our best to help you to get comfortable in the committee and will make sure you're not left behind. If you need any help in preparation, you can contact us and we promise to answer as soon as possible (that concerns other delegates too).

Note: please note that unlike previous years, this year's ATIDMUN is a 2 day conference, therefore both topics will be treated equally (hopefully). You must become prepared for both topics. We ask you to do research on both topics and be consistent with your preparation.

We will judge according to the flow of debate, being on-policy and accurate with your actions (according to your country's actions), being active in the debate (please don't be afraid and shy, it's perfectly normal to get goosebumps) and more. Most importantly, we will judge based on who had the greatest impact on the room.

We encourage you to speak as many times as you can during the conference, in order to make an interesting and enjoyable debate.

And of course, please do not hesitate to reach out to us for any help or advice.

With wishes for a good debate and fun research.

Best regards, the chairs of UNEA in ATIDMUN 2019.

Contact info:

Lion Grizotsky: lion.grizotsky@gmail.com Isobel Bird: Aminah.pilot@gmail.com

Introduction to the Committee:

The United Nations Environment Assembly is the main governing council of the UNEP. In 2012, at the Conference on Sustainable Development (Rio+20), the international community decided to strengthen and upgrade UNEP through the establishment of universal membership in the UNEA. As follows, in February 2013, the Governing Council held its first session with universal membership, where countries agreed to name Governing Council as the "United Nations Environment Assembly of the UNEP" (UNEA). Subsequently, the General Assembly adopted a resolution formally changing the designation to UNEA (67/251).

According to the decision adopted at the first session of the Governing Council with universal membership (27th session), UNEA will meet biennially in Nairobi starting in 2014. UNEA is mandated to ensure the active participation of all relevant stakeholders in the governance of UNEP and to promote a strong science-policy interface.

In response, the UNEP developed, in collaboration with all relevant stakeholders, new modalities for stakeholder engagement in UNEP. The draft UNEP stakeholder engagement policy was presented at the 1st session of the UNEA of UNEP.

Topic A: Preserving Biodiversity Across Physical International Borders

Background:

The Earth is filled with complex and unique ecosystems. Within each of these ecosystems, various fauna and flora coexist in a careful balance. Preserving this balance, the current biodiversity, is essential in order to ensure that the beings within the habitats can continue to exist.

This balance can easily be disturbed. Human history is rife with actions that have completely ruined or forever changed ecosystems. Foresting, fires, oil spills, war, introduction of animals and disease are all ways in which humans have forever affected the environment. Border barriers are no different. A border barrier is a mechanism that separates two territories. The purpose of such barrier is to control what enters and leaves the country, usually in order to prevent illegal immigration, human trafficking and smuggling. Sadly, border barriers often have unintended detrimental effects on the ecosystems around them.

Nature does not recognize our borders. Animals are not aware of what country they are in. They have the ecosystems they naturally exist in and the locations they naturally migrate to every year, regardless of whether they are in different sovereign territory. Despite being directly affected by physical borders, when these borders are erected, the animals' interests are almost always unrepresented.

How do border barriers hurt the local biodiversity?

Construction

The creation itself of the border barrier can be problematic. International borders exist along natural barriers, such as rivers, streams or lakes. The construction of physical borders generally has a sense of urgency. The purpose is to maintain the sovereignty of the country, sometimes against natural invaders. Therefore, the urge to disregard existing environmental building regulations and overlook the wildlife is more prevalent.

Genetics

Genetic diversity is essential for the existence of a species. The larger the genetic diversity, the more likely some members of the population will survive or even flourish in times of environmental changes or challenges (Change in temperature, climate or disease). This is because some of the members have traits which make them resilient to specific dangers. When a border barrier is erected, there is a risk that a population of plants or animals will become separated. This action takes a singular population and turns it into two smaller populations. A smaller population means less members with the right genes required in order to fight off dangers. Furthermore, separating these populations creates a smaller gene pool, leading to more inbreeding. Inbreeding is problematic since instead of genetic flaws being mated out of the species, they tend to remain and hurt the species' ability to thrive.

Natural migration

Different animals deal with similar problems in their own individual way. The issue of winter, when the temperature drops, is an example of this. Some animals grow thicker fur, some hibernate, and others migrate to warmer locations. These methods of survival are ingrained in the animals' DNA. Whenever a border barrier is constructed there is a danger that migratory animals will not be able to migrate at all or not do so effectively. This is specifically problematic considering the rapidly changing climate. The change could cause more animals to attempt to migrate to cooler environments, and their inability to do so due to borders could hurt their survivability.

