

# 2018-2019 Model Arab League BACKGROUND GUIDE

Council of Arab Environmental Affairs Ministers

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Original draft by *Alexis Turner*, Chair of the *Council of Arab Environmental Affairs Ministers* at the *2019* National University Model Arab League, with contributions from the dedicated staff and volunteers at the National Council on U.S.-Arab Relations

# Honorable Delegates,

I am extremely pleased to welcome you to the 2018-2019 season of Model Arab League! My name is Alexis Turner, and I will be the Chair for the Council of Arab Environmental Affairs Ministers at the National University Model Arab League and Secretary General at the Southeast Regional Model Arab League. I am a senior at Converse College, majoring in Mathematics and minoring in Computer Science and Politics. This is my fourth year participating in Model Arab League and I could not be more excited to be chairing this committee in particular. The Council of Environmental Affairs gives delegates the ability to combine their diplomatic skills and their interests in the world around them and how the environment can have a lasting impact in the geopolitical spectrum. I hope that this is a learning experience for you, and that you will gain skills and memories that you will keep with you into later years. Because of Model Arab League, I have made lifelong friends, wonderful networking opportunities, and discovered passions of mine that I didn't know I had before. I sincerely hope that, with your own dedication to this program, you will receive the same gifts.

I know that the physical conference is extremely exhilarating, but the preparation ahead of time is the key to being successful. What I find the best way to research is having a deep understanding of how your delegation - your country - stands on every single one of these topics. Is your country for or against the current policies set in place for this topic? What is your country doing in regards to the topic? Go beyond a simple Google search; use news articles, CIAFactbook, journals, scientific reports, speeches, government websites, and other important categories for your research. While we all come together to compete and collaborate, you are representing a certain delegation and that country's views of the world, not necessarily your own personal view.

Debate can become very intense, so I expect diplomacy and mutual respect between delegates. Remember that this is a learning opportunity for everyone and a chance for growth. I encourage you to go beyond this and be kind, friendly, and approachable - helping one another learn is much more productive than simple heated debate.

I look forward to meeting you at Nationals or a Regional conference, and wish you luck during your journey this season. Remember that this is, above all, a fun experience!

Best wishes, Alexis

Topic I: Reevaluating electronic waste management in the region and proposing methods to properly dispose of electronic waste and reduce its overall production.

### I. Introduction

# A. Background

Electronic waste, or e-waste, is one of the fastest growing waste systems within the Middle Eastern and Northern Africa region. E-waste refers to an "electrical or electronic appliance that has reached its end-of-life, such as refrigerators, washing machines, microwaves, cell phones, TVs and computers." The majority of e-waste is metal, plastic, and other items such as copper and even toxic elements like lead, arsenic and mercury. E-waste requires special handling because many of these materials are expensive or hard to handle. While recycling can help in recovering reusable components, like copper, there are other things to consider: lack of facilities, high labor costs, environmental regulations (or lack thereof), etc. It is also important to remember that the exportation of e-waste to poorer countries is illegal under the Basel Convention. E-waste poses several health hazards, as currently the only recycling tools that are being used are burning e-waste and dissolving in strong acid. Toxic chemicals are released into the environment through these operations, and "Electronics recycling workers have been shown to have higher levels of flame retardants in their blood, potentially from exposure to contaminated indoor air. Similar exposures are likely to occur for communities where recycling plants are located, especially if these plants are not adequately regulated." Right now, only about 15-20% of e-waste is actually recycled.

# **B.** History in the Arab World

While the national percentage of recycled e-waste is much higher within the Middle Eastern and Northern Africa region, the percentage can be as low as 5%. The majority of the waste is "dumped in landfills, stored in scrap yards and warehouses or incinerated." Currently, e-waste management is in its beginning stages within the MENA region, and there is currently not a lot of basic background data. A "2014 report on e-waste by GIZ, the German government's overseas aid agency, highlights not only the lack of e-waste recycling facilities across the region but also the general lack of awareness of the potential dangers of such rubbish, demonstrated by the almost total absence of regulations regarding its disposal."

Egypt currently has the biggest stockpile of e-waste on the continent of Africa, with no formal e-waste system. Since there are not a lot of formal waste management systems, there are places

<sup>&</sup>lt;sup>1</sup> https://www.ecomena.org/ewaste-management/

http://www.middleeasteye.net/columns/growing-mountain-electronic-waste-858058492

<sup>&</sup>lt;sup>3</sup> http://www.middleeasteye.net/columns/growing-mountain-electronic-waste-858058492

known as "electronic graveyards." An area near Idhna is a known graveyard or a dumping ground for electronic waste. The Gulf area, per capita, is also one of the largest electronic consumers in the world. Currently, one e-waste management company based in the United Arab Emirates, called Enviroserve, is claiming to build one of the largest e-waste recycling sites in the world somewhere within the UAE. Currently e-waste entrepreneurs are setting up businesses to make a profit, but more incentives need to me given to encourage growth.

