

Southern Regional Model United Nations XVIII
Fostering a Culture of Peace for International Development
November 15-17, 2006
Atlanta, GA
Email: las@srmun.org



Dear Delegates,

I would like to take this time to welcome you to the Southern Regional United Nations Conference (SRMUN) XVIII and the League of Arab States (LAS). My name is Colleen Miller, and it is an honor for me to serve as the Director for the LAS. This is my third tenure as a committee Director at a college-level Model United Nations conference. However, this is my first at SRMUN! Currently, I am a fourth year PhD student in Political Science at the University of Minnesota. My research focuses on terrorism and security issues. As a student of Modern Standard Arabic and Middle East-North Africa politics, I am looking forward to directing this year's League of Arab States committee.

The League of Arab States was formed in 1945 to allow for a political forum and collective voice for Arab states. The LAS constitution provides administration for management among the signatory nations on education, finance, law, trade and foreign policy. It also forbids the use of force to settle disputes among the members. As the LAS labors to strengthen the union of Arab states, we have chosen the following topics to discuss at this year's conference due to the importance they play in achieving the Millennium Development Goals and in the future of the Arab region:

- I. Security and the Refugee Situation in the Middle East;
- II. Information and Communication Technology and Infrastructure in the Arab World;
- III. Water Usage and Conflict in the Arab Region.

This background guide is an excellent start for your research and should lead you to explore the topic yourself. Excellent delegations should be well versed in their country's position on the topic and general topic information as well. Researching each topic will enhance your position papers, better prepare you for committee debate and make the entire SRMUN experience more rewarding.

Each delegation required to submit a position paper on each of the three topics. Position papers should be not longer than 2 pages in length and single-spaced. It is important that they not only define your country's positions and policies on the topics but also provide recommendations. The position paper is an opportunity to state what your country plans to accomplish in this committee. More detailed information about how to write position papers can be found at the SRMUN website (www.srmun.org). **All position papers MUST be submitted by Midnight on Friday, October 26th to LAS@srmun.org. Late or improperly formatted papers will not be considered for awards.** Best of luck in your conference preparation and I look forward to meeting you in November.

Colleen Miller
Director
LAS@srmun.org

David Tomaschik
Assistant Director
LAS@srmun.org

Cardell Johnson
Deputy-Director General
DDG@srmun.org

History of the League of Arab States

The League of Arab States, also known as the Arab League, is a multi-national regional organization currently comprised of 22 nations extending from North Africa to the Arabian Sea. Its first official meeting was held in Cairo in March 1945.¹ Since the United Nations itself was officially formed in October 1945, the League of Arab States considers itself the oldest existing multi-national organization.²

The idea of the League of Arab States began in the United Kingdom, who formulated the idea in order to rally Arab countries against the Axis powers in World War II.³ In the 1940's, Egypt was the most populous, wealthiest and, arguably, the most politically developed state in the Middle East.⁴ The Egyptian government endorsed the Arab League in 1943, calling for Pan-Arab cooperation without loss of self-rule. Egypt's political parties supported the bargain; with the understanding Egypt would achieve full independence.⁵ The nations concerned based their support on two policy considerations: 1) Arab unity and independence, and 2) The "Palestine Question"⁶

In 1944, five nations met in Alexandria, Egypt, to draft what became known as the Alexandria Protocols calling for a League of Arab States, being neither a federation nor a union. The original charter, called The Pact of the League of Arab States was signed in Cairo Egypt, in March 1945, creating a regional organization consisting of Egypt, Iraq, Lebanon, Saudi Arabia, Syria, Transjordan (Jordan, by 1950) and Yemen.⁷ Among the goals set was independence for all Arabs still under alien rule, and preventing the Jewish minority in British-controlled Palestine from creating a Jewish state.⁸ The members eventually formed a joint defense council, an economic council and a military command. Other Arab nations joined later as they became independent from the European nations.⁹

To this day, Egypt plays a major role: the Headquarters of the League of Arab States is in Cairo Egypt.¹⁰ The Secretary-General, Amr Moussa, is also an Egyptian, as have been four of the previous five Secretary-Generals.¹¹ However, for a ten-year period between 1979 and 1989, in response to Egypt signing the 1979 Camp David Accords with Israel, the Arab League's placed diplomatic sanctions on Egypt and the headquarters was moved to Tunis, Tunisia and even selected a new Tunisian Secretary-General to replace the Egyptian Secretary-General.¹² In 1989, the Arab League restored relations with Egypt and the headquarters moved back to Cairo the following year; shortly after, a new Egyptian Secretary-General was named.¹³

The Arab League is currently involved in political, economic, cultural, and social programs designed to promote the interests of Member States. In order to carry out such programs, the Arab League serves as a forum for Member States to coordinate policy positions and deliberate on matters of common concern, serving as a platform for the drafting and conclusion of almost all landmark documents promoting economic integration among Member States.¹⁴ Such economic integration proposals includes the annual Strategy for Joint Arab Economic Development, leading to the establishment of the Greater Arab Free Trade Area, a multinational free trade zone that will be put into force to promote trade within the Arab States.¹⁵

¹ "Arab League." League of Arab States http://www.arableagueonline.org/las/index_en.jsp

² Ibid.

³ "Profile: Arab League." BBC News. http://news.bbc.co.uk/1/hi/world/middle_east/country_profiles/1550797.stm

⁴ Israel Gresham, and James P. Jankowski. The road to the Arab League, 1939–1945. Edefining the Egyptian Nation, 1930-1945. ambridge University Press, 2002.

⁵ Abdul Hadi, Mahdi. The Arab League: A Historical Background. Palestinian Academic Society for the Study of International Affairs.

⁶ Ibid.

⁷ "Arab League." League of Arab States. http://www.arableagueonline.org/las/index_en.jsp

⁸ "Profile: Arab League." BBC News. http://news.bbc.co.uk/1/hi/world/middle_east/country_profiles/1550797.stm

⁹ "Arab League." League of Arab States. http://www.arableagueonline.org/las/index_en.jsp,

¹⁰ Ibid.

¹¹ "Arab League." League of Arab States. http://www.arableagueonline.org/las/index_en.jsp

¹² "A Jumble of Reactions." TIME. April 28, 1979. <http://www.time.com/time/magazine/article/0,9171,920210-2,00.html>

¹³ Alan Cowell. "At Long Last, Egypt Is Back In Arab Fold." The New York Times. May 22, 1989.

¹⁴ "Arab League." League of Arab States. http://www.arableagueonline.org/las/index_en.jsp

¹⁵ Abu Hamood Siddiqui. "Uniting Arab Economies." The Yemen Times. Issue: (999), Volume 14. November 16, 2006.

In the view of the Arab League's accomplishments, it has been "hailed by some as a glorious vehicle for projecting Arab influence, and condemned by others for being ineffectual, outdated and a failure in all its objectives."¹⁶ Nevertheless, its Economic and Social Committee has played an important role in shaping school curricula, preserving manuscripts and Arab cultural heritage, launching literacy campaigns, reproducing intellectual works,¹⁷ dealing with labor issues and translating modern technical terminology for the use by Member States.¹⁸

However, the main purposes of the founding of the Arab League, namely, Arab Unity and the "Palestine question" are still remain the biggest topic of discussion among Member States, and remain the most elusive.¹⁹

The Arab League has permanent delegations in New York and Geneva for the United Nations, in Addis Ababa for the Organization for African Unity (OAU), as well as offices in Bonn, Vienna, Brussels, Madrid, Washington, DC, New Delhi, Beijing, Moscow, Rome, London and Paris.²⁰

The following are the Members of the League of Arab States:

ALGERIA, BAHRAIN, COMOROS, DJIBOUTI, EGYPT, IRAN, IRAQ, JORDAN, LEBANON, LIBYA, KUWAIT, MAURITANIA, MOROCCO, OMAN, PALESTINE, QATAR, SAUDI ARABIA, SOMALIA, SUDAN, SYRIA, TUNISIA, UNITED ARAB EMIRATES AND YEMEN.

¹⁶ The Doha Debates: Second Series. "This House believes it is time for the Arab League to disband." BBC World. April 25, 2005. <http://www.thedohadebates.com/output/Page80.asp> (Please, try to watch the attached video)

¹⁷ "Arab League." League of Arab States. http://www.arableagueonline.org/las/index_en.jsp

¹⁸ "Agreement between the International Labour Organization and the League of Arab States." Official Bulletin of the ILO, Vol. XLI, 1958, No. 8

¹⁹ Ibid.

²⁰ "League of Arab States." International Monetary Fund. <http://www.imf.org/np/sec/decdo/las.htm>

I. Security and the Refugee Situation in the Middle East

Introduction

The Middle East region has long been plagued by multiple refugee problems. These refugee problems continue to present a serious challenge to the efforts of Member States to achieve and maintain security within the region. While traditional considerations of security may have originally concentrated on the military and physical security of the state, the contemporary discourse in international politics has expanded the definition of security to consider human security. The refugee situations in the Middle East place human security in serious jeopardy and, in certain situations, result in an objective failure of security. According to the definition of human security developed by the United Nations Development Programme (UNDP), human security can be viewed as being composed of two primary aspects: "It means, first, safety from such chronic threats as hunger, disease and repression. And second, it means protection from sudden and harmful disruptions in the patterns of daily life -- whether in homes, in jobs or in communities."²¹ Specific elements of human security include economic security, food security, health security, environmental security, personal security, community security and political security.²² Refugee situations place profound stress on the security of States and have the ability to contribute to the instability of a region. It should also be noted that refugee situations affect women, children and the aged at a disproportional rate.

