

CPD PERSPECTIVES ON PUBLIC DIPLOMACY

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Cases in Water Diplomacy

Edited by Naomi Leight

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**CPD Perspectives on Public Diplomacy
Cases in Water Diplomacy**

Edited by
Naomi Leight

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**CPD PERSPECTIVES ON PUBLIC DIPLOMACY CASES IN WATER
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Naomi Leight
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*For general inquiries or to request additional copies of this paper
please contact:*

USC Center on Public Diplomacy at the Annenberg School
University of Southern California
3502 Watt Way, G4
Los Angeles, CA 90089-0281
Tel: (213) 821-2078; Fax: (213) 821-0774
cpd@usc.edu
www.uscpublicdiplomacy.org

CPD Perspectives on Public Diplomacy

CPD Perspectives is a periodic publication by the USC Center on Public Diplomacy, and highlights scholarship intended to stimulate critical thinking about the study and practice of public diplomacy.

Designed for both the practitioner and the scholar, this series will illustrate the breadth of public diplomacy—its role as an essential component of foreign policy and the intellectual challenges it presents to those seeking to understand this increasingly significant factor in international relations.

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Preface

by Naomi Leight

With so many people and countries facing challenges global in scope, here at the USC Center on Public Diplomacy we address—through our research initiatives, conferences, and publications—some of the most pressing ones for which public diplomacy can make a difference. Water is one of them.

Water is essential for the life for every person and other creature on the planet, but although we are a blue planet, water is a scarce resource: more than one billion people do not have access to safe water. Numerous water issues plague populations across the planet, and we suggest that public diplomacy can assist the many governments, NGOs, and private businesses trying to provide sustainable access to safe water. At CPD we define water diplomacy as work conducted by a variety of international actors to aid water-stressed areas, which in turn can improve relations with foreign publics. Done correctly, these efforts can save lives and enhance influence. If a core component of public diplomacy is to increase understanding between nations by addressing issues that affect publics, while at the same supporting national interests, then water diplomacy should be at the forefront of foreign policy.

Through the CPD Water Diplomacy Initiative, launched in November 2011, we have brought together scholars, diplomats, policy makers, NGO leaders, and activists to discuss challenges and goals for water diplomacy. We produced a policy brief for these change makers and the U.S. foreign policy establishment. In this report we addressed U.S. policies related to global water issues and examined how public diplomacy can strengthen the United States as a leader in tackling water challenges.

Among the report's recommendations are these:

- 1) To strengthen U.S. national interests abroad, secure strategic partners and gain influence with foreign publics, the U.S.

Department of State and the U.S. Agency for International Development should adopt water diplomacy as a means to fulfill USAID Priority Goal Six¹ of connecting Americans to the rest of the world through listening, technical and educational exchanges, and development work.²

- 2) The U.S. Congress should fully implement the Senator Paul Simon Water for the Poor Act of 2005 in conjunction with passing the Senator Paul Simon Water for the World Act of 2012 which has not seen any movement since the Senate Foreign Relations Committee passed the resolution in June 2012. When the United States makes a commitment to the Millennium Development Goals and passes the WPA and yet does not fulfill the mandate of its own laws,³ it reflects poorly on the American political process and hurts American interests abroad.
- 3) To better facilitate global water partnerships, the United States government should establish an internationally coordinated water diplomacy working group comprising all actors—governmental, nongovernmental, local, international, multilateral organizations, and the private sector—to share knowledge and best practices in creating solutions to water challenges. Since partnerships are the key to conducting effective public diplomacy and development work abroad, it is essential when working with local and international partners to listen to the public’s articulation of needs before implementing water diplomacy programs. The State Department’s mandate for public diplomacy efforts in international cultural and educational exchange should strategically support USAID’s water diplomacy development work through technical exchange training programs designed specifically for each public receiving water aid.⁴ This recommendation has begun to see traction with former U.S. Secretary of State Hillary Clinton’s U.S. Water Partnership which brings together 47 organizations seeking to improve the quality of water access and safety around the globe.⁵

The United States is far from being the only player in the area of water diplomacy, and in this issue of *CPD Perspectives on Public Diplomacy* we have collected a number of case studies brought to us by scholars and practitioners from around the globe. In these instances, water diplomacy strategies were implemented by governments, improving water access for the public and developing and enhancing relationships with the local population. We also showcase research, conducted by former CPD Research Intern Emily Chin, which highlights three regions in which public diplomacy is desperately needed because of the water vulnerability these cross-border populations are facing.