# C. Finding a Solution to the Problem: Past, Present, and Future

Since the problem of e-waste management is so new, there is a desperate need for basic data on the amount of e-waste that each country is producing, dumping, and recycling. The past solutions to recycling have only been dissolution in acids and incineration, and this could potentially damage the environment and the laborers by releasing toxins in the air. However, there currently few economical methods used or discovered which could solve this issue. The lack of proper facilities could also be because of several political factors in a country, such as a lack of funds and infrastructure, which would need to be addressed.

# II. Questions to Consider in Your Research

- What is my country doing with respect to waste management, particularly electronic waste? If it is not doing anything, why not?
- Has e-waste been a priority to my country? Is there a chance that my government would change its stance within the future if e-waste became more of a priority?
- What type of barriers would impede creating solutions within my country to deal with waste management?
- If a solution did arise, how could it negatively impact my state? Would it affect my state financially, or impact state sovereignty?

# III. Questions a Resolution Might Answer

• What are some successful methods of e-waste management, and can they be implemented into other countries with less resources?

• What are some methods of e-waste recycling that could be considered, other than simply burning or dissolving?

<sup>4</sup> http://www.middleeasteye.net/columns/growing-mountain-electronic-waste-858058492

- How will prioritization be distributed? Will certain countries gain more priority?
- What would be some repercussions of making facilities for e-waste management and how would that be addressed?

### IV. Additional Resources

• <a href="https://www.giswatch.org/sites/default/files/gisw2010regionalmiddleeastnorthafrica\_en.p">https://www.giswatch.org/sites/default/files/gisw2010regionalmiddleeastnorthafrica\_en.p</a> df

Global Information Society watch with an in depth explanation about current services of e-waste.

- <a href="https://sciforum.net/manuscripts/610/manuscript.pdf">https://sciforum.net/manuscripts/610/manuscript.pdf</a> *E-waste management within the United Arab Emirates and the geopolitical factors.*
- <a href="https://www.thenational.ae/uae/throwaway-culture-make-e-waste-a-looming-disaster-for-us-all-1.706972">https://www.thenational.ae/uae/throwaway-culture-make-e-waste-a-looming-disaster-for-us-all-1.706972</a>

Statistics on e-waste disposal, how harmful it is, and the problems with current solutions being brought forth.

• <a href="https://onlinelibrary.wiley.com/doi/pdf/10.1002/tqem.21500">https://onlinelibrary.wiley.com/doi/pdf/10.1002/tqem.21500</a>
<a href="Case study of e-waste management in Algeria">Case study of e-waste management in Algeria</a>, and the results.

Topic II: Developing strategies to protect environmental infrastructure, particularly water and energy, from being utilized as tactical weapons in environmental warfare.

### I. Introduction

# A. Background

Parties at war have been targeting environmental infrastructure as means to impact general welfare and livelihood. Infrastructure that has been targeted during wars includes water, sanitation, waste, and energy management stations, but what is the reasoning for this? Some say "by targeting, destroying or controlling such infrastructure through indiscriminate and punitive tactics, warring parties are able to displace and terrorise urban populations, punish civilians perceived as being sympathetic to the enemy, deprive rival warring parties of energy resources and revenues and force the surrender of cities." This can include poisoning water, damaging regions of food production, and targeted spreading of pollution. Not a lot of information is available, as the implications are hard to measure. There are not enough humanitarian organizations to combat the impacts of these attacks, as the particular areas where environmental infrastructure is targeted are particularly dangerous. It is said that "specifically, targeting water infrastructures poses very serious risks to public health. Water infrastructure protects water quality, access to safe water and the ability to treat human and industrial waste. When water infrastructure is attacked civilians lose access to safe water, are often exposed to the growing threat of water-related diseases, like cholera, and it affects the ability to produce goods and services in industry... particularly in cities where sieges have hindered repair of environmental infrastructures, factors such as hunger, malnutrition, water-borne diseases, and lack of medical care interact to increase civilian mortality." On the energy side, targeting oil and gas could affect revenue, and the ability for most cities to function. Electric and telecommunication services are used by civilians and military alike, and are particularly vulnerable to attack. The targeting of civilians basic needs is usually overlooked and understudied. Justification comes through international law, as parties consider the infrastructure dual-usage or simply "collateral" damage, hence the inability to pursue any action against perpetrators.