At present, there are four primary refugee crises in the Middle East. There are currently an estimated 1.3 million Palestinian refugees in official refugee camps in the Middle East, the result of an exodus from Israel between 1947 and 1967.²³ The current war in Iraq has resulted in at least two million displaced Iraqis throughout the Middle East; this number only continues to rise.²⁴ In Sudan, nearly 800,000 individuals have been displaced by violence in the Darfur region.²⁵ Somalia has over 400,000 refugees and internally displaced persons (IDP) within the Horn of Africa.²⁶ While the Palestinian territories, Iraq, Sudan and Somalia have suffered greatly from their refugee crises; there is a tremendous spillover effect in neighboring States. These neighboring States find their own security undermined and threatened with an influx of refugees and often find themselves facing particularly frustrating security issues. With respect to the Palestinian issue, Jordan, Lebanon and Syria have played host to refugees for more than half a century in some cases. The hostilities in Iraq have placed considerable strain on these same States, while other States such as Egypt and Somalia have found themselves facing security challenges as a result of the situations in Somalia and Sudan.²⁷ The issue is often complicated by the legal status of refugees, few of who are considered to be citizens in the eyes of the law and more of whom are legally viewed as being in the State illegally.²⁸ The League of Arab States faces the task of ensuring not only the security of refugees themselves, but also maintaining the security of those States facing refugee crises.

While the League of Arab States has indicated its awareness of the problem of the refugee situation in the region, the League has yet to take action with respect to the four primary refugee situations in the Arab world. To date, States have faced the issues and challenges of refugee crises individually. The League of Arab States has the unique ability to consider the crises as an organization and develop ways in which cooperation between Member States would result in a more successful refugee policy, ensuring the security of all. As the refugee crises highlight, civil insecurity in one State can have powerful implications for the security of the region as a whole.

There are three areas wherein the League of Arab States must focus its attention in attempting to address the issue of security and the refugee situation in the Middle East. Political, economic and social issues must all be considered in any successful solution of the issue of security and refugees in the region. When considering the political aspect,

²¹ Ronald Paris. "Paradigm Shift or Hot Air?" *International Security*. 2001. pp. 87-102.

²² *Ibid.*

²³ "Overview." United Nations Relief and Works Agency for Palestine Refugees in the Near East. <http://www.un.org/unrwa/overview/index.html>

²⁴ Ron Redmond. "UNHCR Chief Tells Iraqi Refugees That the World is Waking Up to Their Plight." *United Nations Human Rights Council*. February 9, 2007. <http://www.unhcr.org/cgi-bin/texis/vtx/iraq?page=news&id=45cc950c4>

²⁵ United Nations Human Rights Council. "UNHCR Global Appeal 2007 – Sudan." *UNHCR Fundraising Reports*. December 1, 2006. <http://www.reliefweb.int/rw/dbc.nsf/doc108?OpenForm&emid=ACOS-635PIJ>

²⁶ *Ibid.*

²⁷ Sheera Claire Frenkel. "Egypt Might Reject African Refugees." *The Jerusalem Post*. August 10, 2007.

http://www.jpost.com/servlet/Satellite?cid=1186557417809&pagename=JPost_percent2FJPArticle_percent2FShowFull

²⁸ *Ibid.*

delegates should consider the legal status of refugees, both short and long term. The legal rights of refugees also have important ramifications for the refugee situation and the security of the region. With respect to the economic aspect, the League should consider a myriad of issues, including the various ways in which refugee situations can impact States with the refugee crisis and those States impacted by the crisis. Refugee crises are a huge economic drain on States and have the potential to impact the economic health of the region at large. The economic status of refugees themselves will also be considered extensively in any successful resolution of the refugee crises in the region. The social aspect of this problem is equally challenging, as it often forces Member States to address the very issues that precipitated the original refugee situation. The League of Arab States must critically examine questions regarding religious and social differences between groups, as well as the areas of expected tension. The League of Arab States must remain cognizant of the region's many tribal, sectarian and social distinctions when considering appropriate and viable solutions to the refugee crises in the Middle East. Logistical considerations of the refugee problem should not be overlooked; ensuring the preservation of basic human rights must remain a priority of the League of Arab States in ensuring the security of not only Member States, but also the refugee population.

The following sections provide information on the four primary refugee crises in the region. Delegates should familiarize themselves with each of these cases and arrive at the Conference prepared to consider those avenues open to the League, which will have the ability to successfully address each of the refugee situations.

The Palestinian Issue

The Palestinian refugee issue is the single greatest refugee problem facing the Middle East with respect to both number of refugees and length of time the problem has existed. While acquiring exact numbers will always be problematic, current estimates place the number of Palestinian refugees in official refugee camps within the Middle East at 1.3 million.²⁹ It should be noted that this number addresses only those individuals in official camps; the real number is of course much larger. The refugee situation of the Palestinian people originated with the first of the Arab-Israeli war in 1948, in which the Israeli government successfully established its state. At this time, untold numbers of Palestinians in the area fled the area now identified by the League of Arab States as Occupied Territories of Israel. Nearly a half-century later, many of these refugees and their descendents remain in refugee camps in Lebanon, Syria and Jordan.³⁰ A second wave of refugees was created by the 1967 Arab-Israeli conflict, with the majority settling in refugee camps in Jordan.³¹ These refugees and their descendents maintain that they hold claim to their property in the Occupied Territories of Israel to this day. Much of this rationalization comes from reliance upon the language of United Nations General Assembly Resolution 194. Adopted by the General Assembly in 1948, the Resolution states that all Palestinian "refugees wishing to return to their homes and live at peace with their neighbors should be permitted to do so at the earliest practical date."³²

Despite the passage of time and the numerous attempts to permanently solve the Palestinian-Israeli issue, the fate of these refugees remains very much in limbo. The 'practical date' described by the United Nations General Assembly has yet to arrive. There is a very real and strong resistance by the government of the Occupied Territories of Israel preventing such return from occurring. In the eyes of Israel, granting the so-called 'right of return' to Palestinians "would be tantamount to surrendering the country's identity."³³ At least a portion of Israel's concerns regarding the Palestinian right of return is motivated by demographics, "With a population of 6.6 million, of which 5.4 million are Jewish, opening the doors to a potential 4 million returnees would threaten the demographic balance – and thus the very nature – of the world's only Jewish state."³⁴ The Israeli government has also made the argument that the Palestinians who left the area relinquished their claims to property and citizenship of the land with their departure.³⁵ As is to be expected, this argument has not found much support in the Arab world.

²⁹ "Overview." United Nations Relief and Works Agency for Palestine Refugees. <http://www.un.org/unrwa/>

³⁰ "Official UNRWA Palestinian Refugee Camps." MidEast Web Gateway. 1993. <http://www.mideastweb.org/mrefugees.htm>

³¹ "Overview." United Nations Relief and Works Agency for Palestine Refugees. <http://www.un.org/unrwa/>

³² A/RES/194. *Palestine – Progress Report of the United Nations Palestine -- Progress Report of the United Nations Mediator*. United Nations General Assembly.

³³ Heather Sharp. "Right of Return: Palestinian Dream." BBC News: World: The Middle East. April 15, 2004. http://news.bbc.co.uk/2/hi/middle_east/3629923.stm

³⁴ Ibid.

³⁵ Steven Erlanger. "Olmert Rejects Right of Return for Palestinians." *The New York Times*. March 30, 2007. <http://www.nytimes.com/2007/03/31/world/middleeast/31mideast.html?ex=1332993600&en=66af96388ce4c2dc&ei=5088&partner=rssnyt&emc=rss>

The United Nations has been involved in the Palestinian refugee crisis on an unprecedented level. In 1951, the United Nations created the United Nations Relief and Works Agency for Palestine Refugees.³⁶ The organization established a list of the approximately 860,000 individuals classified as having lost homes and livelihoods in the new Israeli State.³⁷ This United Nations organization has “fed, housed and clothed tens of thousands of fleeing refugees and at the same time, educated and given health care to hundreds and thousands of young refugees.”³⁸ The organization defines a Palestinian refugee as “any person whose normal place of residence was Palestine during the period 1 June 1946 to 15 May 1948 and who lost their home and means of livelihood as a result of the 1948 conflict.”³⁹ However, with the passage of time, the term has come to refer also to the descendants of the original Palestinian refugees. The United Nations Relief and Works Agency for Palestine Refugees has fields of operation in Lebanon, Syria, Jordan, Gaza and the West Bank.⁴⁰

Palestinian refugees have not had a common experience as refugees. The situation in Lebanon has been particularly distressing, with “hundreds of thousands of Palestinian refugees forced to live in overcrowded refugee camps,” often lacking in basic human needs.⁴¹ These individuals are denied the right to work in many professions; they are prohibited by law from owning or inheriting property.⁴² As a result, “Lebanon has repeatedly stated that it will not accept the permanent settlement of Palestinian refugees in Lebanon and that their presence in the country is temporary.”⁴³ The reality, however, is that this temporary solution has existed for more than half a century. In Jordan, the Palestinian experience has been very different. In harsh contrast to the situation in Lebanon, most of the refugees in Jordan enjoy civil rights equal to those of Jordanian citizens. Indeed, “Palestinians in Jordan, most of whom were granted citizenship in the early 1950s, represent over half of the Jordanian population.”⁴⁴ Instead of accepting the Palestinian refugees as a ‘temporary’ addition to the population, the Jordanian government took significant steps to adopt its policies to accommodate for the influx of Palestinians.⁴⁵

The Palestinian refugee situation highlights the potential dangers of ignoring the refugee problem in the Middle East. Camps in Lebanon have often found themselves recruiting grounds for militant Islamic groups, which have repeatedly resorted to violence against both Israel and Lebanon.⁴⁶ This has resulted in significant security threats to each State and the region at large. Contrasting the Lebanese experience against the Jordanian one highlights the importance of social integration in addressing the problem of refugees.