Note on border barriers: attempts to limit the damage to the biodiversity by making passages for animals periodically in the border barrier isn't always effective. The construction of the border barrier creates an environment which is completely unlike the previous one. Suddenly there are roads adjacent to their construction, people patrolling those roads, helicopters to monitor the border and high-powered lights to help supervise occurrences. Each one of those factors make the animal less likely to cross a passage through the border. The lights and helicopters deter the animals from approaching the barrier. Once they reach it, seeing patrols scares them away. Lastly, even if there are no lights or helicopters, or patrols, the barrier is not their natural environment. If the animal has a tendency to only travel under the cover of vegetation it is impossible for it to cross the border.

Current situation:

There are currently many border barriers around the world. All of them are massive projects spanning between tens of kilometers and upwards of hundreds. It is almost impossible to build them without detrimentally affecting wildlife. Though at times human border barriers help wildlife.

US-Mexican border:

Donald Trump made many promises before he was elected president; one of the most prominent ones was to "build the wall". The proposed plan is to build over a thousand miles of border wall between the United States and their neighbor to the south, Mexico. Many NGOs have brought up concerns about the environmental ramifications of the border, and the media have brought some attention to this concern. The face of the issue has been the ocelot. The American Ocelot population is dangerously low, leading to genetic issues. A border barrier would eliminate the link between the American and Mexican populations, dooming the ocelot. The ocelot is not the only animal affected by this barrier. According to the World Watch Institute and the US department of the interior, 31% of the US's endangered species live near the border, and there 85 endangered species living near the border on the Mexican side. The border would place all of these species at an increased risk. Especially prominent ones include pygmy owls, armadillos, bobcats, chachalacas, bighorn sheep, black bears, jaguars, Texas horned lizards and the Mexican gray wolves.

Other Examples:

Kashmir: This is a disputed territory located where India, Pakistan and China meet. The region has a large diversity of fauna and flora, which includes 3054 different species of plants and animals from mammals to microorganisms. Despite this precious biodiversity, the dispute has led to the region being covered with border walls and fences with heavily armed with weapons, and the wildlife has suffered for it.

Crimea: Due to the territorial conflict between Russia and the Ukraine, borders have been built inside the Crimean peninsula. These borders have affected the wildlife.

Korea: The DMZ (demilitarized zone), the border between North and South Korea is a unique example of what happens when there is no human intervention in an environment. The conflict

between the two countries has led to the border being littered with landmines, making it uninhabitable to humans. Lack of human activity has allowed nature to take over and flourish. The area is filled with all types of wildlife, including fish, reptiles, mammals and rare plants. Not all border barriers are detrimental to wildlife. If a "No man's land"-which is territory left unoccupied due to conflict- is created, it could actually come to aid wildlife.

A note about potential solutions: When drafting resolutions be sure to be as specific as possible when dictating the mechanism of solving the problem. Additionally, as we are the UNEA committee, make sure that the solutions are within the UNEA's authority and monetary capability.

It is recommended that delegates research their country's attempts to maintain biodiversity. This might provide insight on the lengths your country is willing to go to in order to preserve biodiversity or provide ideas for solutions that might apply to the international community.

Questions to Consider:

- Does my country have physical border barriers?
- Which border dispute is most relevant to my country's interests? What would be the ideal resolution from it?
- Does my country have experience in preserving biodiversity? Has it been prioritized?

Suggested Reading:

- https://en.m.wikipedia.org/wiki/Biodiversity
- https://www.unenvironment.org/news-and-stories/story/more-needs-be-done-protect-biodiversity
- https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/
- https://www.greaterkashmir.com/news/opinion/biodiversity-loss-a-common-tragedy/
- https://news.stanford.edu/2018/07/24/border-wall-threatens-biodiversity/

Bibliography:

- Enzler, S.M. "Environmental Effects of War." *Lenntech*, Sept. 2006, www.lenntech.com/environmental-effects-war.htm
- Russian article about crimea, the presidential website about crimea : http://zapovednik-crimea.udprf-crimea.com/информация/#history
- US- Mexico article by world watch guide: http://www.worldwatch.org/node/567
- Biodiversity in Kashmir by kashmir Network: http://www.kashmirnetwork.com/wildlife/biodiversity.html
- Article about the thriving wildlife of the DMZ: https://www.theguardian.com/environment/2012/apr/13/wildlife-thriving-korean-demilitarised-zone

Topic B: Promoting Urban Sustainability in Megacities

Definitions:

Mega Cities:

A very large city, with a population of over 10 million people. There are currently 30 megacities in the world, with most of them being in China and India. For context, the entire population of Israel is only 9 million people!

