Southern Regional Model United Nations, Atlanta 2013 Beyond 2015: Reshaping the Millennium Development Goals for an Empowered Future Sustainability November 21-23, 2013 - Atlanta, GA Email: gaplen_atlanta@srmun.org



Dear Delegates,

It is my distinct honor to welcome you to the General Assembly Plenary of the Southern Regional Model United Nations Atlanta 2013! My name is Brian Ruscher and along with my Assistant Directors, we hope that you will find this background guide informative and useful in your preparations. Over the summer we have worked diligently with Director-General Reggie Thomas and Deputy Director-General Fawn Apgar to ensure the highest quality background guide for your SRMUN experience. As you read this Background Guide you will notice that the General Assembly Plenary is of the highest importance in the international development context, serving many mandates through its extensive agenda and the UN Charter. The agenda before the delegates has been put together by conference leadership with past, present, and future issues the international community has and will address in Atlanta, these topics are:

- I. Securing Free, Equal, and Cooperative Access to Fresh Water Resources; and
- II. Fostering Mobile Technology in the Advancement of Commerce

With this agenda in mind, it is vital to understand the importance of the General Assembly Plenary and the mandate of the body. The General Assembly deals directly with thematic, programmatic, and systematic changes in the UN system, however it's focus has been more so on how international development occurs as opposed to the specific programs working. The leadership of this committee highly recommends that you begin your research with the sources found in this background guide and at the Plenary's website, expanding your research into other areas as your respective Member State sees fit.

With the two topics above and the context of the conference theme, the international community is poised with a number of valuable questions in how to create a new development framework for the international community to work under on issues such as water and mobile technology. Water is an essential provider for human life and required for nearly all development indicators progress. Mobile technology finds itself as the game-changer in the international trade and commerce context, allowing once underdeveloped areas to become booming areas of economic growth. This year, SRMUN has undertaken an excited development by reducing the topic number from three to two topics. This change reflects the desire of both delegates and staff to make topics more in depth, detail oriented, and allow for greater sub-topics. However, this means that more research must be undertaken and delegates should come to Atlanta in November expecting more intensive debate on water and mobile technology.

Every delegation must submit a position paper addressing each of the topics listed above and only those listed above. These papers should adhere to SRMUN's guidelines on position paper format and style found on the conference website. The position paper objective is to convince and persuade delegations in the Plenary that your recommendations on each topic are the prime courses of action to address the agenda, and to give the committee's leadership an idea of what you expect to do at the conference. A proper position paper should also provide insight into your country's position, history, and statement of goals for the topic. If you have questions about the details of the position papers, please visit the SRMUN website (www.srmun.org) or email the committee leadership at the address listed below. All position papers MUST be submitted by November 1st, 11:59pm EST via the on-line submission system at http://www.srmun.org.

Best of luck in your preparation and welcome to the General Assembly Plenary!

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History of the United Nations General Assembly Plenary

Of the after effects of World War II, destruction and disorder led 51 world leaders to reevaluate the needs of the international community and thus founded the United Nations (UN) with the goals of maintaining peace and promoting international cooperation. Coming fully into force on 24 October 1945, the UN has served as an international discussion forum for critical global issues. The General Assembly (GA) is one of the six principle organs of the UN as stated by Article 7 of the Charter of the UN and is the only universally representative committee, seating all 193 Members of the UN as well as Permanent Observer Member States.¹ According to Chapter IV of the UN Charter "the function of the GA is to discuss, debate, and make recommendations on a range of subjects pertaining to international peace and security--including disarmament, human rights, international law, and peaceful arbitration between disputing nations."²

The GA is considered the main deliberative body of the United Nations. Of the vast spectrum of duties the GA has, some are considered to be more direct action and others more indirect action. It is tasked with the election of all ten non-permanent members of the Security Council (SC) as well as the members of other councils or organs. The GA is also responsible for election of the single most important position a single Member State can hold in the UN, the Secretary General. The SC decides this election after receiving recommendations. Since the creation of the UN, the GA Plenary has elected eight Secretary-Generals, the most recent being Ban Ki-moon of the Republic of Korea.³ Finally, the UN GA also has to consider and approve the budget of the UN.⁴

Some of the additional tasks of the GA are consideration and recommendation of any issues concerning the status of international peace and security, creation and commencement of international studies fomenting political cooperation, and finally, make recommendations with regards to the settlement of international disputes affecting diplomatic and friendly relations between member nations.⁵ The General Assembly's resolutions are not legally binding upon Member States. However, through its recommendations it can focus world attention on important issues, generate international cooperation and, in some cases, its decisions can lead to legally binding treaties and conventions.⁶

Given the numerous responsibilities that the GA has, it is divided into subsidiary organs that deal with issues at a more specific level. The meeting of all UN Member States as well as Permanent Observers is called the General Assembly Plenary (GA), it oversees six main committees with agenda items, these bodies are: First Committee, Disarmament and International Security (DISEC); Second Committee, Economic and Financial (ECOFIN); Third Committee, Social, Cultural, and Humanitarian (SOCHUM); Fourth Committee, Special Political and Decolonization (SPECPOL); the Fifth Committee: Administrative and Budgetary; and, Sixth Committee: Legal. Besides these main committees, the GA has other subsidiary bodies and agencies that can be classified as commissions, boards, councils and panels, working groups, and "other".

The first session of GA Plen was held on 10 January 1946 in Westminster Central Hall in London and following the adoption of its first resolution on 24 January 1946, which focused on the peaceful uses of atomic energy and the elimination of atomic and other weapons of mass destruction.⁸ Since then, the Plenary has pioneered some of the most significant diplomatic documents ever. Just two years after its initial sessions, the GA created the Universal Declaration of Human Rights (UDHR), containing thirty articles discussing and explaining the UN's view on human

"Charter, UN, Chapter IV: The GA." The UN. 22 Feb. 2012.

¹ "Council on Foreign Relations." Council on Foreign Relations. 22 Feb. 2012. <u>http://www.cfr.org/un/role-un-general-</u> assembly/p13490 (accessed August 1, 2013)

Ibid.

³ "Former Secretary Generals". UN, Secretary-General Ban Ki-moon. <u>http://www.un.org/sg/formersgs.shtml</u> (accessed August 1, 2013).

⁴ "UN, Main Body, Main Organs, GA." The UN. 22 Feb. 2012.

http://www.un.org/en/ga/about/background.shtml (accessed August 1, 2013).

http://www.un.org/en/documents/charter/chapter4.shtml (accessed August 1, 2013). ⁶ "UN, Main Body, Main Organs, GA." The UN. 22 Feb. 2012.

http://www.un.org/en/ga/about/background.shtml (accessed August 1, 2013). ⁷ Ibid.

⁸ McCormick, John H. The UN Today: The GA. (New York, NY: UN Dept. of Public Information, 2008), 17-22.

rights. The UDHR proclaimed the "inherent dignity" and "equal and inalienable rights of all members of the human family."⁹ The issue of human rights remains a critical one, but the efforts made by the UN GA in the form of the UDHR have significantly aided the international desire for true universal human rights.

In 2000, the GA named its 55th session as the Millennium Assembly. At the Millennium Summit, current Secretary-General Kofi Annan revealed the United Nation's Millennium Declaration, which set forth the Millennium Development Goals (MDGs).¹⁰ The GA voted and passed A/RES/55/2 on 18 September 2000, establishing these goals as the new development framework for the next fifteen years. The MDGs consist of eight global goals that the UN aspires to complete at an international level by 2015. These goals range from eradicating poverty and hunger, implementing better environmental and sustainable practices, and creating a global partnership.¹¹ While there has been significant progress over the last twelve years, efforts remain in order to successfully reach all eight of the MDGs by the deadline of 2015; nevertheless, these have served as a clear vision for what needs to be done as well as an international source of motivation.

The 66th session of the United Nations GA was held in 2011 and was presided by Nassir Al-Nasser of Qatar who served as the Committee President.¹² This session focused on issues such as prevention and control of noncommunicable diseases, "desertification, land degradation and drought in the context of sustainable development and poverty eradication³¹³, and a Commemoration ceremony marking the 10th anniversary of the adoption of the Durban Declaration and Program of Action, amongst many other things. The 67th session of the GA took place in between the months of September and December 2012. The GA is the only of the six principle organs of the United Nations in which every one of its total 193 Member States is represented and has one vote.

⁹ "The Universal Declaration of Human Rights." The UN. February 22, 2012. <u>http://www.un.org/en/documents/udhr</u> (accessed

August 1, 2013). ¹⁰ "Council on Foreign Relations." Council on Foreign Relations. February 22, 2012. <u>http://www.cfr.org/un/role-un-general-</u> assembly/p13490 (accessed August 1, 2013). ¹¹ "UN Millennium Development Goals." The UN. February 22, 2012.<u>http://www.un.org/millenniumgoals</u> (accessed August 1,

^{2013).}

¹² "UN, Main Body, Main Organs, GA." The UN. February 22, 2012. <u>http://www.un.org/en/ga/about/secretariat.shtml</u> (accessed August 1, 2013). ¹³ Ibid.

I: Securing Free, Equal, and Cooperative Access to Fresh Water Resources

"And as we look beyond 2015, we need a transformative agenda that focuses on decent jobs, social inclusion and food security. A vision that puts people and the planet at the centre. One that brings clean water and sustainable energy to the millions who lack it. One that ensures fair access to markets and resources, and strengthens financial and economic stability for all countries."

-- United Nations Secretary General Ban Ki Moon

Introduction

Water is a required element for sustaining human and other life on earth, and has been the cause for social, political, and economic strife and prosperity since the beginning of time. The United Nations (UN) General Assembly (GA) has enshrined this fact by declaring access to water a basic human right.¹⁴ The UN Conference on Environment and Development (UNCED) recommended the creation of World Water Day in 1992 to better promote the importance of a resolution to global water issues.¹⁵ Each year, World Water Day highlights a specific aspect of freshwater and is coordinated by a member on behalf of UN-Water."¹⁶ In 2005, the United Nations began the International Decade for Action entitled "Water for Life" and is scheduled to last until the year 2015. The UN Established UN-Water which serves as a coordination mechanism that assists agencies and organizations with water-related issues. The activities of this unit are those of the Member States with the support of the partners that have agreed to participate in the program.¹⁷ Yet, as the world is quickly approaching the end of the Water for Life Decade and the Millennium Development Goals finish line, there are still many lingering water issues to be addressed; namely, ensuring free, equal, and cooperative access to fresh water resources among and within Member States.

Ensuring access to safe, free, and cooperative access to water is problematic because water transcends geopolitical boundaries and human activity is increasingly interrupting the cycle by which water has operated for millions of years.¹⁸ Water management, access, and sanitation are some of the primal issues that require a multidisciplinary approach to the resolution of these conflicts. Moreover, there has been an increase in the privatization of water sources and pollution of major river systems by corporations throughout the world. Also of concern, the lack of managing human waste and an increase in the human population which has strained water resources worldwide and created areas which can no longer produce food because of overdrawing water. A lack of water already affects more than 40% of the world and by 2025, there will be over 1.8 billion people living without water and two-thirds of the world population will be under stressed conditions.¹⁹ The ability to respond to water crises of the future will be contingent upon current and near future initiatives by Member States to protect, manage, and ensure resilience of this resource. However, because those already experiencing a lack of water are those who are underdeveloped, especially in sectors such as health, food production, security, industry, sanitation and technical infrastructure, investments in the future water resource management will entail more risk if current trends continue.