The Situation in Iraq

At present, the refugee situation in Iraq represents the second largest refugee crisis in the region despite the fact that the problem is less than five years old. The Iraqi refugee situation is the direct result of military actions conducted against the Saddam Hussein government, which began in March 2003. The United States, in alliance with dozens of other States, began military action against the government on March 18, 2003.⁴⁷ While the goal of overthrowing the Saddam Hussein regime was accomplished relatively quickly, stability has yet to return to Iraq. In July 2007, Amnesty International estimated the number of refugees who have left Iraq to be at 2 million, with an additional 2 million internally displaced peoples (IDP).⁴⁸ The current Iraqi population is estimated by the United States’ Central

³⁶ “Overview.” United Nations Relief and Works Agency for Palestine Refugees. <http://www.un.org/unrwa/>

³⁷ Ibid.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Sherifa Shafie. “Palestinian Refugees in Lebanon.” Forced Migration Online. <http://www.forcedmigration.org/guides/fmo018/fmo018.pdf>

⁴¹ “Refugees Feature: Palestinian Refugees – a Legacy of Shame.” Amnesty International. March 3, 2004. <http://news.amnesty.org/index/ENGMDE183032004>

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Oroub Al Abed. “Palestinian Refugees in Jordan.” Forced Migration Online. <http://www.forcedmigration.org/guides/fmo025/fmo025.pdf>

⁴⁵ Ibid.

⁴⁶ Augustus Richard Norton and Jillian Schwedler. “(In)security Zones in South Lebanon.” *Journal of Palestine Studies*. Autumn 1993. pp. 61-79.

⁴⁷ B. Gregory Marfleet and Colleen E. Miller. “Failure after 1441: Bush and Chirac in the United Nations Security Council.” *Foreign Policy Analysis*. November 2005. pp. 333-360.

⁴⁸ “Iraq: the Situation of Iraqi Refugees in Syria.” Amnesty International. July 26, 2007. <http://web.amnesty.org/library/Index/ENGMDE140362007>

Intelligence Agency to be approximately 27.5 million.⁴⁹ Jordan and Syria have found themselves hosting many of these refugees.⁵⁰

Much of the violence in Iraq has been motivated by ethnic and sectarian tensions.⁵¹ Increasing tension between Sunnis, Shia and Kurds have resulted in a volatile security situation. The media reports every day on the violence and insecurity within Iraq, as well as the thus far insufficient attempts by foreign and Iraqi forces to reestablish security within Iraq.⁵² The inability of the Iraqi government, or American forces, to establish security in the State has resulted in an overwhelming refugee problem within Iraq and the region at large. With estimates that as much as 40 percent of the middle class population of Iraq now gone from the country, Iraq has lost significant human capital.⁵³ This is a particularly hard blow to attempts to rebuild Iraqi infrastructure and society. While the refugee crisis is at least partially the result of insecurity in Iraq, it has also contributed to that insecurity.

The Situation in Sudan

The North African State of Sudan has a long and bloodied history. Sudan has been independent for 51 years; only eleven of those years have been void of civil war.⁵⁴ The current hostilities in the State date back to 2003 and have displaced more than 2 million people, according to the United Nations.⁵⁵ While a peace agreement was signed by the involved parties in January of 2005, a “separate conflict, which broke out in the western region of Darfur in 2003, has displaced nearly 2 million people and caused an estimated 200,000 and 400,000 deaths.”⁵⁶ Peacekeeping troops, some of which have been supplied by the United Nations, have struggled to stabilize the region; this instability has extended to eastern Chad and the Central African Republic.⁵⁷ Currently, the Sudanese government has accepted the presence of a hybrid United Nations – African Union operation authorized by the United Nations Security Council on July 31 of 2007; the force is composed of 20,000 peacekeepers and 6,000 civilian police.⁵⁸ It should be noted that earlier civil wars in Sudan have created large numbers of refugees over the past decades; some estimates have placed this number as high as 4 million.⁵⁹ The situation in the Darfur region of Sudan is much more than simply a refugee situation; it is a case of genocide and ethnic cleansing, often with the suspected support of the Sudanese government and so-called janjaweed militias it arms and supports.⁶⁰ There have been countless attacks against the civilian populations of the African Fur, Masalit and Zaghawa ethnic groups; “government forces oversaw and directly participated in massacres, summary executions of civilians – including women and children – burning of towns and villages” and forcible depopulation along ethnic lines.⁶¹ The absence of any sort of human security in the Darfur region has prompted a serious refugee problem. Chad has found itself hosting many of these refugees while Sudan itself has refugees from Chad and Ethiopia.⁶² The general instability of the region has contributed to a refugee problem that not only threatens the possibility of future security but prevents serious economic burdens to the region as well.

The Situation in Somalia

⁴⁹ “The World Factbook: Iraq.” United States Central Intelligence Agency. <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html>

⁵⁰ “The Situation in Iraq.” United Nations Human Rights Council. 2007. <http://www.unhcr.org/iraq.html>

⁵¹ “Syria Iraqi Refugees Situation Report and IBC Activities.” Relief Web. July 27, 2007.

<http://www.reliefweb.int/rw/RWB.NSF/db900SID/SBOI-75HMNU?OpenDocument>

⁵² “Iraq War.” *New York Times*. <http://www.nytimes.com/pages/world/worldspecial/index.html>

⁵³ Carolyn Lochhead. “Iraq Refugee Crisis Exploding: 40 percent of Middle Class Believed to Have Fled Crumbling Nation.” *San Francisco Chronicle*. January 16, 2007. *San Francisco Chronicle*. pp. A1.

⁵⁴ “United Nations Mission in the Sudan: Background.” United Nations Mission in the Sudan.

<http://www.un.org/Depts/dpko/missions/unmis/background.html>

⁵⁵ “BBC News Country Profiles: Sudan.” BBC. http://news.bbc.co.uk/2/hi/middle_east/country_profiles/820864.stm

⁵⁶ “The World Factbook: Sudan.” United States Central Intelligence Agency. <https://www.cia.gov/library/publications/the-world-factbook/geos/su.html>

⁵⁷ Ibid.

⁵⁸ Anne Gearan. “United Nations Official: Sudan Cooperating.” *San Francisco Chronicle*. August 24, 2007.

<http://www.sfgate.com/cgi-bin/article.cgi?file=/n/a/2007/08/24/national/w140435D72.DTL&type=printable>

⁵⁹ “Overview of Human Rights Issues in Sudan.” Human Rights Watch. December 31, 2006.

<http://hrw.org/englishwr2k7/docs/2007/01/11/sudan14715.htm>

⁶⁰ “Sudan: Darfur Destroyed.” Human Rights Watch. 2004. http://hrw.org/reports/2004/sudan0504/2.htm#_Toc71531687

⁶¹ Ibid.

⁶² “The World Factbook: Sudan.” United States Central Intelligence Agency.

<https://www.cia.gov/library/publications/theworldfactbook/geos/su.html>

Like Sudan, Somalia has not enjoyed either stability or security over the past decades. Indeed, there have been at least fourteen different governments formed in the country since 1991.⁶³ Most recently, June of 2006 saw a “loose coalition of clerics, business leaders, and Islamic court militias known as the Supreme Council of Islamic Courts” defeating the powerful warlords who had held the capital of Mogadishu.⁶⁴ The influence of the Supreme Council of Islamic Courts expanded, threatening to overthrow Somalia’s Transitional Federal Government in Baidoa: “Ethiopian and TFG forces, concerned over suspected links between some SCIC factions and al-Qaeda, in late December 2006 drove the SCIC from power, but the joint forces continue to fight remnants of SCIC militia in the southwestern corner of Somalia near the Kenyan border.”⁶⁵ The situation is not resolved and Somalia’s Transitional Federal Government continues to struggle in its attempts to maintain control of Mogadishu while preventing the return of warlord rule, under which the State suffered prior to the 2006 episode with the Supreme Council of Islamic Courts.⁶⁶ Civil unrest remains a serious problem in the region; in late August of 2007, the United Nations Security Council asked the Secretary-General to develop a contingency plan for possible United Nations deployment in the Horn of Africa.⁶⁷

The refugee situation in Somalia has been particularly urgent in the current year. In March and April of 2007 alone, the United Nations reported that at least 350,000 individuals had fled fighting in the capital city of Mogadishu.⁶⁸ Estimates at the end of 2006 asserted that Somalia had over 400,000 refugees and internally displaced persons (IDP) within the Horn of Africa; this number has only grown over the past year.⁶⁹ While these refugees are often without basic human rights such as shelter, food and water, they are also thought to be vulnerable to recruitment by extremist Islamic groups who operate within refugee camps.⁷⁰ The dangerous conditions in the camps and their emerging permanence of the situation can be a dangerous mix: “a hungry man is always an evil source... they are being forced to accept whatever situation that will give them a living,” one refugee is quoted as saying.⁷¹ This insecurity and vulnerability to indoctrination by extremist groups spills over to the States hosting refugee camps or individual refugees, including Kenya, Chad and Ethiopia.