# **B.** History in the Arab World

Environmental warfare has been dated back officially to 2011, however the idea has been around much longer. Examples of environmental warfare can be seen in Syria, Lebanon, and Yemen, as infrastructure that provides essential human services like sanitation and fresh water are attacked. Water pumping stations in Aleppo are repeatedly bombed, and nearly 2 million people were without fresh water. ISIS also sought control over water infrastructure in Iraq and Syria, like Syria's Tabqa Dam, which regulated municipal water and hydropower. Rebuilding infrastructure

<sup>&</sup>lt;sup>5</sup> http://www.natureasia.com/en/nmiddleeast/article/10.1038/nmiddleeast.2017.144

is especially tough once it is destroyed due to consistent air attacks in places where the infrastructure has been damaged. Yemen, for example, didn't have access to the proper sanitation materials, had a cholera outbreak due to lack of sanitation and clean water. Kuwait oil fields were attacked during the 1990-1991 Gulf War by the Iraqis, significantly harming their economy and energy sector.

# C. Finding a Solution to the Problem: Past, Present, and Future

While there is scant information currently about environmental warfare, due to the dangerous situations, not much physical action has been taken. International laws have been put in place to protect certain types of environmental infrastructures from being targeted, but there is a loophole when considering the damage collateral. Not only this, there also needs to be prior research about the most important infrastructure that supports civilizations in war-torn territories, such as dams and hydropower stations. Environmental warfare has also not been considered in many conversations of defense, and having this included in any summit or forum about defense would be a stepping stone towards the right direction.

# II. Questions to Consider in Your Research

- How is my country sustained environmentally? Does my country have a major water system or important infrastructure?
- Have there been recent attacks on my country's infrastructure? What about state allies? How would an attack on a neighboring country's environmental infrastructure affect my country?
- Do any of these current conflicts have a clear end in sight? If not, what are some precautions needed in case of a longer war?
- What would be the easiest way to attack environmental infrastructure?

# III. Questions a Resolution Might Answer

- Can international law be interpreted more strictly to criminalize damage to environmental infrastructure? What can countries do on a state level?
- Is there a way to make it harder for warring parties to target infrastructure such as dams or energy stations? What would this take in terms of political and physical capabilities?

- How can environmental infrastructure be made more of a priority when it comes to discussions of defense?
- Should outside forces be allowed to intervene?

### IV. Additional Resources

- <a href="https://www.newsecuritybeat.org/2017/10/middle-eastern-wars-protect-civilians-protect-environmental-infrastructure/">https://www.newsecuritybeat.org/2017/10/middle-eastern-wars-protect-civilians-protect-environmental-infrastructure/</a>
  - Information on current studies on the effects of attacks on environmental infrastructures and suggestions about how international bodies can intervene.
- <a href="http://english.geopolitics.ro/environmental-warfare-changing-the-balance-of-geopolitics/">http://english.geopolitics.ro/environmental-warfare-changing-the-balance-of-geopolitics/</a>
  Information on past examples of environmental warfare not in the MENA region and how it was combated.
- https://www.independent.co.uk/voices/middle-east-war-medicine-cancer-superbugscaused-by-conflict-a7738451.html
   Explanation of a drug resistant bacteria that came from environmental warfare outside of Mosul.
- <a href="http://journals.sagepub.com/doi/abs/10.1177/0967010617716615?journalCode=sdib">http://journals.sagepub.com/doi/abs/10.1177/0967010617716615?journalCode=sdib</a>
  Journal on the targeting of environmental infrastructure and how it affects daily lives and why it is used.

Topic III: Examining avenues for regional water security within the League over the usage of – and disputes over – shared water resources.

### I. Introduction

# A. Background

Freshwater is an invaluable resource that civilization needs access to survive. However, the scarcity of freshwater availability has led to political and regional tension that could escalate into extreme violence. The rising demand for clean water and the control of it will eventually drive states to fight for control of the source - if one controls the source of the water, they control the entire region that relies on that source. However, "Unilateral practices of water diversion create a situation of inequitable distribution of water among nationstates within a basin which is a prerequisite for a sustainable conflict." Any kind of state distribution in the past has ended up with unfair lines drawn within regions of distribution, with people suffering because of it. Freshwater is not just used for drinking - one of the main reasons that people need access to freshwater is agriculture and irrigation. Additionally, scarcity of water can "contribute to waterborne disease, malnutrition, poverty, economic and political instability..."