In 2010, the UN decided to declare 2013 as the United Nations International Year of Water Cooperation,²⁰ which resulted in UN-Water calling upon the United Nations Economic, Social, and Cultural Organization (UNESCO) to lead the 2013 UN's International Year on Water Cooperation. Because of the complexities involved in addressing water crises, UNESCO's "unique multidisciplinary approach that blends the natural and social sciences, education, culture and communication," allows the organization to approach water conflicts from a holistic perspective.²¹ The meaning of free access to fresh water resources is that all people will feel safe and secure in the process of obtaining fresh water to sustain their lives.²² Equal access denotes the notion of all people being able to obtain

¹⁴ "The Human Right to Water". UN Water (UN-Water). <u>http://www.un.org/waterforlifedecade/human_right_to_water.shtml</u> (accessed July 22nd, 2013)

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ "UN-Water Activities". UN-Water. <u>http://www.unwater.org/activities.html</u> (accessed July 22nd, 2013)

¹⁸ David Rosenberg, et al. "Environmental Effects of Hydrological Alterations." International Rivers.

http://www.internationalrivers.org/environmental-effects-of-hydrological-alterations (accessed July 22nd, 2013).

[&]quot;Statistics: Maps and Graphs". UN-Water. http://www.unwater.org/statistics san.html (accessed July 23, 2013).

²⁰ "UN-Water: World Water Day". UN-Water. <u>http://www.unwater.org/wwd.html</u> (accessed July 29, 2013) ²¹ Ibid.

²² "Manual on the Right to Sanitation." UN-Habitat. <u>http://www.unhabitat.org/pmss/getElectronicVersion.aspx?nr=2536&alt=1</u> (accessed July 22, 2013).

access to fresh water resources on a non-discriminatory manner and in a manner unrelated to one's economic power, location, or societal status.²³ Cooperation and a cooperative access to fresh water resources signify the need for all people to assist each other, in the accessing and the equal distribution of fresh water resources.²⁴ Currently, Member States are failing to provide the recommended 20 to 50 liters of water a day for basic drinking, cooking and cleaning and the decisions of the GA will largely affect policy and have implications for the all involved.²⁵

Types of Water Shortages and Regional Issues

Most of the 783 million people without water access worldwide reside in Africa, but each region suffers from different types of water shortages.²⁶ The two major types of water shortages are economic and physical shortages of water.²⁷ Economic shortages relate to the inability to afford water while physical shortages mean that there is a lack of water resources.²⁸ Each problem presents different difficulties for communities to address; however, the problems are not mutually exclusive from one another. Water deficiencies and high prices are often driven by external factors, including sanitation, cooking, agriculture, industry, and others. The interchanges and pressures of these varying factors will have an effect on the ability of communities to utilize water resources and could very well change the physical access to water or cost associated with the commodity.²⁹

Addressing these shortages has largely come down to Member States' local and regional government agencies. Nevertheless, because water affects most development indicators through city, state, national, and sometimes regional boundaries, managing this resource must be done with efficiency and transparency.³⁰ Managing water is also important because there is not an abundance of freshwater and desalinization is much higher in cost compared to a well-managed freshwater system. However, because of the typology of water shortages, there have been different regional approaches to managing the hydraulic cycle and water supplies. For example, Africa will need to implement certain policies and management schemes which will need to address water deficiencies while North America and Europe will have to address water quality and water for agriculture monitoring.³¹

Africa is the region with the highest rate of water scarcity and inaccessibility to fresh water. Poverty, corruption, lack of infrastructure, and of planning and governmental provisions are some of the many factors that lead to the costly, inaccessible, and insecure to fresh water resources in region.³² Lack of access to water impacts not only the physical well being of the people living in such conditions, but also their emotional well-being, ability to sustain themselves from their land, and the overall development of the region. However, because the region has experienced "mixed results" in attempting to accomplish the MDGs, Member States have noted failures in this sector have lead to lack of coordination and cooperation, especially in some instances of downstream Member States.³³ Furthermore, the African experience in access to water has presented significant challenges in Sub-Saharan Africa and conflict zones, where there are either significant proportions of rural communities without the ability to manage the physical infrastructure of water or the area is not stable enough for analysis to be completed by experts on the water system. The Final Report on the 2011 World Water Day, celebrated with a multitude of conventions, came to several key recommendations and conclusions. The Honorary Edna Molewa reinforced the determination of the African Ministers' Council on Water "to implement its plan of action through advocacy, lobbying and both securing funds to implement the campaign and providing technologies to improve access to water and sanitation in Africa."³⁴ This is an essential notion, especially in today's world of advanced technology. It is important to discover the most

²⁶ "Water Facts". UN-Water. <u>Http://water.org/water-crisis/water-facts/water/</u>

²³ Ibid

²⁴ Ibid

²⁵ "Statistics: Maps and Graphs". UN-Water. <u>http://www.unwater.org/statistics_san.html</u> (accessed July 23, 2013).

²⁷ "Water Scarcity". UN. http://www.un.org/waterforlifedecade/scarcity.shtml (accessed July 22, 2013).

²⁸ Ibid

²⁹ Managing Water under Uncertainty and Risk. The UN Education, Scientific and Cultural Organization. Paris, France. 2012 http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/WWDR4%20Volume%201-

Managing%20Water%20under%20Uncertainty%20and%20Risk.pdf (accessed July 22, 2013) pp. 45-47 ³⁰ Ibid 134-145

³¹ Ibid p. 176 & 187

³² World Water Day 2011: Final Report. UN-Water. Cape Town, South Africa: The UN. March 22, 2011.

http://www.unwater.org/downloads/World_Water_Day_2011_Final_Report_Web.pdf (accessed July 22, 2013). Ibid

³⁴ Ibid.

efficient, effective, and affordable ways in which water sanitation can become an inseparable part of the lives of those who struggle with access to fresh water resources. The African Caucus also came to the conclusion that it is essential for regional economic blocs to better collaborate by forming partnerships on the African Continent between those who control domestic resources with local commercial banks and that there is a need to "prioritize infrastructure-led development to enhance economic growth and poverty alleviation in the continent."³⁵ Furthermore, the African Caucus has stated that communities must be able to "build partnerships with local governments to ensure sustainable provision of urban water and sanitation services."³⁶ These and many new ideas need to be examined and developed by the Member States in order to present plausible solutions that will address the issues of the African continent's struggle with fresh water access.

Europe and North America, along with other parts of the developed world and within Member States, are increasingly seeing water management issues arise as previously failed strategies are beginning to show their long term effects and climate change begins to hinder future challenges.³⁷ Overdrawing of water and usage of water in agricultural and other industrial purposes has resulted in the most significant of problems as ecosystems are being permanently changed to reflect human influence. Furthermore, urban development patterns in these regions have also lead to changes in stormwater runoff, coupled with increased fertilizers, agrochemicals, and other human byproducts invading water resources and changing waters ability to support natural and human populations.³⁸

As industry has began to use water which feeds into other aquatic resources such as larger river basins and oceans, changes in those environments have led to decreased fisheries stocks in the surrounding areas. Infrastructural changes have also changed the ability of communities to thrive economically. One prominent example is the Apalachicola-Chattahoochee-Flint (ACF) River Basin which has seen overdrawing of water by upstream communities and led to decreased shellfish populations.³⁹ The tri-state conflict between Georgia, Alabama, and Florida of the United States arose because of overdrawing and dumping by upstream stakeholders into and out of this system that empties whatever contents are left into the Gulf of Mexico, changing the quality and quantity of water. This led to a decline in quality water and has resulted in declining fish and shellfish stocks, which have required some local fisherman to change professions due to a lack of income.⁴⁰ These states are still involved in a legal battle that has lasted longer than twenty years. Conversely, the Rhine River in Europe runs between multiple Member States who have been renowned for their management of the catchment area.⁴¹ These two cases provide a distinct dichotomy between management strategies and should be target for greater study.

South America also suffers from conflicting and diverse water management issues; namely, the need to solve the urban and rural conflict between communities, managing water effectively, and resolving disputes between parties while stresses on current inventories continue to grow.⁴² Population growth and rapid urbanization over the past fifty years has resulted in significant shortages in the water supply, combined with a lack of well-paying jobs to provide people with the economic resource to be able to afford water. Nevertheless, there has been an increase in the South American Middle Class, and a drive to resolve water related environmental disputes, specifically related to the construction of dams used for hydroelectric power. Furthermore, the increased use of water in agriculture production and tourism related industries have serious environmental consequences. While South America's population and economies' continue to grow, water quality and the intertwined economic cost continue to be a concern for water analyst and global actors.⁴³

⁴² Managing Water under Uncertainty and Risk. The UN Education, Scientific and Cultural Organization. Paris, France. The UN. 2012 <u>http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/WWDR4%20Volume%201-</u>

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid p. 187

³⁸ Ibid pp. 187-188.

 ³⁹ "Case Statement: June 2012." The ACF Stakeholders. June 2012. <u>http://acfstakeholders.org/wp-content/uploads/2012/10/ACFS_Case_Statement-updated_June_2012.pdf</u> (accessed July 24th, 2012).
⁴⁰ Ibid.

 ⁴¹ Carel Dieperink, "From open sewer to salmon run: lessons from the Rhine water quality regime".
<u>http://www.researchgate.net/publication/222135409 From_open_sewer_to_salmon_run_lessons_from_the_Rhine_water_quality_regime/file/d912f50c72ee012b5f.pdf</u> (accessed July 22nd, 2013)
⁴² Managing Water under Uncertainty and Risk. The UN Education, Scientific and Cultural Organization. Paris, France. The UN.

Managing%20Water%20under%20Uncertainty%20and%20Risk.pdf (accessed July 22, 2013) 202-203 ⁴³ Ibid

Water Conflict Between and Within Member States

Water causes economic, civil, political and many other types of conflict due to its requirement for sustenance to human life and decline as a readily available resource. A lack of fresh water access creates a vicious circle that begins with a lack of water creating conflict that escalates into city-to-city, state-to-state, and beyond region-toregion.⁴⁴ Water-related conflicts primarily emerge on four basic levels – local, national, international, or global level, with each level of conflict threatening the next level of governance. The handling of the conflict depends on a multitude of factors, such as political, socio-economic, and cultural responses to the problem. In international water conflict resolution, cooperation between Member States and other multinational organizations are often called upon to respond. Cooperation in information and data sharing, best practices exchange in water management and resources, and the usage of international actors and organizations to call attention to the problem.⁴

Disasters and conflicts reduce water security by compromising the physical infrastructure needed to access water, sanitation and hygiene services, such as treatment plants, drainage systems, dams, or irrigation channels. Conflicts and disasters may cease directly or indirectly upon social capital and human resources needed to run water-related infrastructure, along with the governance, social or political systems that keep water utilities functional and water services accessible.⁴⁶ Conflicts and disasters can also affect water security by inhibiting access to water and waterrelated services such as health, social, cultural and economic activities of entire communities.⁴⁷ South Sudan is a prime example of a state affected by conflict, attributed to water insecurity. In Sudan, violence broke out in March 2012 at the Jamam refugee camp as the camp's services were limited to 16,500 but was serving 37,000 refugees.⁴⁸ Many people were dying of dehydration and diarrhea, common illnesses in overpopulated refugee camps. A massive relocation of some of these refugees occurred later into 2012 and helped to alleviate some of the populations suffering.⁴⁹ However, more situations similar to this one are expected, as conflicts related to water insecurity are especially prevalent in developing areas. It is imperative for the international community to increase cooperation and collaboration in cases of conflict and natural water-affecting disasters and ensure the secure access to fresh water resources for the affected populations.