Ranking	**City**	**Country**	**Population (approx.) (in millions)**
1	Tokyo	Japan	37.4
2	New Delhi	India	29.4
3	Shanghai	China	26.3
4	Sao Paulo	Brazil	21.8
5	Mexico City	Mexico	21.6
6	Cairo	Egypt	20.5
7	Dhaka	India	20.3
8	Mumbai	India	20.2

9	Beijing	China	20
10	Osaka	Japan	19.2
11	Karachi	Pakistan	15.7
12	Chongqing	China	15.3
13	Buenos Aires	Argentina	15
14	Istanbul	Turkey	15
15	Kolkata	India	14.7
16	Lagos	Nigeria	14
17	Manila	Philippines	13.7
18	Tianjin	China	13.4
19	Rio de Janeiro	Brazil	13.37
20	Guangzhou	China	12.9
21	Moscow	Russia	12.5
22	Lahore	Pakistan	12.2
23	Shenzhen	China	12.1

24	Bangalore	India	11.8
25	Paris	France	11
26	Bogota	Colombia	10.8
27	Chennai	India	10.7
28	Jakarta	Indonesia	10.6
29	Lima	Peru	10.5
30	Bangkok	Thailand	10.3

Urbanization:

Urbanization is the population shift from rural areas to urban areas, or cities. This began during the Industrial Revolution, and is now happening in more of the developing countries. People move from the countryside to the cities, usually in search of jobs. This means that cities are growing rapidly, with little time to adapt.

Urban Sustainability:

Urban sustainability is the idea that a city can be organized without excessive reliance on the surrounding countryside and be able to power itself with renewable sources of energy. It is the attempt to reduce the carbon and ecological footprint of a city via reducing/managing waste and pollution, using land efficiently, and making the city's overall contribution to climate change minimal.

Some have defined sustainable urban development as "development that improves the long-term social and ecological health of cities and towns", or a city in which social and financial development

has little to no harmful impact on the environment. You could also think of urban sustainability as the way a city adapts to the rapid increase in population caused by urbanization, but in an ecologically safe way.

Background to the Issue:

In 1930, New York became the world's first megacity when it reached a population of 10 million. But until the 1960s, there was almost no environmental consciousness, and cities like New York were full of air that was unbreathable due to pollution and waterways that were black and clogged with sewage that was pumped into them on a daily basis. Financial growth was at an all-time high, but the damage that was being done to the environment was immeasurable.

Eventually, in the 1970s, after things such as smog inhalation had killed hundreds of people, cities began to take steps to improve their sustainability and ecological health. Incineration plants were shut down and sewage plants were built, among other measures.

Notable Events:

1992 — the U.N. Conference on Environment and Development in Rio de Janeiro marked the beginning of sustainable development goals. An action plan, called Agenda 21, was signed by 152 nations. However, few of the goals were completed.

2002 — the World Summit on Sustainable Development was assembled by the U.N. The Summit focused on conserving natural resources in an ever-growing world and introduced the concept of sustainable consumption and production.

2015 — 193 U.N. member states signed the 2030 Agenda for Sustainable Development. The agenda contained 17 goals (called SDGs, or sustainable development goals) that tackle air pollution, renewable energy, and better and green public transport.

Current Situation (Status Quo):

Today, over 55% of the Earth's population lives in urban areas. It is expected that this number will rise to 70% by 2050. Such a rapid demographic shift to cities, called urbanization, has created and will continue to create a variety of issues, such as that of overcrowding, concentrated pollution, and an increasing growth of slums.

A sustainable city tends to have the following features: compact, efficient land use; less automobile use, yet better access; efficient resource use; less pollution and waste; the restoration of natural systems; good housing and living environments; a healthy social ecology; a sustainable economy; community participation and involvement; and preservation of local culture and wisdom. Urban planners are now promoting a sustainable city model, which consists of cities that are designed with consideration of environmental impacts, such as minimizing the use of energy, water, and the outputs of waste and pollution.

Because of political and governmental structures in most jurisdictions, sustainable planning measures must be widely supported before they can affect institutions and regions. Actual implementation is often a complex compromise.

