WATER IN THE MIDDLE EAST
COOPERATION AND TECHNOLOGICAL SOLUTIONS IN THE JORDAN VALLEY

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CHAPTER 18

Postscript: Focusing on Peace – Building Trust and Understanding

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The Center for Peace Studies (CPS) seeks to foster peace between groups in conflict. Although governments lay the cornerstone by signing treaties, it is the citizens of a nation that build peace. To reach these citizens, CPS organizes conferences that focus on issues important to groups on both sides of a conflict. Although the proximate goal of these conferences is to generate solutions to a specific problem, the ultimate goal is to build trust and understanding among participants. The friendships formed at these conferences help build networks of trust between the groups in conflict, allowing the enemies of today to become the friends of tomorrow. Previous issues addressed by CPS conferences include the Middle East peace process and Palestinian refugees. Although it is often overshadowed by high profile issues, like the Palestinian refugees, the issue of water is paramount and was the focus of a 2001 CPS conference and this book.

Water is the source of life. The availability of water has been central to the development of society. Due to the presence of large rivers, some regions of the Middle East are relatively water rich. It was in these fertile regions that the earliest civilizations developed. The ancient Greeks called the valley between the Tigris and the Euphrates Mesopotamia, the land "between the rivers." Years of enriching silt deposits from the rivers and irrigation canals made this land highly productive. Similarly, the area around the Nile River is lush and green, but the land becomes increasingly arid the farther one travels from the life-giving river. As with Mesopotamia, floods deposited enriched soil each year, making the Nile delta the "breadbasket" of the Mediterranean basin in ancient times.

In the Nile delta, agricultural production results from the farmers' diligence. By digging canals from the Nile to areas adjacent to the river, farmers increase the amount of arable land. However, in many areas of the

Middle East there are no large rivers that can be utilized during times of drought. The Bible tells us that, unlike Egypt, the region occupied by present-day Israel, Palestine, and Jordan was dependent on rain.

> For the land, whither thou goest in to possess it, is not as the land of Egypt, from whence ye came out, where thou sowedst thy seed, and wateredst it with thy foot, as a garden of herbs: But the land, whither ye go to possess it, is a land of hills and valleys, and drinketh water of the rain of heaven."[1]

As in ancient times, drought is common in this arid region. Even in years when rain is plentiful there is a drawdown in the water-level of Lake Kinneret (Lake Tiberius, Sea of Galilee) as well as the regional aquifers, the sources of water upon which Israel, Jordan, and Palestine depend.

The reliance on shared water resources, and the shortage of water in the Israel–Jordan–Palestine region, complicates the tenuous political situation. After the final Israeli–Palestinian peace agreement, refugees will return to Palestine and water shortages will be exacerbated. Although water issues are not politicized and rarely find their way into the headlines, they are just as important to the peace process as the fate of the Temple Mount and the location of Israel's borders. Thus, water is a principal issue in both the Israeli–Jordanian peace treaty and the Oslo Accords signed by Israel and the Palestinian Authority. In fact, water is one of the issues yet to be resolved in the permanent status negotiations between Israel and the Palestinians.[2]

Israel, Jordan, and Palestine must cooperate to ensure that there will be adequate supplies of clean, fresh water. The task will not be easy. Although there are precedents for the joint management of international rivers (e.g. the Danube River in Europe), there are no cases of international management of aquifers. Israel, Jordan, and Palestine must work together to regulate the drilling of new wells and to prevent over-pumping. In addition, the treatment and discharge of sewage that can contaminate the regional aquifers must be properly managed. Successful joint management will also require each country to participate in the collection and sharing of data.

As the population of the Middle East and the demand for water grows, cooperation between Israel, Jordan, and the Palestinian Authority must be expanded to include other countries in the region including Iraq, Lebanon, Syria, and Turkey. Not only will additional sources of water need to be developed but there will be a greater need for joint management of shared water resources. For example, Lake Kinneret supplies half of Israel's drinking water and smaller amounts to Jordan and Palestine via binational agreements. The source of Lake Kinneret, the Jordan River, is fed by three tributaries, only one of which, the Dan River, is within Israel's borders. Headwaters of the two other tributaries, the Banias and the Hazbani, are located in Syria and Lebanon, respectively, two countries that are presently not at peace with Israel. Changes in flow in the Banias or

Hazbani could affect the Jordan River, which in turn could affect the water budgets of Israel, Jordan, and Palestine. Similarly, alteration of the Tigris and Euphrates systems could affect the water budgets of Syria, Turkey, and Iraq.

Water shortages are not confined to the Middle East; the global water situation is becoming increasingly more alarming.[3] Worldwide, growing population centers are exerting a greater demand on fresh water supplies, while at the same time the quality of the remaining fresh water supply is threatened by pollution. The water crisis in the Middle East and the rest of the world can be alleviated. However, ending the water crisis will require a greater effort to collect and share data, the development and implementation of technological solutions, and international cooperation. The 2001 conference on water in the Middle East was one step toward seeking solutions to the water crisis.