Larger bodies of water or watersheds also require more planning and have inherent complexities as one community's usage affects another's ability to receive the benefits from its resource. One prominent example of this issue is the Mekong River, which extends from the Peoples Republic of China (PR China) through Myanmar, Laos, Thailand, Cambodia, and Vietnam into the South China Sea. PR China has been the subject of complaints by many downstream Member States due to its uses of the water in both extracting its resources and using the flows for hydropower have created complaints from the lower Delta's Member States since the 1950s.⁵⁰ More recently, Member States in Southeast Asia have seen an increased demand for energy and began to build dams as a response to this growing need. Since 1995, the Mekong River Commission (MRC) has put into place rules regarding the economic and environmental value of the river to promote cooperation between actors in the region. The MRC allowed for a strategic environmental Assessment to be completed on the Xayaburi Dam project and the outcome was the need for a multiparty discussion on the construction of the Dam. The analysis resulted in diplomatic quarrels between the Member States to the MRC and even though there is ongoing opposition by Cambodia and Viet Nam. Thailand and Myanmar continue with its construction. Both of these Member States contend that the construction of

https://www.salon.com/2012/04/27/oxfam_south_sudan_refugees_face_water_shortages/ (accessed July 23, 2013.) ⁴⁹ "IOM, Partners Complete Relocation of Refugees from South Sudan's Jamam Camp". International Migration Organization. 18 June, 2013. http://reliefweb.int/report/south-sudan-republic/iom-partners-complete-relocation-refugees-south-

⁴⁴ Water and Violent Conflict. Organization for Economic Co-operation and Development. 2006. http://www.deza.admin.ch/de/Home/Themes/Conflict prevention and transformation/Violence prevention/ressources/resource $\frac{\text{en } 92767}{^{45} \text{ Ibid}} (\text{accessed July 24th, 2013}).$

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Tom Odula."South Sudan refugees face water shortages." Salon. April 27, 2013.

sudan%E2%80%99s-jamam-camp (accessed July 25, 2013) ⁵⁰ Aaron T. Wolf and Joshua T. Newton, "Case Study of Transboundary Dispute Resolution: the Mekong Committee." 1957. http://www.transboundarywaters.orst.edu/research/case_studies/Mekong_New.htm (Accessed July 25, 2013).

the dam is placing the energy needs of those upstream and have access to this resource against those downstream who normally use the river for food production.⁵¹

Urban vs. Rural Water Use

The conflicts that stem from access to water or a fear of in-access to water are also associated with the needs of the urban versus the rural context. Secretary General Ban Ki-moon has stated this problem numerous times, most prominently at World Water Day 2011: "Urbanization brings opportunities for more efficient water management and improved access to drinking water and sanitation. At the same time, problems are often magnified in cities, and are currently outpacing our ability to devise solutions."⁵² More than half the world's population is now living in an urban environment, and statistics continue to show that the world is deserting the rural environment.⁵³ Today one in two people on the planet live in a city and "93% of the urbanization occurs in poor or developing countries, and nearly 40% of the world's urban expansion is growing slums."54

Dr. Joan Clos, Under-Secretary General and Executive Director of UN HABITAT, emphasized the need to plan dense and diversified urban settlements to limit 'sprawl' which often results in increased cost in service delivery. Sprawl is when cities undergo development that is typically distant from goods, services, and other areas that are closer to human commercial and residential places. A prominent example can be found when comparing Atlanta, Georgia in the United States to Barcelona, Spain. Both cities have relatively comparable populations, yet Barcelona uses 1590 square miles less land to house its population than Atlanta. This vast difference in population density increases the need for water management infrastructure and encourages unsustainable uses of water in various places that would not normally need water.⁵⁵ The difference in larger land size also increases transportation cost to public and private users, and destroys potential community collaboration.

Urbanization is a phenomenon that has been affecting the lives of many rural populations worldwide for decades. Its relationship with access to fresh water resources is a very dynamic one as growth of urban settlements often takes a toll on natural resources while at the same time increasing the need of a systematic and well-directed flow of such resources to the urban settlements in order to satisfy their increasing needs. It is notable, for example, that in some countries in Africa "current investments in urban services are not sufficient to cope with the rates of urbanization" and therefore it is necessary for the "African countries to mobilize domestic resources and properly manage investments to support the urban water and sanitation sector."⁵⁶ This is true of many other Member States facing rapid and not well-structured urbanization; therefore it is the mission of this body to provide suggestions for a better, and more sustainable process of urbanization with regard to securing access to fresh water resources for the urban and rural populations.

Climate Change and Water Resources

Scholars, military commanders from all around the world, heads of Member States, and a number of other prominent figures have all stated "climate change is the single greatest threat to humanity" or the security of that given Member State. At current rates, 11 island Member States are expected to be completely underwater by 2090.57 One of these Member States, the Maldives, held an underwater cabinet meeting to draw attention to the issue that the island will be completely consumed by water if the world does not reverse course on global warming, one of the

http://esi.nus.edu.sg/publications/2013/01/24/water-conflict-in-the-mekong-lessons-from-the-xayaburi-dam-controversy (Accessed July 25, 2013).

⁵¹ "Water Conflict in the Mekong: Lessons from the Xayaburi Dam Controversy". National University of Singapore: Energy Studies Institute. December 2012.

⁵² World Water Day 2011: Final Report. UN-Water. Cape Town, South Africa: The UN. March 22, 2011. http://www.unwater.org/downloads/World Water Day 2011 Final Report Web.pdf (accessed July 22, 2013).

⁵³ "Water and Cities". UN-Water. http://www.un.org/waterforlifedecade/water_cities.shtml (Accessed July 28, 2013). ⁵⁴ Ibid.

⁵⁵ Alain Bertaud, "Spatial structures, land markets and urban transports". June 10-11, 2010. Transport and Urban Forms. http://www.afd.fr/webdav/shared/PORTAILS/SECTEURS/DEVELOPPEMENT_URBAIN/formesurbainesettransport/AB_Ateli er-bertaud-AFD_10-11_juin.pdf (accessed July 28, 2013). ⁵⁶ Ibid.

⁵⁷ Randy Astaiza, 11 Islands that will vanish when sea level rises. Business Insider. October 12, 2012. http://www.businessinsider.com/islands-threatened-by-climate-change-2012-10?op=1 (accessed July 28, 2013).

major causes of sea level rise.⁵⁸ The Netherlands has adapted particularly well to living underneath sea level. Its success is attributed to a series of levees, dykes, dunes and other measures.⁵⁹ Nevertheless, the potential sea level rise of 20 feet has concerned many actors within the Netherlands and is an issue that must continually be addressed as new technologies and information continues to arise on climate change.⁶⁰

Much of the academic literature focusing on sea level rise focuses on actual land intrusion but fails to mention the affects of salt water intruding farther into freshwater supplies and the potential effects on irrigation, drinking supplies, and the possibility of conflict. Water from the sea intruding farther onto land and into groundwater resources will have two significant effects: the reduction of coastal land area and groundwater used for drinking and food production near coastal areas.⁶¹ This will become an aggressive problem for island communities and for areas with large populations living on the coast as problems will become more prevalent to a larger number of actors, placing a strain on disaster resources. Tuvalu has been experiencing a number of problems already related to sea level rise as coastal barriers have collapsed and caused trees in a once productive area to die out due to an increase in salinity.⁶²

Inland areas are also going to see an increase in managing water access in all areas of the world. First, more areas are going to undergo scarcity in the water sector which will more than likely drive up the commodities price in all areas of the world.⁶³ Second, rainfall in some areas will substantially increase and lead to significant flooding where a lack of stormwater management is not put into place.⁶⁴ Rainfall and drought disasters are experience sporadically throughout the world and Member States must adapt to new issues climate change raises in securing free and adequate access to water supplies.⁶⁵ Furthermore, ecosystems have been failing to be able to respond to human interactions with the world's water systems, which could adversly affect the ability of inland and coastal communities to effectively use natural solutions to managing the resource. UN-Water has identified a number of strategies to address adaptation to water related climate change issues, namely implementing UN Member State and Private Enterprise discussions on water management. Policy makers and managers must be instructed as to the issues and opportunities that proactive strategies to manage water at a local, regional, and multi-national context must be incorporated into urban and rural areas.⁶⁶

Issues related to climate change and water also affect nations on a macro and microeconomic level. The World Bank reports that "the cost of adapting to the impacts of a 2°C rise in global average temperature could range from US\$70 to \$100 billion per year between 2020 and 2050."⁶⁷ Over 100 Member States gross domestic product in 2011 to 2012 was less than \$70 billion , meaning that this temperature rise will be a severe economic burden for some Member States who do not maintain developed economic status.⁶⁸ Furthermore, many underdeveloped Member States contend that their more developed counterparts at the UN continually fail to meet obligations to developing areas all around the world.⁶⁹ On a microeconomic level, UN Women notes that the impact on women and children will be far more substantial than on male adult counterparts. Reduced or variable rainfall will increase women and

http://unfccc.int/resource/docs/napa/tuv01.pdf. (accessed July 28, 2013)

⁶⁵ "Climate Change Adaption is... mainly about water." UN-Water.

⁵⁸ "Maldives government highlights the impact of climate change... by meeting underwater". Mail Foreign Service. 20 October, 2009. <u>http://www.dailymail.co.uk/news/article-1221021/Maldives-underwater-cabinet-meeting-held-highlight-impact-climate-change.html</u> (accessed July 28, 2013).

⁵⁹ Vanessa McKinney, "Sea Level Rise and the Future of the Netherlands." American: ICE Case Studies. May, 2007. http://www1.american.edu/ted/ice/dutch-sea.htm (accessed July 28th, 2013).

⁶⁰ Ibid.

⁶¹ Teng-fong Wong, "Comprehensive Monitoring of Salt Water Intrusion and Submarine Groundwater Discharge in Coastal Ecosystems" Stony Brook University: Department of Geosciences. May 16, 2008.

http://www.un.org/esa/sustdev/csd/csd16/LC/presentations/wong.pdf (accessed July 28, 2013).

⁶² "Tuvalu's National Adaptation Programme of Action". UN Development Program. May 2007.