All of the cases discussed in this compilation touch on some of the key takeaways water professionals and scholars shared with us during our conference on “Water Diplomacy: A Foreign Policy Imperative” in February 2012. They address areas such as strategic partnerships, demonstrating the need for ensuring mutuality, working with the local communities, and understanding the cultural dimensions of water aid.

By raising awareness of the capacity for public diplomacy to aid in water aid, we encourage everyone from policy makers to aid workers to remember some of the key components to a successful water diplomacy strategy: listen to the people you are trying to help; provide technical training to people in communities receiving aid from groups like Engineers without Borders and Water for People; use public diplomacy to raise global awareness of water issues through advocacy programs and international institutions. We hope that this publication and the CPD Water Diplomacy Initiative encourage governments, NGOs and multilateral institutions around the globe to begin seeing water diplomacy as vital to improving the lives of publics everywhere.

Endnotes

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3. A 2010 Government Accountability Office report on water and sanitation stated that the U.S. must do more to fulfill the WPA (Senator Paul Simon Water for the Poor Act). “US Water and Sanitation Aid,” Report to Congressional Requesters, (Washington, DC: Government Accountability Office, 2010) 36. <http://www.gao.gov/assets/320/310349.pdf>.
4. Under Section 5b, the WPA 2005 states that “a broad range of local and national stakeholders is consulted in the development of any country-specific water strategy.” But it neglects to address the international stakeholders already working in the area. Water diplomacy is better conducted in partnership with not just the American and local stakeholders but other entities working towards the same end. To be effective, water diplomacy must be conducted multilaterally. Not by many nations unilaterally or even bilaterally. The U.S. should demonstrate leadership on this and not neglect its international partners. Earl Blumenauer, “H.R. 1973,” The Senator Paul Simon Water for the Poor Act 2005, (Washington, DC: U.S. Congress, 2005).
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Author Biography

Naomi Leight serves as CPD's Assistant Director for Research & Publications where she manages all aspects of the Center's research and publications programs, presents the Center's work in public forums, co-develops research projects and contributes articles and blogs for a variety of CPD publications. She has expertise in the areas of communications, media, government and international relations, public diplomacy, crowdfunding, community-engagement and strategic planning. She is a partner in Rimona Consulting, a firm dedicated to harnessing the power of people to provide non-profit organizations, social benefit corporations, as well as non-governmental and governmental organizations with a variety of digital tools to meet their goals. Ms. Leight received her Master of Public Diplomacy degree from the University of Southern California and her research interests lie at the intersection between public diplomacy and public policy.

Ms. Leight would like to extend a special thanks to Kia Hays, the CPD Publications Assistant, and 2013 graduate of the Master of Public Diplomacy program at USC for her hard work and dedication to the Center over the past year and a half. She was vital in getting this publication off the ground.

**Conducting Successful Water Diplomacy in
Bangladesh, Hungary, and Somalia**

*Grameen Veolia: The Confluence of Public, Corporate
and Peer to Peer Diplomacy to Provide Clean Water in
Bangladesh*

by Gregory Pierce



Map of Bangladesh—the majority of Grameen Veolia’s work is conducted around Dhaka. Original image from CIA World Factbook.

Summary

This case study analyzes the creation of Grameen Veolia, a non-profit, joint venture between a subsidiary of Veolia Environment (Veolia), a publicly-traded French water company, and a subsidiary of the Grameen Bank (Grameen), a large Bangladeshi non-governmental organization (NGO). In 2008, Grameen and Veolia combined forces to start a social business with the aim of providing water at a reasonable cost to the poorest people in the country of Bangladesh. Grameen Veolia represents a mix of public, corporate, and peer-to-peer diplomacy efforts by different actors that reflects unique institutional factors in both France and Bangladesh.

Rural Water Provision in Bangladesh

As of 2010, the World Health Organization and UNICEF estimated that 81% of the population of Bangladesh had improved coverage for water.¹ These coverage rates have increased markedly over the last few decades, yet even among those who benefit from the country's most consistent service delivery system in the capital city of Dhaka, 90% of households who receive in-home piped water have to boil it before use.² This example demonstrates that there are still substantial labor and resource costs to obtaining drinkable water in addition to the nominal price of purchase.