The major reasons for these conflicts are " (1) low rainfall, inadequate water supply, and dependency on one major water source; (2) high population growth and rapid urbanization; (3) modernization and industrialization; and (4) a history of armed combat and poor relations between countries and among groups within countries." <sup>7</sup> Not many armed conflicts arise from these reasons alone. What causes the tension includes political war, disputes over large scale water projects like dams and reservoirs near the source of the freshwater, and concerns over the effect on the environment.

### B. History in the Arab World

Water scarcity within the MENA (Middle East and North Africa) region is quickly becoming a large concern, especially because of increasingly arid weather. The Tigris and the Euphrates River, for example, runs through Turkey, Syria, and Iraq before emptying into the Persian Gulf. These two rivers begin in Turkey, with about 25% of their course in Syria and 35% in Iraq. There is likely to be tension over water allocation here, due to "Food and energy security" being "the primary concerns for Iraq and Turkey. Population growth amplifies the demand placed on food and energy supplies and increases the prospect of further discontent over the existing water

<sup>6</sup> 

https://nsuworks.nova.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=11 31&context=pcs

<sup>&</sup>lt;sup>7</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3076402/

allocation quotas." Because Turkey is upstream, they have large control over the water, which means "the initiation of the Southeastern Anatolia Project (GAP) by Turkey has created exceeding pressures on the water system of the rivers. The project includes the construction of 22 dams, 19 hydropower plants and irrigation facilities to serve 1.7 million hectares of land, totally owned by the local population of the region." The Yarmouk River was also a site of conflict between Israel, Jordan, and Syria. In 1953 a Jordanian-Syrian treaty was negotiated, and the purpose was to establish the terms of dam, reservoir, and irrigation construction. It also covered the allocation of water to Jordan and Syria - but it did not give a specific allocation quantified in terms of millions of cubic meters to Syria. Therefore, Syria was able to deeply exploit the Yarmouk River.

# C. Finding a Solution to the Problem: Past, Present, and Future

In the past, several treaties deteriorated quickly due to disproportionate allocations and exploitation of water sources. It is essential to address the many complex water needs of each state, and understand that water issues are not uniform across a region. Do they need the water purely for irrigation, or is it needed for a municipality? Is there a way to equally distribute the water? How did that region distribute water in the past? There also needs to be emphasis on combating violence due to water wars, including preventative measures and dealing with the aftermath of conflict.

# II. Questions to Consider in Your Research

- Is my country currently in a water crisis? If so, what is the main source of freshwater that my country depends on, and what is preventing it from actively flowing into my country?
- How do other water wars affect my country?
- Are there any current projects such as building dams or reservoirs that my country is supporting?
- What are the negative impacts of the water wars within the MENA region and how would this translate geopolitically?

# III. Questions a Resolution Might Answer

<sup>8</sup>https://nsuworks.nova.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=11 31&context=pcs

<sup>&</sup>lt;sup>9</sup> Kibaroglu, A. and Unver, O. 2000. —An Institutional Framework for Facilitating Cooperation in the Euphrates-Tigris River Basin.ll International Negotiation: A Journal of Theory and Practice, 5(2): 1-24.

- What are some possible contingency plans in case water wars escalate?
- Are there any preventative measures in place already and can they be improved upon?
- Will there be any restrictions to water if regulations are put in place?
- What is the best way to de-escalate a violent situation formed by conflict over a water source?

# IV. Additional Resources

- <a href="https://www.mepc.org/water-wars-coming-conflicts-middle-east">https://www.mepc.org/water-wars-coming-conflicts-middle-east</a>
  Book excerpt by John Bulloch and Adel Darwish explaining the current water crises that are plaguing the MENA region, including several specific case studies.
- <a href="https://e360.yale.edu/features/mideast\_water\_wars\_in\_iraq\_a\_battle\_for\_control\_of\_water">https://e360.yale.edu/features/mideast\_water\_wars\_in\_iraq\_a\_battle\_for\_control\_of\_water</a>
  - An explanation of the water wars in Iraq over the Tigris and Euphrates River, all of the contributing actors within the conflict, and how extremist groups can deeply affect how diplomacy comes about.
- <a href="https://www.mepc.org/water-politics-middle-east-context-conflict-or-cooperation-water-middle-east-geography-peace-and">https://www.mepc.org/water-politics-middle-east-context-conflict-or-cooperation-water-middle-east-geography-peace-and</a>
  - Book by Mostafa Dolatrar and Tim S. Gray explaining certain avenues that could be taken to combat water wars that include infrastructure, like rerouting water.
- <a href="https://www.foreignpolicyjournal.com/2016/09/02/water-scarcity-cooperation-or-conflict-in-the-middle-east-and-north-africa/">https://www.foreignpolicyjournal.com/2016/09/02/water-scarcity-cooperation-or-conflict-in-the-middle-east-and-north-africa/</a>
  - Journal entry about the reasons of water crises, including environmental problems and how the natural disasters play into geopolitics of the Middle East.