⁶³ "Statistics: Maps and Graphs". UN-Water. <u>http://www.unwater.org/statistics_san.html</u> (accessed July 23, 2013).

⁶⁴ "Statistics: Maps and Graphs". UN-Water. http://www.unwater.org/statistics_san.html (accessed July 23, 2013).

http://www.unwater.org/downloads/UNWclimatechange_EN.pdf (accessed July 28, 2013) 66 Ibid.

⁶⁷ Ibid.

 ⁶⁸ "Data." The World Bank. 1 July, 2013. <u>http://data.worldbank.org/data-catalog/GDP-ranking-table</u> (accessed July 28, 2013)
⁶⁹ "The Global Climate Change Regime". Council on Foreign Relations. June 19, 2013. <u>http://www.cfr.org/climate-change/global-climate-change-regime/p21831</u> (accessed July 28, 2013).

children's time to collect water for their family and reduce productivity in agricultural fields.⁷⁰ For children, this means that available time for education or other economic and political activities decreases, especially for more than half of the world's adolescent girls, who are already significantly outnumbered by males.⁷¹

Free, Equal and Cooperative Access to Water

The burden of securing free, equal, and cooperative access to water rests on the shoulders of the international community and there is no single one-size-fits-all approach to address the issue. Every discussion leading upto placing the appropriate system in place to secure water as a human right will be entirely peicemeal until true water equality is assured through international cooperation. The UN GA has already declared water as a human right, stating: "Recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights…".⁷² Thus, there must be sufficient, safe, acceptable, physically accessible and affordable water.⁷³ Providing water as a human right rather than a monitored sector that is given as a social service in some Member States improves sanitation, encourages participation in governance, creates priorities for humans without water, and more affordable services.

Progress in ensuring water as a human right has seen varying progress throughout the world. In some areas, there have been explicit laws passed recognizing that water is a human right. In other Member States there have been laws passed which only apply to "marginalized groups".⁷⁴ Nevertheless, marginalized groups and the "poor", more specifically are the ones who have little access to water and a lack of access to lobbying tools to ensure communities will receive sufficient water.⁷⁵ Those living in shanty towns or slums who may already suffer from a lack of land tenure and formal water infrastructure will have increased health concerns and an over straining of their economic resources being spent on water.⁷⁶ The World Health Organization (WHO) notes that there are certain responsibilities now that water has been recognized as a human right and not just for governments, but non-state actors and the possibility of financial markets interrupting this right.⁷⁷ The first of these responsibilities is to "respect" the institutions, laws, and systems that have been put into place to ensure that there is water access. Removal of these mechanisms would only erode existing progress towards the realization of this fundamental right. The second responsibility is to "regulate" sectors that affect access to secure water sources.⁷⁸ A strong regulatory regime should aim to provide citizens with a comprehensive protective scheme that would not allow water to be taken away at any time, or from harmful agents entering the water source. This measure could include regulating what types of activities occur along a body of water or ensuring that private sector involvement does not lead to payment by individuals for basic water access.⁷⁹ Again, water must remain free to citizens of Member States that agreed to provide water as a human right in accordance with international law. Finally, Member States must "fulfill" their duties to provide adequate resources to their people. In practice, this could mean a number of different measures according to the legislative and technical policies, and infrastructure that is in place. This final recommended duty by the WHO emphasizes the need to ensure this final step to rural areas as well, alongside a reminder of the international duty of one Member State to support the endeavors of another through the various forms of aid.⁸⁰

WHO also lists a certain number of responsibilities for citizens and non-state actors in the process of securing water as a human right. For individuals, this could mean contributing financially to the maintenance of systems that keep water systems well-maintained or communal efforts to ensure water access point remains free of human excreta and

 ⁷⁰ "18th Conference of the Parties to the UN Framework Convention on Climate Change" UN Women.
<u>http://www.unwomen.org/en/news/stories/2012/12/cop18-landmark-decision-adopted</u> (accessed July 28, 2013)
⁷¹ "Water Facts". UN-Water. <u>Http://water.org/water-crisis/water-facts/water/</u>

⁷² A/RES/64/292. The human right to water and sanitation. August 3, 2010.

http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/64/292 (accessed July 28, 2013)

⁷³ "The Human Right to Water and Sanitation". UN-Water. <u>http://www.un.org/waterforlifedecade/human_right_to_water.shtml</u> (accessed July 28, 2013)

⁽accessed July 28, 2013) ⁷⁴ "Progress So Far". Right to Water. <u>http://www.righttowater.info/progress-so-far/</u> (accessed July 28, 2013)

⁷⁵ "The Right to Water". The World Health Organization. 2003. <u>http://www.righttowater.info/wp-content/uploads/Right-to-Water.pdf</u> (accessed July 28, 2013).

⁷⁶ Ibid p. 28

⁷⁷ Ibid p. 28

⁷⁸ Ibid p. 29

⁷⁹ Ibid p. 29

⁸⁰ Ibid pp. 30-31

other materials that could contaminate sources.⁸¹ For non-state actors, the responsibility to train peoples on possible new systems would assist communities in developing sound practices and sustaining waterworks. Training could also be conducted on the possible risk associated with unsustainable logging and deforestation, agriculture, and other practices which are potentially harmful on the environment for the sake of other communities being effected by one companies or enterprises decision.82

While making water a human right contributes to the development context in a number of ways, there are still considerable hurdles to be addressed. In general, human rights are inextricably linked, however most human rights focus on dignity, political freedom, economic, cultural, and social norms. However, water is a limited resource and not available in all regions of the world.⁸³ While water is not entirely accessible in some areas of the world, it is accessible in others, but not affordable or safe to drink, creating future technical challenges. Laws and plans are essential pieces to providing this right, but are only as good as the implementation.⁸⁴ Many of these laws demand strong implementation policies to ensure that marginalized and underserved populations are receiving equal access. Finally, accountability from various levels must be secured to ensure that this and other rights are being passed down from governments to individuals.85

The movement to make water a human right was also founded in the goals of reducing poverty and other societal illnesses across the board and some actors see this as a means for a post Millennium Development Goals (MDG) agenda. Beyond 2015 has been one of the keystones for reducing economic inequality, improving hygiene, improving children's living conditions and educational circumstances, and reducing malnutrition, has selected water.⁸⁶ The Beyond 2015 recommendations deal with four topical items: Water, Sanitation and Hygiene; Water Resources Management; Wastewater and Water Quality; and, Governance and Human Rights. Each of these recommendations deal with individual targets similar to the MDGs but provide another perspective on how the post 2015 development agenda is going to be framed. A Partner in this call to action include the End Water Poverty group which aims to make water and sanitation the highest issue for governments, through Sanitation and Water for All, and better delivery systems through health, education and nutritional programs.⁸⁷ These programs are continual drivers for success in ensuring that water can be secured in a cooperative way and free of charge in times of need.

Case Study: Securing the Right to Water in Argentina

The Center for Human Rights and Environment (CEDHA) in Argentina was tasked with providing water as a human right to its population in 2002. The concept of providing water, as a human right was a relatively new concept brought forth numerous issues for the public and private sector in that Member State. First, the need to build an understanding of the right to water was a substantial hurdle as the country still suffers from memories of a brutal military dictatorship in the 1980s.⁸⁸ Attention was brought to the field through the president campaigning on the matter, and various workshops completed by CEDHA. Legal frameworks for water as a human right is recognized in the Argentinian Constitution, along with the ratification of a number of other human rights that were not previously recognized due to the military dictatorship. Water and other rights must be enshrined by social agencies and those which pass substantial policies related to the use of the resource.⁸⁹ Prosecution of malicious actors has also been the subject of scrutiny in Argentina as agents who pollute the resource are also viewed as working against this human right. By providing the legal framework to communities, many groups were able to contend the actions of

⁸¹ Ibid p. 32

⁸² Ibid p. 32

⁸³ Catarina De Albuquerque, "On the Right Track: good practices in realizing rights to water and sanitation." UN Human Rights: Office of the High Commissioner for Human Rights. February, 2012.

http://www.ohchr.org/Documents/Issues/Water/BookonGoodPractices_en.pdf (accessed July 29, 2013)

⁸⁴ Ibid 85 Ibid

⁸⁶ "Water In The Post-2015 Development Agenda". Beyond 2012. March 2013. <u>http://www.righttowater.info/wp-</u> content/uploads/Position-paper-Water.pdf (accessed July 28, 2013). ⁸⁷ "Sanitation and Water for All Partnership". End Water Poverty. 2012. <u>http://www.endwaterpoverty.org/about-ewp</u> (accessed

July 29, 2013).

⁸⁸ Juan Miguel Picolotti, *The Right to Water in Argentina*. The Right to Water. November 5, 2013.

http://www.righttowater.info/wp-content/uploads/argentina_CS.pdf (accessed July 29, 2013)

⁸⁹ İbid

individuals and smaller municipal governments investments in infrastructure to provide people with access to free and secure water.

Conclusion

As part of the Water for Life Decade for Action, 2013 is the year to celebrate cooperation. Cooperation lies in the basis of overcoming most, if not all issues faced by the international community. Cooperation in achieving free, safe, secure, and equal access to fresh water resources is essential in order to minimize conflicts and maintain all forms of life in this world. Without cooperation and adherence to the decisions of international organizations or United Nations bodies, none of the decisions would actually matter or have any of the positive effects that they are designed to have. There are a number of issues before the committee, and none of them are mutually exclusive from one another. Member states must consider the strife of water scarcity and price gauging, while also contending with the continual pollution of water sources as human interaction increases. Natural resource and water conflict is another issue that must be addressed by the body and not solely the conflicts within Member States but between them as well. These conflicts can rise out of the dichotomy between the urban and rural needs for water and a host of other issues. Furthermore, climate change is a significant problem when addressing free, secure and cooperative access to water. The larger picture of climate change is beyond the context of solely water, however there are issues to be raised by the body that go beyond the discussion held here. Finally, water as a human right is a relatively new concept, but has substantial differences from human rights laid out in the Universal Declaration of Human Rights, in that it is a limited resource. Delegates must contend with the fact that not all Member States have recognized this right, and provide guidance in areas appropriate to Member states that have.⁹⁰

Committee Directive

Human rights have been enshrined through a number of documents, yet, considerable problems arise in a number of areas where these basic rights are not passed onto people. How is access to free, cooperative, and secure water different from human rights related to political, social, and cultural significance? Should the GA take approaches similar to ensuring rights similar to the Universal Declaration of Human Rights? Or, should the body address the policies of the international community in another way? In addition to guaranteeing this right, there is a significant interest in providing water to meet certain development goals. Should water serve a role within a "beyond 2015" context or should the resource be made standalone from other goals? Water will be an issue for many coming generations if not dealt with appropriately, especially in the context of climate change. It is important to emphasize that your Member State will have issues pertaining to water security outside what is mentioned directly within this guide. What are your Member States' water security issues? How should your Member State respond to climate change in the instance of natural disasters or a greater deficiency in resources? How will your Member State respond to less water, greater cost of importing water, and more difficult weather patters that will affect rainwater patterns? How should such agreements between Member States affect small island and developing states that are likely to "disappear" in the next century?