Efforts of the United Nations

The Middle East region and the Arab world has benefited from attempts by the United Nations to address the refugee crises in the area. The United Nations has been active in the situation of the Palestinian people for more than half of a century through its United Nations Relief and Works Agency for Palestine Refugees, which runs several refugee camps in the region.⁷² The organization has maintained its long-term commitment to the refugee problem, providing food, shelter, clothing, health care and educational opportunities to the original Palestinian refugees and their descendents.⁷³ In Iraq, the United Nations has worked through the United Nations Assistance Mission in Iraq to address the needs of refugees within and fleeing Iraq.⁷⁴ This organization works to provide emergency assistance to displaced Iraqis, as well as basic humanitarian assistance; other efforts include working to ensure the facilitation of voluntary return to Iraq while ensuring the legal and human rights of Iraqis during the conflict.⁷⁵ It should be noted that the United Nations Assistance Mission in Iraq is more of a coordinating organization in comparison to the social-services based United Nations Relief and Works Agency for Palestine Refugees. Oftentimes, as in Sudan, the United Nations has faced challenges to providing assistance and

⁶³ “Country Profile: Somalia.” British Broadcasting Company. July 17, 2007.

http://news.bbc.co.uk/2/hi/africa/country_profiles/1072592.stm

⁶⁴ “The World Factbook: Somalia.” United States Central Intelligence Agency.

<https://www.cia.gov/library/publications/the-world-factbook/geos/so.html>

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Paddy Ankunda. “Somalia: There is No Peace to Keep in Somalia.” All Africa. August 24, 2007.

<http://allafrica.com/stories/200708240472.html>

⁶⁸ “Somalia is ‘Worst Refugee Crisis.’” BBC. April 27, 2007. <http://news.bbc.co.uk/2/hi/africa/6598361.stm>

⁶⁹ United Nations Human Rights Council. “UNHCR Global Appeal 2007 – Somalia,” *UNHCR Fundraising Reports*. December 1, 2006. <http://www.reliefweb.int/rw/dbc.nsf/doc108?OpenForm&emid=ACOS-635PL7>

⁷⁰ Eric Westervelt. “Somali Refugees Hang on to Hope in Camps.” National Public Radio: All Things Considered. November 8, 2005. <http://www.npr.org/templates/story/story.php?storyId=4994848>

⁷¹ Ibid.

⁷² “Overview.” United Nations Relief and Works Agency for Palestine Refugees. <http://www.un.org/unrwa/>

⁷³ Ibid.

⁷⁴ “UNAMI – Internally Displaced People and Refugees.” United Nations Assistance Mission in Iraq.

<http://www.uniraq.org/clusters/cluster8.asp>

⁷⁵ Ibid.

peacekeeping efforts to ensure security in refugee situations. Sudan has expressed a desire to solve the problem on a more regional basis, involving the African Union in its attempts to solve its humanitarian crisis.⁷⁶ This preference by States to address problems of security and refugee situations through regional bodies instead of the United Nations gives the League of Arab States a unique opportunity to have a positive impact on the problem of refugees in the Arab world. The refugee problem is indeed a regional problem; it is not limited to a single state and most refugees have only the ability to go as far as their feet will take them. The League of Arab States has the ability to work together to identify the most pressing concerns of the refugee crises, their impact on the security region and the most promising ways in which these issues can be solved.

Conclusion

Nowhere in the world is more seriously affected by the problem of refugees than the Middle East and the Arab world. Much of this is due to the sectarian and ethnic makeup of the region, as well as its tumultuous history. While this presents many difficulties for Member States of the League of Arab States, it also highlights just how significant this problem is. As such, delegates have a unique opportunity to address a very real problem that impacts millions of Arabs every single day. In doing so, delegates must remain sensitive to the underlying tensions, which have caused the situation and ensure that the basic human rights of its citizens – regardless of religious sect or ethnicity – are respected and upheld.

Committee Directive

Any successful consideration of the refugee crises and the insecurity that almost always accompanies such crises must address the political, economic and social concerns that arise in refugee situations. Delegates should consider the common traits of refugee crises and their impacts on regional security, as well as differentiating factors in each refugee situation. Is there a ‘one size fits all’ way to address refugee crises or are tailored approaches required? Delegates should also consider the ways in which refugee crises can be averted. It is important to remain cognizant of refugees as a region-wide problem and avoid focusing on a single area in preparation for the Conference. Instead, focus on identifying the root causes of refugee crises and the related insecurity. Security, as discussed above, addresses much more than military and physical security. A State or region will only be secure if basic human security is ensured. How is this type of security to be defined by the League of Arab States? How will the League work with the United Nations and the international community at large to ensure regional security and solve refugee crises?

II. Information and Communication Technology Infrastructure in the Arab World

Introduction

Information and Communication Technologies (ICTs) are important and necessary components of stability, growth and development in the modern world. ICTs have drastically changed the character of the international community, as well as the quality of life of billions of people around the world. ICTs encompass a vast array of contemporary technology, including telephones, computers, the Internet, and mobile phone service. ICTS provide users with better access to local and global markets, the ability to share information in a timely fashion and enables the better use of oft-limited resources. The benefits of ICTs, however, have not been enjoyed at congruent rates around the world. Instead, a very real digital divide has emerged as technology has become more advanced. Former United Nations Secretary-General Kofi Annan described “the gap between information ‘haves’ and ‘have-nots’” as widening, resulting in “a real danger that the world’s poor will be excluded from the emerging knowledge-based global economy.”⁷⁷ The Arab world often finds itself on the disadvantaged side of this digital divide. Despite the region’s traditional reliance upon petroleum, the Arab world must address its ability to utilize ICTs effectively if it is remain competitive in the global economy. Equally important is the quality of life benefits ICTs can provide to the citizens of the Arab world. As such, the issue of information and communication technology is of particular importance to the Member States of the League of Arab States.

⁷⁶ Anne Gearan. “United Nations Official: Sudan Cooperating.” *San Francisco Chronicle*. August 24, 2007.

<http://www.sfgate.com/cgi-bin/article.cgi?file=/n/a/2007/08/24/national/w140435D72.DTL&type=printable>

⁷⁷ Kofi Annan. “On the Digital Divide.” United Nations. November 5, 2002.

<http://www.un.org/News/ossg/sg/stories/sg-5nov-2002.htm>

Information and Communication Technology infrastructure refers to the interconnected structural elements that provide the framework supporting information and communications technology. As such, delegates should turn their attention to ways in which Member States can establish and improve the quality of infrastructure in the area of ICTs. Such infrastructure has great promise both economically and socially.⁷⁸ It is imperative that the League of Arab States address the digital divide and the accompanying lack of information and communication technology infrastructure since “the gap is growing at an exponential rate.”⁷⁹

Information and Communication Technologies and Their Role in Development

Telephones can be considered perhaps the earliest of ICTs. As telephone technology improved, trade was greatly and irrevocably altered. The exchange of information became not only easier, but also timelier. The world indeed became smaller as response time decreased drastically. The nearly instantaneous transmission of information resulted in a much more fast-paced economic environment. Radio and television increased communication of information to the mass public and the invention of each was a significant landmark in social development.⁸⁰ The infrastructure required for television and radio are a lot less demanding and expensive than many other forms of ICTs and remain important methods of communication between governments and their citizens. Radio is “one of the most common and important means of dissemination of weather information and not infrequently, is the only effectively functioning mass medium in the aftermath of severe weather disasters.”⁸¹

Mobile phones are a very important type of ICT and have played a significant role in the development of States over the past decade. Mobile phones can be incredibly powerful economic tools in the hands of the economically disadvantaged. In recognition of this, several micro-credit and micro-finance programs have helped merchants in less developed States obtain mobile phones to assist in timely and effective communication with buyers and suppliers.⁸² One example of such a program is the Grameen Bank’s development of the ‘Village Phone’ program in 1997.⁸³ This program allowed villagers to receive mobile phones on micro-credit in exchange for sharing it with others in the village.⁸⁴ In providing access to affordable telecommunications, the ‘Village Phone’ was alleviating the “enormous economic and social disadvantage” many of the communities experienced pre-access.⁸⁵ The Village Phone program addresses this disadvantage in a way they describe as “sustainable, profitable and ... empowering.”⁸⁶ The Village Phone provides an inexpensive method of solving many of the problems that have faced poor, rural communities for decades while invigorating the economic opportunities of the citizens of such communities.⁸⁷ Grassroots entrepreneurs “operate their business in rural villages where no telecommunication services previous existed... [participants earn] enough money to repay their loans and earn profits that allow them to make investments in their children’s health, nutrition and education, and in other business ventures.”⁸⁸ The benefits of mobile phone technology are not limited to rural areas. In Riyadh, Saudi Arabia, landlines are oftentimes unreliable in a way that mobile phone infrastructure can overcome.⁸⁹ During a 2005 issue with landline telecommunications infrastructure, the Red Crescent was forced to rely upon cell phone technology to address emergency phone calls.⁹⁰

At present, the Internet is clearly the most impressive form of information and communication technology, as well as perhaps the most powerful and versatile. The Internet has immense potential with respect to its ability to promote

⁷⁸ Nabil Sukkar. “The Digital Divide and Development.” World Bank. October 2, 2002.