In rural areas, providing in-home piped water is largely infeasible due to high costs. Consequently, rural communities often rely on public standpipes or untreated surface or ground water. Since Bangladesh is endowed with an abundance of raw water resources, there is fairly good service coverage in rural communities (80% of households have access), especially through water boreholes that extract shallow groundwater. Even so, water quality remains a major concern because salinity, iron, and especially arsenic contamination cause serious health problems for households that rely on standpipes.³

Moreover, 80% of the country's land area is comprised of floodplains. Three major river systems flow from the Himalayas in the north to the Bay of Bengal in the south. Bangladesh is also located in a monsoon-prone area of South Asia.⁴ As a result, frequent flooding damages and contaminates supply infrastructure. This makes maintaining rural water supply resilience very challenging. In short, deficiencies in rural water supply reflect not only a shortcoming in ecological sustainability but also in social sustainability—although water is abundant, the lack of quality and reliable supply remains ubiquitous.⁵

Water Diplomacy: The Creation of Grameen Veolia

Recognizing this dual ecological and social resilience problem, Grameen and Veolia established their joint venture in March 2008. The first project, which comprised a water treatment plant and

distribution system, became operational in June 2009 in the village of Goalmari, located 50 kilometers east of Dhaka and the poorest village in its district. The project was initially intended to serve 20,000 people, with plans to build plants in five villages serving 100,000 people by 2012.⁶ Since the initiative is so recent, this study does not thoroughly analyze the effectiveness of the Grameen-Veolia venture in providing water to the poor, but rather aims to contextualize the diverse motivations for this effort in a larger diplomatic and developmental framework.

What incentives did Veolia and Grameen have to form the joint venture and why did the government of Bangladesh allow these actors to intervene? The simple answer is that all actors sought social justice for the poor of Bangladesh, but a detailed analysis reveals more nuanced motivations (though I cannot cover the full range of actors and motivations involved in this case, the complexity of interests involved is outlined elsewhere).⁷ This analysis first explores the motivations of Veolia since it represents the most relevant actor engaging in public diplomacy. Public diplomacy is defined broadly here as ‘reaching out to foreign publics rather than foreign governments.’⁸

Public and Corporate Diplomacy

Grameen Veolia represents both an indirect expression of traditional public diplomacy, from one government to a foreign public, and a direct expression of privatized public diplomacy. As for traditional public diplomacy, the French government owns shares in Veolia and directly influences executive decisions at the company.⁹ The heavy involvement of the government is not only due to its financial interest, but also because water service is one of France’s national champion industries.¹⁰ The French firm Suez Environment is by far the largest publicly traded water company in the world, with Veolia consistently ranking among the top five.

Consequently, the French government actively advocates for its multinational water companies to provide technical assistance for water provision in other countries. These efforts have incurred a good

deal of bad press for both the government and Veolia. Foreign-private involvement in water provision has often proved controversial or detrimental to local populations.¹¹ However, Grameen Veolia, which directly provides water services in Goalmari for no profit, represents a new model of corporate diplomacy by Veolia, and implicitly a new type of public diplomacy by the French government.

Peer to Peer Diplomacy

The Grameen-Veolia initiative also highlights the unique level of ‘peer to peer’ diplomacy present in Bangladesh: this effort follows a long tradition of outreach to the Bangladeshi public by non-state actors. Since the country’s independence in 1971, the Bangladeshi government has been unusually open to service interventions by the foreign non-profit sector.¹² The emergence in Bangladesh of two of the most prominent NGOs in the developing world, BRAC and the Grameen Bank, also demonstrates the government’s willingness to allow space for alternative service providers. This strategy has produced remarkable improvements both in water provision and other important public services.¹³

However, the prominence of non-governmental actors in service provision also creates problems. NGOs in Bangladesh still occupy an undefined, under-regulated position and sometimes clash with the state.¹⁴ In particular, over the past few years Muhammad Yunus, founder of the Grameen Bank, has clashed with the national government.¹⁵ The conflict may signify that the government is threatening the large role it has traditionally granted to non-profits, or that Yunus is distancing himself from the state through the creation of new hybrid entities such as Grameen Veolia. Parsing these motivations in this study is not feasible, but the peer to peer diplomacy dimension of Grameen Veolia clearly deserves more consideration.