Urban environments also must take a more effective approach to controlling development and ensuring that the needs of the city and of the rural environment are met simultaneously. How can cities become more efficient in managing best practices of water resources? And, how do these strategies differ from your Member State to another? Should a regional context be developed to water management, as seen in the Mekong Basin and would your Member State sign onto such an agreement? What resources can Member States employ to use in a development context that will show their water footprint on the globe, and how to reduce it?

⁹⁰ "The rights to water and sanitation in national law". The Right to Water. <u>http://www.righttowater.info/progress-so-far/national-legislation-on-the-right-to-water/</u> (accessed July 29, 2013).

II: Fostering Mobile Technology In The Advancement of Commerce

"More broadly, we should work to optimize the power of information and communications technology to support sustainable development. By gathering, disseminating and analyzing information, we can accelerate action to protect natural resources, combat climate change and help vulnerable people, including women and girls."⁹¹ --UN Secretary General Ban Ki Moon

Introduction

Chapter IX, Article 55 of the United Nations Charter states one of the mandates of the organization is to implement greater standards of "economic progress and development...".⁹² The proliferation of mobile technology is allowing developed Member States to attain this goal at a more accelerated pace than previously established. Foreign policy academic Kishore Mahbubani captures this sentiment when interviewing the Indian writer Shashi Tharoor.⁹³ According to Tharoor, the mobile technology "miracle" has been hailed as something which development policy could never truly accomplish by empowering the less fortunate.⁹⁴ Harvard Economist Robert Jensen illustrates an example of this miracle by studying fishermen in Kerala, India. This case study's results saw a reduction in waste and an increase in profits by 8% after the introduction of mobile phones.⁹⁵ If mobile technology continues to serve as a catalyst for growth and trade through a unified international strategy, billions can be lifted out of extreme poverty.⁹⁶

However, for these billions who are capable of being lifted out of poverty by technology, a number of issues need to be addressed by the international community. First, an examination of advances in information and mobile technology over the past several decades has changed the landscape of trade and development. Technology is becoming more about the individual and how the user operates within the Internet depends on the resources available to them.⁹⁷ These resources and "The Mobile Revolution" is incomplete due to a lack of interoperability among all devices and limited penetration into certain areas of the globe, but also due to a lack of electrical and data infrastructure, or even training to operate these devices.⁹⁸ There are a number of reasons and much more speculation as to why and how we arrived at this point of a "Digital Divide" between the rich and the poor having different access to information and communication through broadband and telephone services. However, mobile technology is working to close the Digital Divide through providing opportunities for new commerce between Member State's peoples.⁹⁹ However, because the rise of mobile phones has only recently occurred within the past decade, development sectors are still exploring the ways in which it can be used to reduce poverty by advancing commerce and trade.

The Global Economy in the Information Age

Before the mass proliferation of cell phones among developed states, there were several advancements in the field of information technology that began to connect developed states in North America, Europe, and East Asia to other parts of the world. In 1991 Tim Berners-Lee, a consultant with the European Organization for Nuclear Research (CERN), created the World Wide Web and posted his first Website.¹⁰⁰ The purpose of the World Wide Web was for

⁹¹ "WTISD 2012: Message from UN Secretary-General, Ban Ki-moon." 2013 International Telecommunication Union. <u>http://www.itu.int/en/wtisd/2012/Pages/ki-moon.aspx</u> (accessed July 31, 2013).

⁹² "UN Charter Chapter IX, Article 55." UN GA. <u>http://www.un.org/en/documents/charter/</u> (accessed July 31, 2013)

⁹³ Mahbubani, Kishore. *The New Asian Hemisphere: The Irresistible Shift of Global Power to the East.* (New York, NY.: Public Affairs, 1999), 22.

⁹⁴ Ibid 23.

⁹⁵ "Why mobile phones drive economic growth in the developing world." International Telecommunications Union. March 16, 2013. (<u>http://www.itu.int/ITU-</u>

D/ict/newslog/Why+Mobile+Phones+Drive+Economic+Growth+In+The+Developing+World.aspx) (accessed July 31, 2013) ⁹⁶ Mobile Technologies and Empowerment: Enhancing human development through participation and innovation. UN

Development Program (UNDP). <u>http://www.undpegov.org/mgov-primer.html#execsummary</u> (accessed July 31, 2013). ⁹⁷ Friedman, Thomas. *The World is Flat*, (New York, NY.: Farrar, Straus, and Giroux, 2005), 195 ⁹⁸ *Ibid*.

⁹⁹ "Mobile Technologies and Empowerment: Enhancing human development through participation and innovation". UN Development Program (UNDP). <u>http://www.undpegov.org/mgov-primer.html#execsummary</u> (accessed July 31, 2013).

¹⁰⁰ Friedman, Thomas. The World is Flat, (New York, NY.: Farrar, Straus, and Giroux, 2005), 60

scientists to share information and research results.¹⁰¹ This differed from the internet which was already in use for activities such as email. According to Berners-Lee, the internet is "...a network of networks...made from computers and cables."¹⁰² The introduction of the World Wide Web was followed by several other innovations, including the utilization of the modem to connect computers to phone lines, and the new application known as the browser.¹⁰³ The first browser was created to assist researchers in sharing each other's data and results.¹⁰⁴

Much has changed since the invention of the internet. For example, spreadsheets were not transmittable initially but are now able to have multiple users looking at the same piece of information from across the world and simultaneously edit the same information.¹⁰⁵ Mobile phones have grown since the initiation of the MDGs from nothing, to well over 6.8 billion people subscribed to a mobile phone plan in 2013.¹⁰⁶ The incredible growth in mobile phone usage is indicative of not only a shift in communication to one another, but also to how people connect to one another. Almost 40% of the world population is connected to the internet, meaning that most people have the same information as any other person who is connected to the Internet.¹⁰⁷ However, there have been problems along the way with phones and computers interacting with one another, a problem that has occurred since the beginning of software.

The rise of common workflow software such as a spreadsheet allowed different companies and continents to collaborate as never before when computers were invented.¹⁰⁸ The standardization of languages and protocols such as HTML, HTTP, XML, and SOAP provided for an increasingly interoperable world among companies and developers.¹⁰⁹ This standardization allowed for easier communication, but it also allowed for greater collaboration among users. This lead to the divide between web coders who were part of the "intellectual commons community" and the "free software community."¹¹⁰ The "intellectual commons community" believed that any code that used any variant for commercial purposes should give credit to the original inventor, while the "free software community" believed that programmers should allow anyone access to their products without financial compensation.¹¹¹ This tension over the protection of intellectual property has been a major issue since the commercialization of the Internet and continues to be a major area of concern today. This issue is also evident in modern smartphone technology, namely through Google and Apple Technology. Google's Android operating system allows for greater autonomy by developers in terms of content and prices that have given rise to a greater diversity of programs for more devices.¹¹² However, the iOS system that is used by mobile Apple devices is more standardized and contributions to applications follow a stricter quality control regime.¹¹³

The United Nations and Mobile Technology

The United Nations has served as a guiding force behind collaboration and coordination of the spread of information technology, and later mobile technology. After the adoption of the United Nations Millennium Declaration, the GA chose to take a closer look at the advancement of a development agenda that would achieve the eradication of extreme poverty and greater collaboration for economic development.¹¹⁴ In 2001, the GA passed a resolution that endorsed the decision by the International Telecommunications Union to hold a World Summit on Information

¹¹³ Ibid

¹⁰¹ Ibid.

¹⁰² Ibid 61

¹⁰³ Ibid 63

¹⁰⁴ Ibid 65

 ¹⁰⁵ Soumitra Dutta and Irene Mia. "The Global Information: Technology Report 2009–2010; ICT for Sustainability". 2010.
World Economic Forum. <u>http://www3.weforum.org/docs/WEF_GITR_Report_2010.pdf</u> (accessed July 31, 2013)
¹⁰⁶ "The World in 2013: ICT Facts and Figures" ITU. 2013. <u>http://www.itu.int/en/ITU-</u>

D/Statistics/Documents/facts/ICTFactsFigures2013.pdf (accessed July 31, 2013).

¹⁰⁷ Ibid

¹⁰⁸ Friedman, Thomas. The World is Flat, (New York, NY.: Farrar, Straus, and Giroux), 79

¹⁰⁹ Ibid 84

¹¹⁰ Ibid 96-97

¹¹¹ Ibid

¹¹² Michael Staff, "iOS vs. Android: The Game Dev. Edition." CNET. June 13, 2013 <u>http://reviews.cnet.com/8301-3638 7-57589074/ios-vs-android-the-game-dev-edition/</u> (Accessed August 2, 2013).

¹¹⁴ A/RES/55/2. The UN Millennium Declaration. UN GA. September 8, 2000

Technology.¹¹⁵ The Economic and Social Council (ECOSOC) followed up with the passage of resolution that asked the President ECOSOC to set up an Ad-hoc Open-ended Working Group on Informatics for the implementation of enhancing the connectivity to the Internet in Member States. Particularly within capital cities, improving the connection between Member States of the United Nations, and providing training for permanent mission staff.¹¹⁶ The resolution was also noteworthy because it asked for the United Nations to collaborate with private sector and provide the necessary hardware to the missions of developing countries.¹¹⁷

In 2002, the GA also chose to convene three GA meetings on closing the digital divide and helping to enhance opportunities in the information society during the 56th session.¹¹⁸ In May 2002, the International Telecommunications Union met to discuss the closing of the digital divide in technology between Developed Countries and Emerging Markets, as well as the widening of the gap between Least Developed Countries and the rest of the world.¹¹⁹ During the 2003 phase of the World Summit on Information Technology, Member States put forward a Declaration of Principles that emphasized that Information and Communication Technology is essential to sharing the economic, political, social, health, cultural, educational, and scientific knowledge that can serve as a catalyst to development.¹²⁰ In 2005, the GA passed the World Summit Outcome Document that reaffirmed the role of communication technology in development, and that the transfer of technology should occur through mutually agreed upon terms.¹²¹ Later that same year the World Summit on Information Technology passed the Tunisia Agenda for the Information Society.¹²² The Tunisia Agenda called for coordinated assistance with LDCs and Small Island Developing States concerning the proliferation of information and communication technologies to assist with poverty eradication projects in the fields of agriculture, and health.¹²³ In 2009, the GA passed a resolution that acknowledged that the spread of information technology has accentuated certain impediments to development including insufficient infrastructure, capacity, and investment.¹²⁴ In 2012, the United Nations GA passed a resolution that acknowledged that the quality, price, and access to broadband Internet access for developing states and Africa, as a continent was substandard compared with other regions.¹²⁵ The GA also acknowledged that the spread of information technology is essential to the use of science and technology as tools for the eradication of extreme poverty.¹²⁶

The United Nations has also taken direct actions through various agencies to advance the proliferation of mobile technology. In Nigeria, the United Nations Educational, Scientific and Cultural Organization (UNESCO) sends pedagogical advice and educational content once per day to cell phones in order to assist primary school teachers.¹²⁷ This is essential for economic growth because education is essential to building human capital. The United Nations Children Education Fund (UNICEF) has also partnered with First Bank in Nigeria through a platform known as FirstMonie to safely and securely disseminate funds to recipients in the state.¹²⁸ FirstMonie also allows subscribers to pay bills and buy goods through their cell phones.¹²⁹ This platform is essential to increasing the connectivity of

http://www.itu.int/wsis/docs2/tunis/off/6rev1.html (accessed July 31, 2013)

¹¹⁵ A/RES/56/183. World Summit on Information Technology. UN GA. January 31, 2002

¹¹⁶ Economic and Social Council (ECOSOC) Resolution 2001/24. The need to harmonize and improve UN informatics systems for optimal utilization and accessibility by all states. UN Economic and Social Council. July 26, 2001 ¹⁷ Ibid.