<http://www.worldbank.org/wbi/mdf/mdf4/papers/sukkar.pdf>

⁷⁹ Ibid.

⁸⁰ David Adams. “Television and Social Change.” International Institute for Communication Excellence. Oxford, England.

⁸¹ World Meteorological Organization “Dissemination and Presentation of Weather Information” *Public Weather Services*, <http://www.wmo.ch/web/aom/pwsp/communicationdissemination.htm>, April 2007.

⁸² Jordan, Miriam. “It Takes a Cell Phone--A New Nokia Transforms a Village in Bangladesh.” *The Wall Street Journal*. June 25, 1999. pp. B1.

⁸³ Ibid.

⁸⁴ “Seeing is Believing: Cell Phones in Bangladesh.” <http://www.seeingisbelieving.ca/cell/dacca/>

⁸⁵ “Village Phone: Connecting Technology and Innovation.” Grameen Foundation. http://www.grameenfoundation.org/what_we_do/technology_programs/village_phone/

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹ “Red Crescent Staff Used Their Cell Phones to Attend to Emergencies.” Arab News. August 2, 2005.

<http://www.arabnews.com/?page=1§ion=0&article=67845&d=2&m=8&y=2005>

⁹⁰ Ibid.

sustainable growth and development. The Internet has enabled more efficient international trade while further enhancing transportation logistics, growth and economic stability.⁹¹ Economic analysis has suggested that a “10 percent point increase in the growth of web hosts in a country leads to about a 0.2 percentage point increase in export growth.”⁹² The Internet has long been a topic of conversation within the international community and the Arab world specifically. In 2004, the 11th Session of the United Nations Conference on Trade and Development recognized ICTs as substantial enablers of growth and development.⁹³ Unfortunately, the digital divide of which Kofi Annan has spoken is very real in the area of Internet infrastructure. This is particularly true with respect to broadband Internet technology.⁹⁴ Furthermore, developing States often lack necessary levels of bandwidth while facing the hurdles of the relatively low number of individuals who can afford computers, low levels of human skill and illiteracy, poor mastery of the English language and high cost of access.⁹⁵

This is unfortunate, as ICTs have the power to play a powerful role in education.⁹⁶ ICTs can provide individuals with previously unavailable information and learning tools, such as specialized courses and job training. This technology has the power to bridge communication camps, reduce the cost of education over the long term and create new avenues for education in remote locations. Distance learning provides students worldwide with unprecedented options for further education.⁹⁷ One such initiative has been the One Laptop Per Child (OLPC) initiative, undertaken by a non-profit organization in the United States.⁹⁸ The organization aims to provide children in the developing world with laptops as educational tools in an effort to contribute to their adequate education.⁹⁹ Unfortunately, at the current time, the One Laptop Per Child initiative remains a theoretical proposition; the organization has not yet been able to implement the program.¹⁰⁰

In the growth of local commerce, Information and Communication Technologies play a role in both the horizontal and vertical trade markets. New markets are opened and expanded through vertical growth; this can include the sale of technology parts, providing support, and other related services such as cell phone or Internet service providers. To date, however, much of this potential has been unrealized in the Arab world, as reports have suggested that “MENA [Middle East and North Africa] trade is poorly integrated into cross-border production sharing networks, which have increasingly become a driver of growth in global trade.”¹⁰¹ Additionally, “countries that have strengthened their positions in global production chains have improved their ICT capabilities; lowered the cost of transport; and created more competitive finance and insurance markets.”¹⁰² This has resulted in a reduced ‘cost of doing business,’ “thus improving the attractiveness of these countries to both foreign and domestic investment.”¹⁰³ In this way, promoting strong ICT infrastructure within the Arab world can have a very strong and real impact on

⁹¹ “ICTs as an Enabler for Growth, Development, and Competitiveness.” United Nations Conference on Trade and Development. http://www.unctadxi.org/templates/Event_69.aspx

⁹² Caroline L. Freund and Diana Weinholt. “The Effect of the Internet on International Trade.” *Journal of International Economics*. January 1, 2004. pp. 171-189.

⁹³ “ICTs as an Enabler for Growth, Development, and Competitiveness.” United Nations Conference on Trade and Development. http://www.unctadxi.org/templates/Event_69.aspx

⁹⁴ Nabil Sukkar. “The Digital Divide and Development.” World Bank. October 2, 2002. <http://www.worldbank.org/wbi/mdf/mdf4/papers/sukkar.pdf>

⁹⁵ Ibid.

⁹⁶ “ICTs and Education.” *Eldis*. <http://www.eldis.org/ict/education.htm>

⁹⁷ “ICTs and Education.” World Bank.

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:20264888~menuPK:617610~pagePK:148956~piPK:216618~theSitePK:282386,00.html>

⁹⁸ “One Laptop Per Child.” One Laptop Per Child. www.laptop.org

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ Dipak Dasgupta, Mustapha Kamel Nabli, Christopher Pissarides and Aristomene Varoudaks. “Making Trade Work for Jobs: International Evidence and Lessons for MENA.” World Bank. 2002.

[http://Inweb18.worldbank.org/mna/mena.nsf/Attachments/Pissarides-Varoudakis/\\$File/Trade+and+Jobs+MENA.pdf](http://Inweb18.worldbank.org/mna/mena.nsf/Attachments/Pissarides-Varoudakis/$File/Trade+and+Jobs+MENA.pdf)

¹⁰² Dipak Dasgupta and Farrukh Iqbal. “Trade, Investment Climate and Jobs in the Middle East and North Africa: Some Emerging Issues.” World Bank. [http://Inweb18.worldbank.org/mna/mena.nsf/Attachments/Dasgupta-Iqbal/\\$File/dasgupta-Iqbal.pdf](http://Inweb18.worldbank.org/mna/mena.nsf/Attachments/Dasgupta-Iqbal/$File/dasgupta-Iqbal.pdf)

¹⁰³ Ibid.

the economic power of the region. Horizontal growth can be realized through a number of related areas, including the continued localization of industries and production.¹⁰⁴

Additionally, the Middle East region has a long history of information and communication technology with respect its role in political mobilization in the area. The “political networking effect of new ICTs in the Arab world today has been accelerated by new technologies, which have in turn spilled over to civil society impacts.”¹⁰⁵ With the growth of ICTs and development of regional news networks, such as Al Jazeera, the Arab world has experienced a new forum of speech within “authoritarian regimes, putting them on the defensive and connecting people with a global society.”¹⁰⁶ In particular, this has had an important impact on gender roles: “in Saudi Arabia, gender roles have traditionally prevented women's ability to communicate, but the Internet has really affected how women see themselves and expect to be treated.”¹⁰⁷ Where once the State held a monopoly on information, ICTs have created new voices and new information networks and business communities in the region are pushing both e-business and Internet development.¹⁰⁸ However, it must be noted that many State owned telecommunication networks still stifle free expression to ensure stability of the state.¹⁰⁹ As such, any progress made by the League of Arab States will have to consider the issue of examining what information is available to citizens of States and how that information is regulated. Delegates must remain cognizant of the reality of each Member States' position in this area and represent it faithfully.

The State of the Arab World and the Role of the LAS in ICT Development

A number of issues within the Arab world continue to hinder the adoption and growth of Information and Communication Technologies. These issues have traditionally included low literacy rates, the cost of such technologies, cultural and localization issues, and the unwillingness to replace existing technology infrastructure. However, certain industries have been pushed toward adoption of various forms of ICT infrastructure, most notably the petroleum and tourism industries. Such infrastructure exists only in limited areas, but it does provide a foundation for the development of further ICT infrastructure in the Arab world.

Grey E. Burkhardt's 2003 RAND Corporation report considered the desire of the League of Arab States to bring about ICT development. The report summarized the situation as follows:

“The causative factors in MENA countries are not favorable to the information revolution. The societies are generally risk-averse and conservative. Business decisions take time. And while it seems that everyone is “in business,” Western-style entrepreneurship has been rare. Capital markets are nonexistent in some countries, such as Libya and Syria, and strongly state-dominated in most of the other countries. Even in countries with a well-developed private financial sector—countries that depend on that sector for a large portion of their earnings—the regulatory environment is strict. Thus, investment funds are very limited. The most significant source of development financing in most of these countries comes from international and regional lenders/grantors, such as the World Bank or Arab Bank for Regional Economic Development.

Similarly, there is relatively little investment in research and development in general, and almost none in information technology. Such efforts as exist seek principally to adapt a foreign technology to local conditions or develop an indigenous production capability, particularly for software development.”¹¹⁰

As Burkhardt's report shows, there are significant hurdles facing the development of ICT in the region. The reality is that many Member States are loath to surrender control of the media. This has had a significant impact on the

¹⁰⁴ “Good Governance through ICT.” Indian Ministry for Information Technology.

http://home.nic.in/files/policy/ICT_Book_New.pdf

¹⁰⁵ “The Impact of ICTs on Democratization and Good Governance.” Dot Com Alliance. March 2007.

http://www.dotcomalliance.org/newsletter/article.php?article_id=70

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Grey E. Burkhardt. “The Information Revolution in The Middle East And North Africa: Chapter 3.” RAND National Defense Research Institute. 2003.