Topic IV: Exploring ways to increase public participation in environmental initiatives.

# I. Introduction

# A. Background

Currently, the amount of public participation in environmental initiatives is low. While an issue is indeed the amount of people who participate in environmental initiatives, the main role is "to find ways of making it more effective." But undertaking the actual programming is not an easy start. Some say that specific reasons for this are "benefits are assumed to be obvious and substantial, the specific rationale for seeking greater public participation is not always clearly articulated. In many cases multiple purposes are listed without differentiation between them or without discussion of how they relate to each other, or of whether certain potential benefits are omitted because they are not considered significant." Another problem is sharing information with the public - which is different than influencing a government's decision to go through with environmental initiatives. Ciaran O'Faircheallaigh notes "For instance a frequently-cited goal is to allow community aspirations or priorities to be taken into account in decision making. Yet such a requirement could encompass many different approaches, from treating community views as one of numerous variables considered in decision making, to immediately excluding options that fail to win community support." Without community involvement, any initiative to sustain the environment would fail, as all programs need cooperative work and a large group to extend across an area and make a substantial impact.

# **B.** History in the Arab World

For the Arab world, sustainability means something a little different than what it does in the Western world. To the MENA region, sustainability means "addressing basic developmental challenges such as economic growth, water scarcity, food security, and health" meaning that environmental initiatives were put on the backburner. An integral part of sustainability is the "built environment". <sup>11</sup> The Middle East is currently facing rapid population increase and urbanization without a framework for sustaining the environment or the resources it possesses. Right now, the hot and arid climate of the region poses a threat. However, several countries have started their own environmental plans. Morocco created a nationwide charter for sustainable development and Jordan, along with the United Arab Emirates, drafted energy efficiency standards for all of their buildings. However, without the participation within states or cooperation between states on a larger scale, a few states changing a few rules is not going to affect much.

11 https://www.mei.edu/sites/default/files/publications/EnvironmentVol.1.pdf

<sup>&</sup>lt;sup>10</sup> https://fenix.tecnico.ulisboa.pt/downloadFile/563568428720863/texto\_apoio\_aula\_5.pdf

# C. Finding a Solution to the Problem: Past, Present, and Future

Public participation needs to be coordinated, not only on the community level but also on the state level. Several questions need to be asked in terms of what will incentivize these initiatives. Several solutions came about through administration intervention, such as public notices and judicial reviews for wrongfully impacting the environment. However, it is ultimately up to the state how they will go about incentivizing. Will it be through punishment or through setting goals?

# II. Questions to Consider in Your Research

- What kind of environmental concerns pertain to my country?
- Is there a rapid increase in population or urbanization that might affect the environment?
- Does my country already have standards set in place for public participation in environmental initiatives?
- What did some of the most successful environmental programs do to increase participation levels?

# III. Questions a Resolution Might Answer

- Is there a way to build upon current environmental standards pertaining to participation?
- Can my country utilize outside resources to increase participation, and if so, what are they?
- What happens if participation does not increase after standards are set in place?
- Will there be punishment for not adhering to standards?

# IV. Additional Resources

- <a href="https://www.ecomena.org/environment-middle-east/">https://www.ecomena.org/environment-middle-east/</a>
  An op-ed about a man's trip to the Middle East and his findings about the environment and correlating reasons to why there aren't many initiatives set in place.
- https://dirt.asla.org/2012/10/15/why-public-art-is-important/

Explanation on a certain environmental initiative that garnered a lot of attention, using public art to entice people into environmental sustainability.

- <a href="https://www.mei.edu/sites/default/files/publications/EnvironmentVol.1.pdf">https://www.mei.edu/sites/default/files/publications/EnvironmentVol.1.pdf</a>
  Pathways to sustainability report includes an education on environment aspect and how to properly educate the public on the effects that they have on the environment and what to do about it, plus innovative programs to put into action.
- <a href="https://www.epa.gov/sites/production/files/2014-05/documents/us-eia-experience.pdf">https://www.epa.gov/sites/production/files/2014-05/documents/us-eia-experience.pdf</a>
  An environmental impact assessment in the United States, explaining ways to increase participation and how participation levels were handled in the US with environmental programs.