¹¹⁸ A/RES/56/258. Meeting of the GA devoted to information and communication technologies for development. UN GA. April 4, 2002.

¹¹⁹ World Telecommunication Development Report 2002 Executive Summary" International Telecommunication Union. March 12, 2002. http://www.itu.int/ITU-D/ict/publications/wtdr_02/material/WTDR02-Sum_E.pdf (accessed July 31, 2013).

¹²⁰ Declaration of Principles, Building the Information Society: A Global Challenge. World Summit on Information Society. December 12, 2003. http://www.itu.int/wsis/docs/geneva/official/dop.html (accessed July 31, 2013)

¹²¹ A/RES/60/1. 2005 World Summit Outcome Document. UN GA. October 24, 2005

¹²² "The Tunisia Agenda for the Information Society." World Summit on Information Society. November 18, 2005.

¹²³ Ibid.

¹²⁴ A/RES/63/202. Information and communication technologies for development. UN GA. January 28, 2009

¹²⁵ A/RES/67/195. Information and communication technologies for development. UN GA. February 5, 2013 126 Ibid.

¹²⁷ "UN agency to use mobile phone technology to boost literacy in Nigeria" UN News Centre. April 30, 2013. http://www.un.org/apps/news/story.asp?NewsID=44793#.UfNfl41OPV0 (accessed July 31, 2013). ¹²⁸ Henry Ifeanyi. "Nigeria's First Bank, UN partner on mobile payments" IT Web Africa. July 3, 2013.

http://www.itwebafrica.com/mobile/319-nigeria/231236-nigerias-first-bank-un-partner-on-mobile-payments (accessed July 31, 2013)

¹²⁹ Ibid.

individuals in remote that normally do not have access to banks or capital. The UN World Food Program can now collect data on food security and respond accordingly through mobile phones.¹³⁰ This is also an essential program to reduce the possibility of famine and maintain a climate of reduced risk. The United Nations also acknowledged that more people have access to mobile phones than proper sanitation and is now raising awareness about World Toilet Day.¹³¹ Sanitation is an essential right and an essential component for safe investment. The ITU has even taken care to ensure cyber-security by issuing a global warning about bug that can allow hackers to compromise mobile SIM cards.¹³² These various programs strongly contribute to a better-networked world that is more conducive to trade and collaboration. However, the United Nations and its Member States have yet to tackle the biggest issue retarding greater connectivity, building a strong network in Africa.

The State of International Commerce

Most trade is still conducted in accordance with traditional methods and most investment is still local. William J. Bernstein has stated that maritime vessels conduct approximately eighty percent of trade.¹³³ According sociologist John L. Campbell, seventy five percent of all Foreign Direct Investment (FDI), or investments in hard assets such as properties, occurs among developed capitalist nations.¹³⁴ According to a United Nations Commission on Trade and Development (UNCTAD) Report, FDI flows among the developed world increased by 21 percent in 2012, while least developed countries saw a third year of continual FDI decline.¹³⁵ However, international portfolio investment or investment in equities and other financial instruments grew significantly during the 1980s and 1990s.¹³⁶ Portfolio investment is also more prone to volatile fluctuations due to both speculation and "bubbles". According to global strategist and economist Pankaj Ghemawat, the world is not as flat as some might believe, because according to data collected from 2005, ninety percent of fixed investment is domestic.¹³⁷ Globalization and the use of mobile technology is not only slow to impact and alter fundamental aspects of international trade, but the pace of globalization can be accelerated and diminished by economic shocks.

The first major shock that accelerated international collaboration was the dot-com boom and bust. The digitization revolution, provision of Internet services, and expansion of fiber-optic cable companies at an ever-faster pace which stimulated rapid unnecessary investment in the Internet industry.¹³⁸ However, telecommunications companies did not pay close attention to demand between their expanding efforts to supply and diminishing actual demand.¹³⁴ When the bubble burst there was so much fiber optic cable that the fallout caused long distance call charges to fall through the floor and data transfer to become almost free.¹⁴⁰ This allowed businesses global businesses to operate and engage at dramatically lower rates.¹⁴¹

The second major shock that slowed the pace of globalization was the 2008 global financial crisis. The global financial crisis was started by a speculative bubble that originated in the US housing market, but spread around the world due to active efforts by governments to deregulate their economies.¹⁴² Individuals in both the public and private sector should have been concerned by efforts to gain twenty five percent returns on investments in real

¹³¹ "UN GA designates 19 November as World Toilet Day". UN News Centre. July 24, 2013. http://www.un.org/apps/news/story.asp?NewsID=45490&Cr=sanitation&Cr1=#.UfNzeo1OPV0 (

¹³⁰ Jessica McKenzie. "UN Program Tests Cell Phone Surveys in Africa". Tech President. June 21, 2013. http://techpresident.com/news/wegov/24074/gauging-food-security-mobile-phone-survey (accessed July 31, 2013)

Jim Finkle. "UPDATE 1-UN warns on mobile cybersecurity bugs in bid to prevent attacks" Reuters. June 21, 2013. http://www.reuters.com/article/2013/07/21/mobile-hacking-idUSL6N0FR0JD20130721 (accessed July 31, 2013)

¹³³ Bernstien, William. "A Splendid Exchange." (New York, NY: Grove Press, 2009), 368

¹³⁴ Campbell, John L. The Nation-State in Question, ed. T.V. Paul, G. John Ikenberry and John A. Hall. (Princeton: Princeton University Press, 2003). 238

¹³⁵ "UN Conference on Trade and Development (UNCTAD) World Investment Report 2013." UNCTAD. xi. http://www.unctaddocs.org/files/UNCTAD-WIR2012-Preface-Key-messages-and-Overview-en.pdf ¹³⁶ Campbell, John L. *The Nation-State in Question*, ed. T.V. Paul, G. John Ikenberry and John A. Hall. (Princeton: Princeton)

University Press, 2003). 238, 239 ¹³⁷ Ghemawat, Pankaj. *International Politics, Ninth Edition*, Ed. Art and Jervis (New York, NY: Pearson Education Inc.) 320

¹³⁸ Friedman, Thomas. *The World is Flat*, (New York,: Farrar, Straus, and Giroux), 71,72

¹³⁹ Ibid 73 140 Ibid 74

¹⁴¹ Ibid 75

¹⁴² The Global Economic Crisis: Systematic Failures and Multilateral Remedies. UNCTAD. 2009. http://unctad.org/en/Docs/gds20091_en.pdf (accessed July 31, 2013) XII.

economies that grow only at five percent.¹⁴³ The financial collapse that occurred due to the eventual failure of financial instruments such as Collateralized Debt Obligations (CDOs) that were created by financial institutions was not unexpected or new.¹⁴⁴ The crisis made it abundantly clear that the globalization of both trade and finance demand international cooperation and adherence to international standards.¹⁴⁵ The most recent UNCTAD World Investment Report for 2012 demonstrated that although Transnational Corporations (TNC) have increased in production and gained twenty eight trillion in sales, they have not invested these funds due to global economic fragility.¹⁴⁶

Finally, when considering the state of global economic affairs, and economic integration, it is imperative to consider the many different types of states that are operating in the global capitalist system. According to Baumol, Litan, and Schramm, there are four general categories that encompass different types of capitalism that include state-guided capitalism, oligarchic capitalism, big firm capitalism, and entrepreneurial capitalism.¹⁴⁷State guided capitalism occurs when the government would decide which firms will grow and receive investment.¹⁴⁸ This type of capitalism can include several different economies such as South Korea or Japan, which can strongly influence banks to pick winners and losers.¹⁴⁹ It can also include economies such as China to a certain extent with the State Owned Enterprise system that functions along a unique type of capitalism.¹⁵⁰ Oligarchic capitalism is a system that includes property rights and mechanisms that favor a narrow few individuals and businesses and their retinue.¹⁵¹ Big firm capitalism occurs when large companies maintain a dominant market share in the economic system.¹⁵² Entrepreneurial capitalism occurs when a large group of individuals engage in innovation for commercial purposes.¹⁵³ The United States of America is a merger of the latter two forms of capitalism.¹⁵⁴ These frameworks are essential for understanding how different Member States view both foreign and portfolio investment, and the transfer of technology in order to advance economic growth and commercial profitability.

Case Study: Mobile Technology in Africa

In Africa Altered States, Ordinary Miracles the author Richard Dowden observes Nigerian village women verifying the price of produce in neighboring towns on their cell phone, headers in Somalia traveling with their mobile phones - stick in hand, and Tanzanian fisherman examining the weather on cell phones.¹⁵⁵ According to the Gates Foundation and World Bank Survey, most adults in Kenya, Sudan, and Gabon use mobile financial tools.¹⁵⁶ Nigeria's mobile music industry is now a multi-million dollar industry.¹⁵⁷ The continent now teams with entertainment platforms that include Kulahappy and AfriNolly where users can view movies and other video activities on their phones.¹⁵⁸ Even as far back as 2003, Kenya's Agricultural Commodities Exchange collaborated with Safaricom to introduce SokoniSMS64, which is a text messaging platform that provides pricing information to farmers.¹⁵⁹ An application for dairy farmers known as iCow helps farmers track the gestational period of cows.¹⁶⁰ In Uganda, the Collecting and Exchange of Local Agricultural Content (CELAC) project engages in the use of SMS

¹⁴⁶" UNCTAD World Investment Report 2013." UNCTAD. New York and Geneva. 2013. http://www.unctaddocs.org/files/UNCTAD-WIR2012-Preface-Key-messages-and-Overview-en.pdf (accessed July 31, 2013). XI

¹⁴⁷ Baumol, et al. Good Capitalism, Bad Capitalism, and the economics of Growth and Prosperity. (New Haven, CT.: Yale, 2007) 60.61

- 148 Ibid 62
- ¹⁴⁹ Ibid 63,64

¹⁵⁶ Tolu Ogunlesi and Stephanie Busari. "Seven ways mobile phones have changed lives in Africa". CNN International.

September 14, 2012. http://edition.cnn.com/2012/09/13/world/africa/mobile-phones-change-africa/index.html (accessed July 31, 2013).

159 Ibid.

¹⁴³ Ibid 1

¹⁴⁴ Ibid 4 ¹⁴⁵ Ibid XIII

¹⁵⁰ Ibid 68

¹⁵¹ Ibid 71 152 Ibid 80

¹⁵³ Ibid 85,86

¹⁵⁴ Ibid 90

¹⁵⁵ Africa Altered States, Ordinary Miracles. Richard Dowden. (New York, NY: Public Affairs 2009), 519

¹⁵⁷ Ibid.