¹¹⁰ Ibid.

willingness of States to invest in infrastructure. Every new advance in technology has come about at the cost of government control.

In 1985, the League of Arab States sought to bring about international media coverage through the launch of ARABSAT.¹¹¹ The original purpose of the organization was to bring about improved data communications via telephone calls, Telexed messages, cables, faxed documents and drawings, and computer-to-computer interchanges.¹¹² Within months, the organization also started serving television broadcasts. While the most watched shows on this direct-to-home broadcast are Arabic soap-opera shows, news organizations became big ratings earners as they broadcast events such as the Israeli bombing of the PLO headquarters in Tunis, Tunisia in October 1985.¹¹³ More than twenty years later, ARABSAT remains one of the League of Arab States' most successful ventures in expanding communication and is served by a fleet of satellites which broadcasts a diverse array of programming.¹¹⁴ This programming includes state-run media outlets, upstart bloggers, and conventional news programs and even terrorist organizations.¹¹⁵

The internet revolution was tardy in its arrival to the Arab world.¹¹⁶ While some conservative nations like Kuwait saw such modernism as a remnant of colonization, individual entrepreneurs took it upon themselves to establish a vanguard of innovation.¹¹⁷ While some nations took this opportunity to develop their infrastructure to expand their national capabilities, others have been hampered by old political focuses, including oil, regional balance of power and religious devotion.¹¹⁸ Such forces have had the unfortunately effect of serving to retarding economic and social advances in the region that have the potential to benefit the region's society as a whole. Much work has been done with respect to helping developing Member States improve and build upon their information and communication infrastructure. The World Summit on the Information Society, part of the International Telecommunications Union (ITU) has met several times with the expressed purpose of eliminating the digital divide.¹¹⁹ Unfortunately the 'digital divide' still exists as the region remains behind other parts of the world with respect to the quality and capability of its ICTs.

Conclusion

There is still a strong need for development of high-level information and communication technology infrastructure within the Arab world. Localization is a large problem in adopting more information and communication technologies. As the Internet was developed by western countries, the characters used in Uniform Resource Locators (URLs) and e-mail addresses are limited to the original ASCII character set. This poses a significant problem to countries using other character set, such as Arabic.¹²⁰ There is also a serious need for high-level infrastructure development in the area. While there are initiatives that avoid the need of centralized communication or power distribution, they are still essential for most communication systems. For example, hand-cranked power generators or solar cells can avoid the need for a centralized power grid, and mobile mesh networks can avoid centralization of data networks.¹²¹ While these may be examples of available short-term solutions in specific rural areas, they are limited and non-permanent solutions. It is necessary for the League of Arab States to consider long-term solutions with respect to the development of ICT infrastructure that has the ability to serve the greatest proportion of population. The needs of urban populations may differ greatly from rural and agrarian populations.

Committee Directive

¹¹¹ William J. Broad. "Shuttle Lofts Satellite for Arab Lands and PLO." *New York Times*. June 19, 1985.

¹¹² "Arabsat: About Us." Arabsat. <http://www.ARABSAT.com/ARABSAT/English/default.htm>

¹¹³ Jeffery D. Simon. "Misunderstanding Terrorism." *Foreign Policy*. 1987. pp. 104-120.

¹¹⁴ "Arabsat: About Us." Arabsat. <http://www.ARABSAT.com/ARABSAT/English/default.htm>

¹¹⁵ Marc Lynch. "Blogging the New Arab Public." *Arab Media and Society*. 2007; and Faysal Al-Qassem. "Al-Jazeera TV Talk-Show Host: 'Do We Need Terrorists When We Have Such Liberals?'" *Al-Sharq*. December 19, 2004; and Michael Howard. "Insurgent TV Channel Turns into Iraq's Newest Cult Hit." *The Guardian* (UK). January 15, 2007.

¹¹⁶ Thomas Friedman. *The Lexus and the Olive Tree*. Farrar, Straus and Giroux. 2002.

¹¹⁷ Thomas Friedman. "The Other Invasion." *The New York Times*. December 8, 2007.

¹¹⁸ Thomas Friendman. "www.midwest.com war?" *The New York Times*. September 18, 1997.

¹¹⁹ "About WSIS." *World Summit on the Information Society*. <http://www.itu.int/wsis/basic/why.html>

¹²⁰ "Internationalized Resource Identifiers." *World Wide Web Consortium*.

<http://www.w3.org/International/OURLandident.html>

¹²¹ "OLPC Laptop Hardware Features." *One Laptop per Child*. <http://laptop.org/laptop/hardware/features.shtml>

One significant contribution the LAS can make to the development of ICT infrastructure in the Arab world is through financing. This can be done both on the large scale, where full infrastructure needs to be financed, and on a micro credit scale in which businesses can be provided with technology that enables them to work more efficiently. Delegates should consider ways in which different types of both infrastructure and financing can produce the greatest benefits to the region. In addition, delegates should consider the following questions when conducting their research:

- I How can the League of Arab States help support the expansion of Information and Communication Technologies?
- I What ICT strategies are currently in place? Are they working? Are they internal, regional or international?
- I How have the individual states of the Arab League pursued ICT in the past?
- I How can ICT programs focused on Africa be expanded to include the Arab states?
- I How can technologies be used to help promote development and economic and social stability?
- I Consider your individual state's current status and existing programs in developing ICTs.
- I What is the importance of small scale or private entrepreneurship versus the state?
- I What focus in emerging technology is most important?
- I How do the individual nations of the Arab League address the “digital divide”? Are there any other Arab League nations that share your view of how technology should be disseminated?
- I Is there any economic or political incentive you can offer to countries or businesses to provide the next generation of ICT into your country?

IV. Water Usage and Conflict in the Arab World

Introduction

Water is essential for satisfying daily human needs, protecting public health and ensuring food production, energy and the restoration of ecosystems, as well as for social and economic development.¹²² Thus, the availability of fresh water is an important concern to many countries. A major cause of water scarcity is population growth.¹²³ Between 1970 and 1990 available per capita water supply decreased by nearly one-third due to the population boom.¹²⁴ Current estimates show that the world population is likely to increase from 6 billion to 9.3 billion by 2050.¹²⁵ Currently, 434 million people face either water stress or scarcity.¹²⁶ Depending on future rates of population growth, between 2.6 billion and 3.1 billion people may be living in either water-scarce or water-stressed conditions by 2025.¹²⁷

For millions of people in the Arab Region, the lack of available fresh water is a chronic concern that is growing more acute and more widespread.¹²⁸ In 1955, three Middle Eastern states, including Bahrain, Jordan and Kuwait were listed by international agencies as water-scarce countries.¹²⁹ By 1990, Algeria, Yemen, Saudi Arabia, Qatar, United Arab Emirates, Somalia, Tunisia and Israel/Palestine were added to the list. U.N. studies anticipate another

¹²² “Global International Water Assessment.” The United Nations Environment Programme. <http://www.giwa.net>

¹²³ “Water and Sustainable Development.” The United Nations Education, Scientific and Cultural Organization. <http://www.unesco.org/water>

¹²⁴ Ibid.

¹²⁵ “About the Issue: Population Matters.” The Populations Institute. http://www.populationinstitute.org/teampublish/71_234_4084.cfm

¹²⁶ “Water and Sustainable Development.” The United Nations Education, Scientific and Cultural Organization. <http://www.unesco.org/water>

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ *Population and Development Report: Water Scarcity in the Arab World*. The United Nations Economic and Social Commission for Western Asia. New York. United Nations. 2004. www.escwa.org.lb/information/publications/sdd/docs/03-12.pdf

seven Middle Eastern countries will be added to the list by 2025 including Egypt, Iran, Libya, Morocco, Oman, Syria and Ethiopia.¹³⁰

Further, many policy experts say that next source of possible conflict in the region will likely be water.¹³¹ That is because many countries in the Arab world are becoming increasingly concerned about how they will continue to supply water to rapidly expanding populations and industries, not to mention agriculture, which consumes up to 89 percent of the water in the Arab Region.¹³² The greatest source of water in the region comes from the Nile River, which runs for more than 6,600 kilometers, flowing through nine Arab and African countries.¹³³ While the amount of water produced by the Nile has remained the same for thousands of years, the populations along its path are expected to almost double over the next 20 years.¹³⁴

Causes Water Scarcity in the Arab Region: Population Growth and Urbanization

A major cause of water scarcity in the Arab region is population growth.¹³⁵ Between 1970 and 2000, available per capita water supplies in the Arab region decreased by 55 percent due to the population increase of nearly 160 million in the same timeframe.¹³⁶ At a regional level, the population is growing at 2.7 percent a year.¹³⁷ Current estimates show that if this trend continues, the population in the Arab region is expected to increase from 290 million to 500 million by 2030.¹³⁸ According to the United Nations Environment Programme (UNEP), “population growth usually increases demand for water in all sectors of the economy, including agriculture, industrial, and domestic.”¹³⁹ In the Arab region, agriculture accounts for nearly 90 percent of the total water supply.¹⁴⁰ In the last 30 years, the total amount of land under irrigation in the region nearly doubled due to the increase in demand for food to meet the demands of the growing population.¹⁴¹

Water experts define regions where per capita water supply drops below 1,700 cubic meters per year as experiencing “water stress” - a situation in which disruptive water shortages frequently occur.¹⁴² Countries experience “water scarcity” when per capita water supplies drop below 1,000 cubic meters per year.¹⁴³ In 2000, there were 12 countries in the Arab region with per capita water supplies below 1,000 cubic meters per year.¹⁴⁴ This number is expected to increase to 17 by 2030.¹⁴⁵ Given, the growing population, the region’s water supplies is also expected to be below 1,000 cubic meters by 2030, thereby shifting the region into the water scarce bracket.¹⁴⁶ Currently, the region sits at 1,687 cubic meters per year.¹⁴⁷

In addition to population growth, urbanization is another demographic trend resulting in water scarcity in the Arab region.¹⁴⁸ As defined by the United Nations Centre for Human Settlements (UNCHS) urbanization is simply the

¹³⁰ Ibid.