The Center for Peace Studies, with the financial assistance of the Citizens Exchange program of the US Department of State, has been able to continue the momentum that began at the 2001 conference. In the summer of 2003, water working groups consisting of water experts, community and political leaders, and students (both from the region and the US) were established. Because of the political realities, two sets, a Northern and Southern tier, worked in parallel. The Northern Tier consisted of Iraqis, Jordanians, Lebanese, Syrians, Turks, and Americans, while the Southern Tier included Israelis, Jordanians, Palestinians, and Americans. The Jordanians acted as a "bridge" between the groups, while the Americans acted as facilitators. Like the conference participants, the participants in the water working groups represented a variety of disciplines. They focused on the technical details of alleviating the water crisis and used the meetings as opportunities for trust-building and for establishing networks of communication.

The Southern Tier water working group met four times in Cyprus and Jordan. During these meetings, participants agreed that water shortages are a regional problem and that all states in the region, not just those in the Southern Tier, must cooperate to develop solutions. Technological solutions, public education programs, and water conservation at the level of the individual and community were identified as essential components of the solution to the water crisis. The participants proposed the implementation of several projects through partnerships with government agencies, academic institutions, businesses, and non-governmental organizations (NGOs). The creation of water efficient model villages was proposed as a method of developing, implementing, and demonstrating the technological, educational, and conservation ideas discussed at the meetings. These model villages would be located in each of the Southern Tier countries and set the standard for access to water and conservation.

Participants agreed that joint management of water resources will only

be possible in an atmosphere of transparency. The participants proposed a regional water database as a means to enhance cooperation and facilitate trust on water issues. The database would include consumption rates, data on source water quantity and quality, information on regional hydrology and meteorology, information on treatment facilities, and a directory of regional water experts.

Finally, participants proposed a workshop to develop a public education campaign focusing on water conservation. The core aspects of the campaign would be developed during the workshop and representatives from each country would then refine the campaign to meet the unique needs of their country. The proposed campaign would include school curricula, public lectures by water experts, and media advertisements. The campaigns would target primary and secondary schools, universities, and communities.

To "jump start" these and other projects, as well as to facilitate cooperation between Southern Tier countries, participants proposed the development of collaborative research projects involving doctoral students from each of the Southern Tier countries. The Center for Peace Studies has taken steps to secure funding and resources for these students through the University of Oklahoma.

The Northern Tier water working group met six times in Lebanon, Syria, and Turkey. As in the Southern Tier meetings, Northern Tier participants agreed that regional cooperation is essential in order to alleviate water shortages. Indeed, after the first meeting, they made "Regional Cooperation for Water Management" the theme of subsequent meetings. Northern Tier participants emphasized the need for compiling a regional water database and developing the region's data collection infrastructure. Not only will compiling all available data help to facilitate trust and cooperation, but it will help regional experts identify data collection priorities.

The Northern Tier meetings led to a development initiative between Iraqis, Syrians, Turks, and Americans known as the Euphrates-Tigris Initiative for Cooperation (ETIC). The goals of ETIC are to improve the quality of life and promote harmony between people living in the Euphrates-Tigris region. ETIC will achieve these goals by promoting dialogue about development issues and initiating projects that benefit all groups in the region. ETICs founders hope that this initiative will serve as a model for development projects throughout the Middle East.

Graduate student participants from the Northern and Southern Tier meetings expressed hope that the friendships formed at the water working group meetings will lead to continued dialogue and international collaborations. Student participants have kept in contact with one another via email "newsletters" and a website. The newsletters and website feature the professional accomplishments of water working group students and news about water working group projects and proposals. In addition, the website

provides links to pictures and reports from water working group meetings.[4]

Participants from both the Northern and Southern Tier meetings agreed that the water working groups are an important part of the solution to the Middle East water crisis. Ultimately, alleviating water shortages in the Middle East will require a commitment to pursue cooperation from all parties. The water working groups helped to build trust and facilitate cooperation between water experts. It is our hope that the collaborative relationships formed between water working group participants will lead to improvements in the regional water situation, which, in turn, will make the larger goal of peace a reality.

Notes

1 The Holy Bible, Deuteronomy 11: 10–15.

2 E. Feitelson and M. Haddad, Introduction, in: E. Feitelson and M. Haddad (eds.), *Management of Shared Ground Water Resources. The Israeli–Palestinian Case with an International Perspective* (Boston: Kluwer Academic Publishers, 2000), p. xiii.

3 P. H. Gleick. The world's water: The biennial report on freshwater resources, 2000/2001 (Washington, D.C.: Island Press, 2001).

4 A link to the student website is located on CPS's web site: <http://www.ou.edu/ipc/cps/>.

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