¹⁵⁸ Ibid.

¹⁶⁰ Ibid.

messages to inform farmers about market prices for export crops, best practices, and methods of pest control.¹⁶¹ It is clear that Africa is a continent that is aggressively attempting to connect with the rest of the world.

However, the 55 African Member States are quickly closing the Digital Divide between themselves and the rest of the world but at a much slower pace due to their specific needs. Due to a lack of energy, the phones that dominate the African continent are quite different from the rest of the world. The continent boasts more cell phone users than individuals who have access to electricity.¹⁶² Therefore, there is a premium placed upon battery life as opposed to other functions. In most places, cell phones batteries can last up to a week without power.¹⁶³ In addition, most people living on the continent will experience the Internet for the first time as text on a small screen.¹⁶⁴ This is a stark contrast with the rest of the world that favors the newest, sleek smart phones, tablets and other technology. In response to these challenges, several new innovations have taken hold in Africa. Cloud computing offers a way to reduce the digital divide by requiring access to the latest innovations, and the possibility to reduce the need for computing centers.¹⁶⁵ However, according to major data companies, there is no plan create a data center in Africa due to a lack of development by the private sector.¹⁶⁶ Before major data companies can set up in an African Member State, they require access to water as a cooling station, and a consistent power source.¹⁶⁷ Member States must partner with private sector organizations to ensure that accessibility is not hindered by a lack of investment in infrastructure, and that connectivity can serve to attract investment in infrastructure. In addition, the pace of integration must be accelerated in order to avoid a red queen effect where it takes all the effort that the public and private sector can muster just to maintain their position in the global economy.¹⁶⁸

Problems and Opportunities

The introduction of mobile technology has changed global connectivity and economic development in dramatic ways in the last few decades. Mobile devices have rapidly evolved since Martin Cooper and Motorola introduced the first cellular telephone in 1973.¹⁶⁹ The first devices had a battery life of 20 minutes and were a tool for the super wealthy.¹⁷⁰ Now cellular devices are lightweight, affordable, and certain select models can have a battery life that can last up to six weeks.¹⁷¹ According to an October 2010 report by one of the United Nation's Specialized Agencies, the International Telecommunications Union, 76.2% of the world's population has subscription for a mobile cellular phone.¹⁷² In developing countries, 67.6% of the population report mobile phone subscriptions.¹⁷³ With this depth and breadth of connectivity, the world should be more connected and thoroughly economically integrated. However, there are several major factors that stifle connectivity and make investment a risky proposition.

The most rudimentary issues impeding the spread of mobile technology is energy poverty. The need to improve access to an energy source is vital to the operation of mobile technology. According to the World Bank approximately 1.6 billion people are not connected to a readily accessible power source.¹⁷⁴ According to Friedman, all of the major problems of the developing world, ranging from unemployment to investment shortage are linked

¹⁶¹ "Mobile Technologies and Empowerment: Enhancing human development through participation and innovation". UNDP. http://www.undpegov.org/mgov-primer.html#execsummary (accessed July 31, 2013).

¹⁶² Tolu Ogunlesi and Stephanie Busari. "Seven ways mobile phones have changed lives in Africa". CNN International. September 14, 2012. http://edition.cnn.com/2012/09/13/world/africa/mobile-phones-change-africa/index.html (accessed July 31, 2013).

¹⁶³ Ibid.

¹⁶⁴ Ibid.

¹⁶⁵ "Cloud Computing in Africa: Situations and Perspectives". ITU. April 2012. <u>http://www.itu.int/ITU-</u> D/treg/publications/Cloud Computing Afrique-e.pdf (accessed July 31, 2013).

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid.

¹⁶⁹"Dialing for Development: How mobile devices are changing the lives of millions," WIPO Magazine, http://www.wipo.int/wipo_magazine/en/2010/05/article_0002.html (accessed June 5, 2013) ¹⁷⁰ Ibid.

¹⁷¹ Ibid.

¹⁷² Terry, Mark. Telemicroscopes and Point of Care Diagnostics Team Up with Smartphones. Telemedicine and e-Health. (June 2011) 320-323. http://online.liebertpub.com/doi/abs/10.1089/tmj.2011.9984 (accessed August 2, 2013)

¹⁷³ Ibid.

¹⁷⁴ Friedman, Thomas. Hot, Flat, and Crowded, (New York, NY.: Picador, 2009) 155

energy shortages.¹⁷⁵ Friedman asserts that when individuals have limited access to electricity, they are less likely to use the Internet, computers, and cell phones.¹⁷⁶ These individuals that are outside of the realm of global commerce will in turn move to overcrowded urban centers in order to take part in international economic activity.¹⁷⁷ The acceleration of investment into power grids and renewable energy can help to alleviate the stress on urban centers and increase the standard of living in more remote areas.

Another problem is the issue of economic informality. Informality, as defined by the famous Peruvian economist Hernando De Soto, occurs when economic actors engage in activities that promote growth, but are illegal or outside the law because they operate without government license and regulations.¹⁷⁸ According to a 2006 World Bank report, it takes an average of fifty-nine days and more than one hundred percent of average individual annual income in order to start a business and join the formal economy in the developing world.¹⁷⁹ During field research in Angola, anthologist Carolyn Nordstrom observed how women in the informal economy can move from manual labor into the role of legitimate business owner, only after years of networking and business collaboration.¹⁸⁰ Nordstrom reports that it is the relationship to powerful individuals, and not the licensing under the rule of law that gives security to becoming part of the formal economy.¹⁸¹ She even observed how mobile technology has penetrated informal markets, but that due to corruption, and legal restrictions, many people have to choose illegal routes to achieve wealth.¹⁸² This informal economy lends itself to a host illegal activity, including violations of intellectual property rights.

According to renowned international relations professor Daniel W. Drezner, the duplication and reconstitution of information on the Internet presents a major threat to the traditional regimes and methods of protecting copyrights, and trademarks especially among firms that deal in software development, or financial services.¹⁸³ Therefore, most international treaties on intellectual property resemble the interests of the developed world. The World Intellectual Property Organization (WIPO) formulated two treaties on copyrights and phonograms in 1996, and the US, EU, Japan, and Canada collaborated during the "Uruguay Round" to utilize the World Trade Organization (WTO) dispute settlement mechanism to defend intellectual property.¹⁸⁴ Many developing countries have different interests, and prefer lax standards for increasing the transfer of technology and reducing the need to invest limited resources in attaining new inventions.¹⁸⁵ Developed countries have continued to encourage developing countries to enact greater anti-piracy or intellectual property theft measures, but have achieved limited success with enforcement.¹⁸⁶ Therefore, Member States have been encouraged to examine better methods of collaboration and cooperation to stifle piracy and advance a mutually beneficial distribution of technology.¹⁸⁷

The third and final obstacle to greater global mobile technological cooperation is need for a credible digital security infrastructure that will permit commerce to occur safely between Member States.¹⁸⁸ According to the journalist Misha Glenny, ego hackers executed the majority of cyber-attacks that occurred in 2003 while the majority of attacks that occurred in 2005 were now executed by criminal hackers or crackers.¹⁸⁹ Viruses, Trojans, and all types of malware are now designed to act unnoticed and discretely extract data from a user's computer.¹⁹⁰ Criminal hackers no longer only pursue banks accounts, but rather aim to take entire identities, including secure identity

¹⁷⁵ Ibid 157

¹⁷⁶ Ibid 158

¹⁷⁷ Ibid

¹⁷⁸ Baumol, et al. *Good Capitalism, Bad Capitalism, and the economics of Growth and Prosperity.* (New Haven, CT.: Yale, 2007) 75.

¹⁷⁹ Ibid 97.

¹⁸⁰ Nordstrom, Carolyn. *Global Outlaws: Crime, Money, and Power in the Contemporary World.* (Berkley: University of California Press, 2007), 52-53.

¹⁸¹ Ibid.

¹⁸² Ibid 96, 97.

¹⁸³ Drezner, Daniel. All Politics is Global: Explaining International Regulatory Regimes. (Princeton, NJ.: Princeton University Press, 2007) 101

¹⁸⁴ Ibid 102

¹⁸⁵ Ibid

¹⁸⁶ Ibid 103

¹⁸⁷ Ibid

 ¹⁸⁸ Glenny, Misha. McMafia: A Journey Through The Global Criminal Underworld. (New York, NY: Vintage Book, 2009) 269
¹⁸⁹ Ibid

¹⁹⁰ Ibid

information, and passports.¹⁹¹ According to the cyber security company ISS, the global losses credited to identity theft was \$52.6 billion.¹⁹² In addition, cybercriminals tend to gravitate toward global centers in the same manner as technological inventors are drawn toward California, Toulouse, Munich, and Scandinavia.¹⁹³ Cybercriminals tend to gravitate toward emerging markets because of strong organized criminal networks, high basic education standards, and scarce economic opportunity.¹⁹⁴ This presents a major challenge to those looking to business in emerging markets and the developing world.

Conclusion

The use of mobile technology is contributing more towards global economic development and will continue to do so for many years to come. Although mobile technology is continuing to spread to all corners of the globe, access to capital and investment is still not on a level playing field for all states. Although some states have taken measures to reduce risk, build capacity, and promote an environment that is attractive for investment there are still many challenges that confront other states. The need to complete the full dissemination of mobile technology to more remote parts of the world is the first major obstacle to achieving greater digital integration. This will require a sustained energy infrastructure that is cheap and affordable for all people. Wireless access and cellular coverage must also be part of this critical infrastructure development. After full integration is achieved states must also work to ensure that these new entrants into the global marketplace have a fair opportunity to compete in a digital space including access to financial services. In order to reduce risk, some states will have to continue to enact reforms that create a safe environment for investors, while not exploiting the needs of entrepreneurs. These reforms may include assurances against expropriation of FDI or piracy, and a streamlined legal method of bankruptcy. In addition, states will need to cooperate in sharing intelligence on criminal activities and illegal predatory lenders in order to ensure that the transfer of money is not fraudulent or illicit in any manner. These public investments will yield dividends when private investment enlarges the tax base of a country and is able to free up new resources for further investment in development such as infrastructure and education.

Committee Directive

Delegates should investigate the development of a unified strategy at the international level by considering a comprehensive approach to accelerating the proliferation of mobile technology. How can large firms share their technology in new markets for the advancement of commerce, but still receive a guarantee that intellectual property rights will be protected? What utilities are necessary to enable mobile commerce? And, How will states collaborate to improve infrastructure, especially highways and power grids that are so essential the both communication and the movement of goods? What new procedures can the international community explore to make new hardware more available to developing Member States? What forms of standard software or methods of conversion can be made available to individuals in order facilitate better communication and expand commercial activities? How can Member States make licensing of new businesses more efficient in order for new businesses to take advantage of more cost effective communications and logistics technology and join the formal economy?