Many cities, of course, have made efforts towards environmental preservation. Improving their urban transportation, energy efficiency, and waste management, a number of cities are becoming more sustainable. The city of Bogota, for example, upgraded its public transportation system, introducing hybrid and electric buses. By advocating a separate lane for said buses, they avoided traffic, making them quite attractive. The new buses transport 1.7 million people each day, saving a considerable amount of fuel and reducing carbon emissions. San Francisco, on the other hand, has made efforts to combat waste. Currently, 80% of its trash is "diverted" from landfills, and by 2020, the city hopes to recycle 100% of its waste. Such efforts are valiant, but do not fully combat the vast issue at hand. A fully sustainable city is yet to be achieved.

In 2006, the United Arab Emirates began a project with British architects to design and build a truly green, sustainable city. Although not completed yet, the city, called Masdar, currently homes a variety of offices and houses. To avoid the hot sun, Masdar's buildings are close together, creating shaded walkways. To ensure minimal pollution, no cars are allowed in the city. Instead, clean-energy personal rapid transit vehicles transport people underground. Solar panels produce the city's power. In addition,

smart technologies make each house energy efficient, further reducing the city's reliability on power. Although this all sounds great, Masdar taught architects and city planners an important lesson: it is much easier to implement changes to make a city more sustainable than it is to build a sustainable city from scratch. Masdar was an experiment, and it proved to be an expensive project. The future of sustainable development is through amending current cities, not through building new ones.

Beijing:

Megacities such as Beijing, in fact, have such bad pollution that it is unsafe for people to breathe the air outside. Over 5.5 million premature deaths occur each year because of air pollution worldwide. Beijing's authorities have already taken a number of innovative steps to improve air quality, such as alternating access for cars coming into its city center according to number plates, and planting extensively around the city to create a green wall that has quite successfully alleviated the ferocity of the sandstorm effect.

Tokyo:

Most notably, Tokyo's cap-and-trade scheme has achieved a 25 percent reduction in emissions (compared to the 2010 base year) in just its fifth year since coming into force. Companies in Tokyo first moved to reduce energy usage in the aftermath of the devastating earthquake and tsunami in March 2011, which created severe electricity shortages, but have continued to implement sustainability measures even as that crisis abated.

Tokyo is also taking steps toward a "smart energy city." We intend to increase the percent of energy from renewable sources to 30 percent by 2030. We are creating public-private partnerships to achieve this target. The Tokyo Metropolitan Government has invested $37 million to create six energy funds worth over $350 million in private investments.

Transportation is also critical to our sustainability plans. Tokyo already has one of the world's most efficient and low-carbon public transportation systems. And like many cities, we are reducing emissions by expanding pedestrian zones and establishing bike-sharing programs. But we are also investing in a bold effort to reduce emissions from vehicles by creating a hydrogen-based society. We are investing $350 million to promote hydrogen-powered automobiles and the necessary infrastructure to fuel them.

Additional possible solutions:

Agriculture: Vertical farming, the practice of farming food and medicine in stacked layers, is likely the future of food producing. Vertical farming allows more food to be produced in less space than in traditional outdoor farming.

Public Transport: The creation of sidewalks, trails, and bike paths may encourage walking and biking, therefore decreasing reliance on cars. In fact, with more agreeable parks and pathways, more people would be enticed to spend more time outside in public spaces, increasing their interaction with others. Additionally, if the use of motor vehicles cannot be eliminated, the public transportation we use can be improved. Replacing current transport with buses that are more efficient and faster trains (such as MagLev or HyperLoop); can help reach the sustainable future we desire.

Questions to Consider:

1. Does your country contain any megacities?
2. What do you (your country) value most - financial growth or ecological responsibility?
3. What is the state of your country's resources? Would they be benefited or harmed from increased sustainability?
4. Which sustainability measures have you implemented? Why those in particular?

Suggested Readings (or Watchings):

- https://sustainabledevelopment.un.org

Bibliography:

- Dwyer, Jim. "Remembering a City Where the Smog Could Kill." *The New York Times*, The New York Times, 1 Mar. 2017, www.nytimes.com/2017/02/28/nyregion/new-york-city-smog.html.
- "Which of Your Friends Needs to Learn This Term?" *BusinessDictionary.com*, www.businessdictionary.com/definition/urbanization.html.
- *World City Populations 2019*, http://worldpopulationreview.com/world-cities/
- www.siemens.co.uk/education/pool/teachers/crystal/downloads/what_is_urban_sustainability_v1.pdf.