¹³¹ Paul Welsch. “Water conflict in Middle East.” *BBC World: Middle East*. June 2, 2000.

¹³² Ibid.

¹³³ “The Nile Basin Initiative: Introduction,” *World Bank*, <http://www.worldbank.org/afr/nilebasin/overview.htm>.

¹³⁴ Ibid.

¹³⁵ *Population and Development Report: Water Scarcity in the Arab World*. The United Nations Economic and Social Commission for Western Asia. New York. United Nations. 2004.
www.escwa.org.lb/information/publications/sdd/docs/03-12.pdf

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ “UNEP Water Resource Management Strategies.” The United Nations Environment Programme.
<http://www.unep.org/dpdl/water/>

¹⁴⁰ *Population and Development Report: Water Scarcity in the Arab World*. The United Nations Economic and Social Commission for Western Asia. New York. United Nations. 2004.
www.escwa.org.lb/information/publications/sdd/docs/03-12.pdf

¹⁴¹ Ibid.

¹⁴² Ibid.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

process by which a country's population changes from primarily rural to urban.¹⁴⁹ In most cases, urbanization is caused by the migration of people from the countryside to the city in search of better jobs and living conditions.¹⁵⁰ The number of people migrating to urban areas in the Arab region grew from approximately 50 million in 1970 to 189 million in 2003, and is projected to reach more than 300 million by 2030.¹⁵¹ According to the United Nations *World Urbanizations Prospects* report, rapid urbanization raises the demand for water faster than the overall population growth as urban dwellers tend to adopt modern lifestyle patterns in which more water is consumed for domestic use such as washing the dishes, cooking a meal, laundry, bathing, watering the lawn or garden, and other household activities.¹⁵² Although the population in urban areas enables communities to invest in more efficient and cost-effective water management systems, people who live in urban areas tend to use more water than people living in rural areas.¹⁵³ Further, rapid urbanization can hinder the development of adequate water infrastructure needed to properly serve the populations.¹⁵⁴

Impacts of Water Scarcity on the Impoverished

Poverty is often linked to deprivation from water in sufficient quantity and quality for domestic and farming purposes.¹⁵⁵ Lack of access to water for productive uses is an obstacle that prevents poor people from fulfilling their basic income needs and escaping income poverty.¹⁵⁶ The increase in water scarcity in the Arab region is weakening the limited water rights that poor people have gained in the past, as more socially influential people stake their claims on the resource.¹⁵⁷

Although, water scarcity impacts everyone, it intensifies rural poverty. Many people who live in rural areas farm. According to the United Nations Food and Agriculture Organization (FAO), in the Arab region, over 80 percent of the people living in rural areas are farmers.¹⁵⁸ Thus, the relationship between poverty and rural poverty is particularly profound in the agricultural sector where the livelihood of farmers depends on the quantity of water available to them.¹⁵⁹ When these quantities are insufficient to grow food and feed animals, these farmers are often forced to leave their rural settings and migrate to the cities in search of sustainable employment.¹⁶⁰

Those living in urban areas are not exempt from the impacts of water scarcity. The United Nations Development Programme (UNDP) estimates that currently, 1.1 billion people lack access to safe drinking water and that 2.4 billion lack proper sanitation services.¹⁶¹ Access to safe water is key to eliminating many preventable diseases. Water related diseases are among the most common causes of illness and death, affecting mainly those living in developing and Least Developed Countries (LDCs).¹⁶² Water-borne diseases causing gastro-intestinal illness, such as diarrhea are caused by drinking contaminated water.¹⁶³ Therefore, access to clean water could seriously reduce health risks and disease: "If those in poverty were extended access to water supply and basic sanitation, infectious

¹⁴⁹ "Water Sanitation and Urbanization." United Nations Centre for Human Settlements. <http://www.unhabitat.org/categories.asp?catid=263>

¹⁵⁰ Ibid.

¹⁵¹ *Population and Development Report: Water Scarcity in the Arab World*. The United Nations Economic and Social Commission for Western Asia. New York. United Nations. 2004. www.escwa.org.lb/information/publications/sdd/docs/03-12.pdf

¹⁵² *World Urbanization Prospects Report*. United Nations Department of Social and Economic Affairs. United Nations. New York. 2006. <http://www.un.org/esa/population/publications/wpp2006/wpp2006.htm>

¹⁵³ Ibid.

¹⁵⁴ Ibid.

¹⁵⁵ "Water Scarcity/Poverty" Achievements and Challenges for Water Resource Management." International Water Management Institute. <http://www.iwmi.cgiar.org/pubs/WWVisn/WSandPov.htm>

¹⁵⁶ Ibid.

¹⁵⁷ *Population and Development Report: Water Scarcity in the Arab World*. The United Nations Economic and Social Commission for Western Asia. New York. United Nations. 2004. www.escwa.org.lb/information/publications/sdd/docs/03-12.pdf

¹⁵⁸ "Agriculture and Water Resources." United Nations Food and Agricultural Organization. http://www.fao.org/ag_wtr/ id_2318.htm

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

¹⁶¹ "Poverty." The United Nations Development Programme. <http://www.undp.org/poverty/index.html>

¹⁶² World Health Report 2001. The World Health Organization. <http://hdr.undp.org/reports/global/2005/>

¹⁶³ Ibid.

diarrheas would be reduced by 17 percent annually. If well regulated water supply and full sanitation were achieved, this would reduce the burden by 70 percent annually.”¹⁶⁴

Case Study: Conflict Over the Usage of the Jordan River

The limited amount of and demand for freshwater supplies have caused conflict in the Arab region. A good example of this is the control over the Jordan River. The riparian states of the Jordan river basin are Israel, Jordan, Lebanon, and Syria.¹⁶⁵ The Jordan River rises on the slopes of Mount Hermon in Syria and Lebanon, and moves to the south and passes through Lake Tiberias (Sea of Galilee) to empty into the Dead Sea.¹⁶⁶ The Jordan River receives water from its major tributary, the Yarmuk River, whose catchment area lies in the Huran Plain and the Golan Heights as well as in some parts of Jordan.¹⁶⁷ There are also other smaller tributaries to the Jordan River that originate in Jordan, Israel and the West Bank.¹⁶⁸ From its origin to the entry of Lake Tiberias, the Jordan River is called "upper Jordan" and the stretch between the Lake and the Dead Sea is called "lower Jordan".¹⁶⁹

The conflict over the Jordan River basin surfaced immediately after the establishment of Israel.¹⁷⁰ Control over the water bodies was one of the major reasons for the Arab-Israeli War in 1967 and the water issue also probably influenced Israel's decision to invade Lebanon in 1982.¹⁷¹ In the 1967 June War, Israel occupied the Golan Heights and brought under its domination all the headwaters of the Jordan River and a larger stretch of the Yarmuk River.¹⁷² The occupation of the West Bank also gave control of the lower Jordan basin to Israel.¹⁷³ The invasion of Lebanon and the creation of the 'security zone' in the south gave Israel greater control of the Jordan and Litani Rivers. Taking advantage of its new "hydro-strategic position," Israel withdrew more water for its own use from the basin. The disagreement on water has been a serious block in the present on-going negotiations between Israel and Syria. Israeli failure to honor water sharing with Jordan has also been a source of tension.¹⁷⁴

Besides the conflict over the international river waters, there is also growing tension in the region over the use of underground water. Israel's annual renewable freshwater supply is about 1,950 million cubic meters, while the current demand is approximately 2,150 million cubic meter.¹⁷⁵ Due to population growth and water intensive agriculture, Israel's water demand is projected to exceed 2,600 million cubic meters by 2020.¹⁷⁶ To face this water scarcity, Israel is over-pumping the aquifers. Because Israel's Coastal Aquifer has deteriorated very badly, the Mountain Aquifer is now being used as the country's primary source of drinking water.¹⁷⁷ During the 1970s and 1980s, the Coastal Aquifer was overused to such an extent that the water table fell to less than one meter above sea-level, and in some areas it was below sea-level. This led to the intrusion of salt water into the empty aquifers.¹⁷⁸

However, the Mountain Aquifer of the West Bank consists of three main aquifer groups, but only one is located in Israel proper, under the coastal plain.¹⁷⁹ The remaining two originate in occupied areas, which are the source of 40 per cent of Israel's groundwater supply.¹⁸⁰ These western and north-eastern sections of the Mountain aquifers reached their productive limits by the mid-1970s. In these areas, the groundwater table has gone down 16 meters

¹⁶⁴ UNDP 2004 Human Development Report. The United Nations Development Programme.
<http://hdr.undp.org/reports/global/2004/>

¹⁶⁵ F. Maher Abu-Taleb. "Environmental management in Jordan: Problems and recommendations." *Environmental Conservation*. Vol 21, Spring 1994, pp: 35-40.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

¹⁶⁸ Isaac, J, Sabbah, W, "Water resources and irrigated agriculture in the West Bank," Applied Research Institute, www.arij.org, Jerusalem, 1997

¹⁶⁹ Ibid.