¹⁹¹ Ibid 270

¹⁹² Ibid

¹⁹³ Ibid 273

¹⁹⁴ Ibid

Technical Appendix Guide

I. Securing Free, Equal, and Cooperative Access to Fresh Water Resources

Allan, Tony. "Virtual Water: Tackling the Threat to Our Planet's Most Precious Resource". 2011. I.B. Tauris & Co. Ltd. New York, NY.

In his works, Allan aims to provide a simple context as to why water is a necessary commodity for all human development indicators. Allan also encourages the wise use of water and maintaining of resources to promote economic equality, good health, and sustainable nutrition practices. Global food practices are also called into light and the potential strategies that can be used to both better manage irrigation and provide means to finding water footprints of farmers, localities, and Member States.

Bozzo, Sam; Achbar, Mark; Litvinoff, Si. "Blue Gold: World Water Wars". 7 April 2009.Purple Turtle Films. Full Documentary Available Online. <u>https://www.youtube.com/watch?v=1gCDmPkapqQ</u> (accessed July 29, 2013). This documentary provides a number of instances where the privatization of water has been abused in favor of corporations whose purpose is to gain profit and not provide water to necessary population. The Blue Gold: World Water Wars publication is available in text and video online at Youtube.com. Many developing areas will find this resource useful. The film aims to highlight some of the potential conflict areas where outbreaks of violence are going to flare up as water becomes scarcer.

Economic Commission for Europe (UNECE): Convention on the Protection and Use of Transboundary Watercourses and International Lakes. "Guidance on Water and Adaptation to Climate Change". United Nations Publications. <u>http://www.unece.org/fileadmin/DAM/env/water/publications/documents/Guidance_water_climate.pdf</u> (accessed July 29, 2013)

UNECE provides a larger contextual understanding of climate change and the relationship to water. This report specifically outlines the shift that the international community has taken from mitigation and adaptation on climate change. The report also outlines a number of strategies for managing international waterways and bodies from a European Context. This document also outlines the desire for the international community's desire to move beyond the argument that insufficient information is a justifiable excuse for inaction on water management. Finally, this document illustrates how various strategies of water development affect other human development indicators.

Hoekstra, Arjen et. al. "The Water Footprint Assessment Manual: Setting the Global Standard". The Water Footprint Network. 2011. Earthscan. <u>http://www.waterfootprint.org/downloads/TheWaterFootprintAssessmentManual.pdf</u> (accessed July 29, 2013).

The concept of a water footprint is not a relatively new tool, it is seen as a means to understanding how much water would be necessary to sustain a given lifestyle, business model or product, or community's use of the resource. There are a number of factors involved in creating these tools, but largely, it is the cooperation of academics and political stakeholders in information sharing and collaboration on various sectors. However, like many other sectors related to sustaining water supplies, there are a number of future challenges laid out to creating tools that measure water footprints for the body to consider.

Morrison, Jason et. al. "Water Scarcity and Climate Change: Growing Risk for Businesses and Investors". The Pacific Institute. February 2009. <u>http://www.pacinst.org/wp-content/uploads/2013/02/full_report30.pdf</u> (accessed July 29, 2013).

Ensuring free, secure and cooperative access to water means not only connecting people to safe water resources, but also including actors that have had a role to play in markets related to resources. Enterprises are essential to ensuring that water is provided as a human right to those in need. In many instances, water is necessary for other development to occur, especially in utilities, construction, and other means. Involving the private sector in water resource management allows for investments to be made which minimize risk for parties involved. This document serves as a best practices resource manual that allows the reader to understand an economic perspective to why companies should become involved in water management.

The World Bank: Water and Sanitation Program. "Mainstreaming Gender in Water and Sanitation: Gender in Water and Sanitation". November 2010. <u>http://www.wsp.org/sites/wsp.org/files/publications/WSP-gender-water-sanitation.pdf</u> (accessed 29 July 2013).

Gender is a topic of discussion that typically is a subset of a larger problem throughout multiple international policy discussions. However, when addressing water, gender is at the forefront of water, as many women must be given access to authority to have power in decisions. This document highlights a number of issues in regards to policy review and how women are often left out of decision making. This document also highlights how women can contribute to the urban water context, as well as small town and rural area water operations. Typically women have knowledge which is vital to situational context and this document highlights how to make women's voices heard.

The UN GA. "Charter of the UN". San Francisco, USA. 26 June 1945. <u>http://www.un.org/en/documents/charter/</u> (accessed July 29, 2013).

The UN Charter provides the framework for all of the work that is conducted by the UN. Without the Charter, the UN would not operate. The Charter sets out the mandate of the GA and a number of other bodies and arms of the UN while specifically stating what the GA can and cannot do. The Charter also provides certain duties to the body without compromising the sovereignty of Member States. This document will assist delegates with an understanding of the limitations of the Plenary in addressing the topics.

The UN GA. "Universal Declaration of Human Rights". 10 December 1948.

http://www.un.org/en/documents/udhr/index.shtml (accessed July 29, 2013).

The GA passed the Universal Declaration of Human Rights to establish basic, yet fundamental rights that every person in the world is entitled to. These rights are given to every citizen of every Member State and its territories of the UN. These rights are substantially different from those rights which have been passed more recently, such as the rights of the child and the right to water. Nevertheless, water contributes substantially to the attainment of these rights and should be envisioned alongside, rather than listed as a checkbox of what a state provides to its citizens.

UN-Water. "Managing Water under Uncertainty and Risk: the UN World Water Development Report 4; Volume 1". <u>http://www.unwater.org/documents.html</u> (accessed July 29, 2013).

The World Water Development Report 4th Edition (WWDR4) provides a comprehensive snapshot of where the world is in regards to water management and how the situation developed. The WWDR also provides a reference to a number of other documents that are related to water insecurity and how data can be used to make information, and is then translated into knowledge for informed decisions. Finally, there is a broader discussion of how to mitigate risk and uncertainties in water management.

Velma I. Grover, eds. Impact of Climate Change on Water and Human Health. CRC Press: Taylor and Francis Group. 2013.

This collection of essays outlines the various impacts that water and human health will undergo as a result of climate change. The various complexities laid out by Grover allows for the reader to grasp related law, social complexities, economic matters, and restoring ecosystems. Furthermore, a number of case studies are provided in guiding ecosystem restoration, a pivotal work in regards to maintaining existing water resources, and bringing back those which have been lost.

II: Fostering Mobile Technology In The Advancement of Commerce

Alison Hoare. "Illegal Logging: Are We Making Progress?" Chatham House. July 12, 2013. http://www.chathamhouse.org/media/comment/view/193207 (accessed July 30, 2013)

This expert opinion discusses the concept of "illegal logging" and its implications on trade. Highlighting a number of member states from the European Union and African Union, the document makes a comparison between the challenges and the progresses that arise with "illegal logging" such as illegal allocation of logging permits, non-payment of taxes, Voluntary Partnership Agreements (VPAs), and advancements due to mobile phone technology, GIS, and mapping. This resource will be helpful establishing a different perspective on the impacts of mobile technologies on commerce through the contributions to the forest industry.

Eric Schmidt and Jared Cohen. "The New Digital Age: Reshaping the Future of People, Nations and Business". Knopf. April 23, 2013.

This book engages the concept of connectivity and connectedness and its impact on the global community. With continuous advancement in the realm of technology, the communication and interaction gap has been bridged between town, state, country, and hemisphere often at the simple click of a mouse. However, with increased access there are concerns of privacy, security, and potential sacrifices to be made by its users in the future. The book also introduces the new paths virtual identities will travel down in both the public and private sector. This resource offers delegates a review of influence had and a realistic outlook on the potentials of the future past the surface benefits of personal connectedness.

Gerard Goggin. "Global Mobile Media". Routledge. September 14, 2010.

This resource is a book by a professor of Digital Communication that focuses on the expanding topic of mobile media and media dimensions. Looking at a new form of media through the lens of mobile technologies, the book looks at the vested interests of cell phone corporations, media, users, and policy makers; as well as the topics of political economy, ownership and control, and the key players in its economic structure. With a number of case studies, this book will be helpful in providing tangible examples to paint the picture of the impact that mobile technology has had on daily life.

Isobel Coleman (Presider) et al. "mDevelopment: Harnessing Mobile Technology for Global Economic Growth". The Council on Foreign Relations. May 10, 2012. <u>http://www.cfr.org/women/mdevelopment-harnessing-mobile-technology-global-economic-growth/p28300</u> (accessed July 30, 2013)

This translation of a panel in which Coleman presides over focuses on some of the Council of Foreign Relation's work regarding women and technology and how mobile technology in particular can be used to catalyze economic growth. The article discusses some critical business challenges to all sectors in some developing economies, including lack of access to digital channels and the expense of internet connection in many countries. The dialogue also delves into how access to mobile technology and the internet allows female entrepreneurs to really grow and develop their business. Delegates should take into consideration global partnerships between all sectors such as the partnership between Exxon Mobile and the CFR when formulating solutions to the issues presented in the background guide. This article presents a few examples of these partnerships and delegates can utilize these as examples of success in promoting trade and development through mobile technology.

Matthew Yglesias (Moderator) et al. "How Do Government Restrictions Harm International Online Trade and Commerce?" The Brookings Institute. February 26, 2013 http://www.brookings.edu/events/2013/02/26-international-online-trade (accessed July 30, 2013)

This source is a video from a 2013 Brookings meeting held on the topic of government restrictions on international online trade and commerce. With the extreme increase of internet technologies over the last 20 years, commerce is an aspect that has advanced greatly due to the accessibility and convenience to consumers. This discussion sought to highlight the importance of security, national interests and intellectual property rights in online global commerce; but more importantly identify a balance between security and overbearing restrictions that may hinder trade and industry. This resource allows the delegates to get exposure to a more recent perspective on the scope, influence, and involvement of government on internet commerce.

Paul Collier. "The Bottom Billion." Oxford University Press, USA. August 22, 2008

The poorest 60 nations are host to the "bottom billion" and are centered mostly in central Asia and Africa. Collier suggests four traps into which these poorest of the poor countries often fall; civil war, the resource curse, land locked locations, and bad governance. He discusses how emerging media and mobile technology play an increasingly important role in allowing those who traditionally do not have a voice in these societies to speak up, through platforms such as twitter. Perhaps mobile technology can play a large role in lifting these entrenched countries out of severe poverty. This book will help delegates understand some of the core causes of poverty and development traps in the poorest countries in the world and offers some relatively inexpensive but difficult changes to our current global approach which delegates should consider when formulating resolutions.

Robin Meredith. "The Elephant and the Dragon". W.W Norton & Company. June 17, 2008. Meredith's book discusses the transformation of China and India and emphasizes the power they have to transform the lives of people all over the world. This transformation facilitates technological advancement and has an incredible impact through international trade on the ability of people worldwide to utilize phones, televisions, and computers. The ability of the internet and relatively cheap telephone service allows instant connection with someone else from across the globe and allows developing countries like India to export intellectual work. With advances in mobile technology, companies can outsource IT (information technology) assistance centers to countries like India, where 1.3 million Indians are employed by the IT and call-center market according to Meredith. This book will help delegates understand the complex relationship between mobile technology, development, and international trade by providing in-depth analysis of the role of technology in two developing countries.