¹⁷⁰ Ibid.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Cooley K. John. "The war over water." *Foreign Policy*/ No 54, spring 1984, pp: 3-26.

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

¹⁷⁷ Ibid.

¹⁷⁸ J.A. Allan. "Hydro-Peace in the Middle East: Why no Water Wars? A Case Study of the Jordan River Basin." *SAIS Review*. Vol. XXII no. 2 (Summer-Fall 2002).

¹⁷⁹ Ibid.

¹⁸⁰ Ibid.

since 1969. The over-extraction of water from the aquifers has also deteriorated the quality of the water.¹⁸¹ The Palestinians blame Israeli farmers for unsustainably overpumping from a large section of these aquifers. The Israeli authority, while restricting the drilling of wells for the Arabs, has allowed the Jewish settlers to over-exploit the groundwater. The control of groundwater sources have been one of the major constraints to peace in this region.¹⁸²

Case Study: Conflict Over the Use of the Nile Valley Watershed

The Nile River Valley is home to nearly 160 million people within the watershed, with roughly 300 million living in the ten countries that share the Nile waters.¹⁸³ Egypt currently has an estimated population of nearly 79 million with a projected population of 96 million by 2026.¹⁸⁴ Most of the present population, as well as the future population, will live along the Nile Valley. Previous governments rose and fell on their ability to manage this fragile system, so securing it for the future is necessary to ensure regional stability.

The Nile's course flows through ten countries – Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda. The combined population of these nations number over 300 million, with over half of those (nearly 160 million) living within the watershed of the Nile Basin. Not only are these nations' inhabiting one of the most population dense waterways in the world, it is also home of some of the world's poorest, making an annual per capital income of less than \$250.¹⁸⁵

The solutions to Egypt's water problems were first conquered in the 1950's with the construction of the Aswan Dam. Unfortunately, it also set off a conflict that pitted the Cold War Powers, the United States and the Soviet Union, against each other. In 1956, Egyptian President Gamal Abdel Nasser determined the conditions to the loans he was required to keep with the U.S. and British offer to be insulting. He recognized Communist China, which insulted the United States, causing the U.S. to rescind its loan offer. In response, President Nasser nationalized the Suez Canal to use proceeds from that operation to finance the building of the Aswan Dam along with a loan from the Soviet Union¹⁸⁶

However, after the Aswan Dam was built, Egypt and Sudan entered into negotiations on how to share the water that would be collected in what became known as the Nasser Reservoir. To discussing joint availability to water resources, Egypt and Sudan drew up the Nile Waters Agreement (NWA) of 1959. The NWA treaty had the following provisions:

- “The average flow of the river is considered to be 84 billion cubic meters (BCM)/yr. Evaporation and seepage were considered to be 10 BCM/yr., leaving 74 BCM/yr. to be divided.
- Of this total, acquired rights have precedence, and are described as being 48 BCM for Egypt and 4 BCM for Sudan. The remaining benefits of approximately 22 BCM are divided by a ratio of 7 1/2 for Egypt (approx. 7.5 BCM/yr.) and 14 1/2 for Sudan (approx. 14.5 BCM/yr.). These allocations total 55.5 BCM/yr. for Egypt and 18.5 BCM/yr. for Sudan.
- If the average yield increases from these average figures, the increase would be divided equally. Significant decreases would be taken up by a technical committee, described below.
- Since Sudan could not absorb that much water at the time, the treaty also provided for a Sudanese water "loan" to Egypt of up to 1,500 MCM/yr. through 1977.
- Funding for any project that increases Nile flow (after the High Dam) would be provided evenly, and the resulting additional water would be split evenly.

¹⁸¹ Ibid.

¹⁸² Ibid.

¹⁸³ “The Nile Basin Initiative: Introduction.” *World Bank*. 2007. <http://www.worldbank.org/afr/nilebasin/overview.htm>

¹⁸⁴ “Egypt - Population Division, Department of Economic and Social Affairs of the United Nations Secretariat.” *World Population Prospects: the 1998 Revision*.

¹⁸⁵ Ashbindu Singh, et al. “Assessing Environmental Conditions of Major River Basins in Africa as Surrogates for Watershed Health.” *Ecosystem Health* 5 (4), Volume 5 Issue 4 pp. 265–274, December 1999; and “The Nile Basin Initiative: Introduction.” *World Bank*. 2007. <http://www.worldbank.org/afr/nilebasin/overview.htm>

¹⁸⁶ Asit K. Biswas. “Aswan Dam Revisited; The Benefits of a Much-Maligned Dam.” *D+C Development and Cooperation*. No. 6, November/December 2002, pp. 25-27

- Established a Permanent Joint Technical Committee to resolve disputes and review claims by any other riparian. The Committee would determine allocations in the event of exceptional low flows.
- Egypt agreed to pay Sudan E£ 15 million in compensation for flooding and relocations.
- Egypt and Sudan agreed that the combined needs of other riparians would not exceed 1,000-2,000 MCM/yr., and that any claims would be met with one unified Egyptian-Sudanese position. The allocations of the Treaty have been held to until the present.¹⁸⁷

In 1957 Ethiopia, left out of the negotiations for the NWA, notified the NWA partners that that it would develop Nile water resources within its own territory and would do so without consultation of the NWA partners. Seeing as how the Ethiopian watershed contributes an estimated 75 to 85 percent of the annual water to the Nile, this development can have a significant impact on the use of water resources downstream.¹⁸⁸ The battle for the accessibility for water resources in the Nile is not old news. In 2004, the Ethiopian Minister of Water Resources suggested that it will develop as much as 200,000 hectares of the Nile watershed.¹⁸⁹

By no means is Ethiopia the only Nile Basin nation to assert access to Nile headwaters. Tanzania, Kenya and Uganda have also established claims on Nile water resources.¹⁹⁰ Each of these nations has asserted their right to tap the Nile headwater resources and develop in ways that meet their own national interest. As the East Africa countries, like Sudan, Ethiopia and Kenya, are still affected by continuous drought conditions, access to water, for both reasons of agriculture and for basic human living standards become crucial.¹⁹¹

Such competition during a time where access to fresh water resources are becoming scarcer and world population is still on the rise, especially in the Middle East, this becomes a subject of concern. To ensure that water resources are available to all people for providing affordable and accessible food products and for basic human needs, agreements must be made to assure wise utilization of these resources. To that end, several world agencies, like the UN's Food and Agricultural Agency, the World Bank and International Monetary Fund, and even the Arab League are looking for ways to facilitate access to sustainable water projects to the benefit of all.

Conclusion

The demand for water has grown significantly over the last 50 years not only because of population growth, but also because of an increase in the uses of water for households, agriculture and industrial production. Population growth and urbanization have always been linked to the availability of freshwater and the sustainability of renewable water resources. Appropriate management of the world's water resources is essential for meeting the demands of a growing population and for expanding water uses. Because water does not stop at national boundaries, the use of water upstream, pollution and reduced flows will affect countries downstream. The future of the world's water resources depends on improving management policies and practices globally. Water management institutions must incorporate efficient techniques for using water in industry and agriculture. And most important, management policies must involve the interests of the local community in collaboration with national governments in order to protect water rights and ensure success of programs.

Committee Directive

One of the most important environmental issues facing the international community today is water scarcity. While this may seem like a simple topic it is very complex. In order to have a fruitful discussion of the issues surrounding water scarcity, delegates should gain a complete understanding of the uses of water in their country. Because agriculture is the dominant source of income for many people in the Arab region, some attention should be give to the management of irrigation systems. Further, delegates should become familiar with the concepts and policies of

¹⁸⁷ Elizabeth McClelland and Dale Whittington. "Opportunities for Regional and International Cooperation in the Nile Basin." *Water International*. Vol. 17 #4, 1992

¹⁸⁸ *Ibid.*

¹⁸⁹ Dr. Raphaeli Nimrod. "Rising Tensions over the Nile River Basin." Middle East Media Research Institute. No. 165, 27 February 2004.

¹⁹⁰ Yacob Yosef. "From UNDUGU to the Nile Basin Initiative: An Enduring Exercise in Futility." *Addis Tribune (Ethiopia)*, Section – Letters. January 30, 2004.

¹⁹¹ "Feature: Sudan: beyond Darfur, humanitarian needs stretch to the horizon" International Committee of the Red Cross/Red Crescent Worldwide. April 26, 2007. <http://www.icrc.org/web/eng/siteeng0.nsf/html/sudan-feature-270407>

Integrated Water Resource Management (IWRM). Finally, delegates should consider the best ways to allocate water resources in an equitable, but efficient manner.