Preliminary Evaluation of Grameen Veolia

Only fifteen months passed between the public launch of Grameen Veolia and the first operational water project on the ground

in Goalmari.¹⁶ Before opening the distribution system, Grameen Veolia conducted surveys to gauge public opinion on the design of the distribution strategy and the local demand for water. The business settled on employing local women to act as vendors in addition to providing standpipes for public access. After building and opening the distribution system in June 2009, however, the business soon recognized that residents were not buying nearly as much water as projected. Ninety-five percent of the plant's capacity went unused primarily because residents were not used to paying for water, and the health risk of ingesting arsenic largely went unrecognized even after public education efforts.

As of March 2010, only 23% of local residents regularly purchased water from Grameen Veolia.¹⁷ Rather than insisting on its original strategy or giving up on the project, Grameen Veolia radically altered its plan on several fronts. It decided to try to cross-subsidize the price of water to poorer households by selling larger quantities to institutional buyers and offering in-home taps to richer households. The role of local water distributors was also reconsidered as it appeared to represent an obstacle to some purchases. In short, the leadership of Grameen Veolia showed an unusual willingness to listen and adapt its business strategy to better serve the people of Goalmari.

Policy Implications

Grameen Veolia does not seek a profit, but still stresses cost recovery principles. As Muhammad Yunus argues, this type of arrangement is not just an extension of corporate social responsibility principles; it also represents a new and distinct category of service provider: a social business. The operation of social businesses may attract humanitarian-minded individuals lacking substantial capital, business entrepreneurs seeking a new challenge, or multi-national corporations attempting to repair their public image and break into a new market, as in the case of Grameen Veolia.¹⁸

The analysis also suggests that the form of water diplomacy represented by Grameen-Veolia can have a significant and positive role in improving clean water access for vulnerable populations. This improvement will primarily occur through the transfer of technological and management resources to local populations, rather than the long-term operation of projects by multi-national corporations.

Will the model of Grameen Veolia work in other contexts? Bangladesh clearly is comprised of a special institutional context given the current degree of cooperation between businesses, the state, and non-profits. Yet the social business model still represents a viable model for service delivery in other low or middle income countries. The model will work especially well where government agencies are well-intentioned but lack resources, where domestic NGOs have the trust of local populations, and where multinational corporations have an incentive to break into new markets.

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Author Biography

Gregory Pierce is a doctoral student at the University of California, Los Angeles (UCLA). He received his Masters in Urban Planning from UCLA in June 2009. His current research focuses on the comparative political economy of urban water access in low and middle income countries, and on emerging governance forms for basic service provision in South Asia. Mr. Pierce also conducts research on the travel choices of low-income households in the United States. He can be reached at gspierce@ucla.edu.

Hungary: At the Center of Water Diplomacy Efforts

by Jozef Toth



Map of Hungary with major waterways indicated. Original image from CIA World Factbook.

Summary

Hungary recognizes the growing strategic importance of water, and based on its advantageous geographical and hydrological peculiarities, can make a substantial contribution to designing an international strategy on coping with water issues. Regional and global initiatives originating from Hungary promise a central role for Hungarian water diplomacy. Hosting the 2013 World Conference on Water could be the crowning event for these efforts, and could open up new opportunities to showcase Hungarian interests on a global scene.

The Importance of Water

Seventy percent of the surface of Earth is covered by water, but only 0.65% of that is potable water accessible for continuous human consumption. Water is the basis of human existence, an indispensable and irreplaceable element. Its role in the development of human civilization is undisputed; this is obvious from the ancient civilizations that were located by major rivers, and the role of river and sea traffic in both the Middle Ages and the era of the Industrial

Revolution. We could also recall Hungary's decisive role of regulating the rivers in the twentieth century on matters of flood prevention and river traffic, thus creating the economic infrastructure of that time. As well, the effective countering of the perils posed by floods shaped the society of the *Niederlanden*, and the Dutch expertise in building dams was recently used in New Orleans in order to prevent the catastrophe caused by Hurricane Katrina from happening again.

Potable drinking water and water management has always played an important role in the development of economy and society, and in shaping population structures. Although this role has always been profound, it has never been properly realized in political and economic decision making; water has never been perceived truly as a strategic factor on its own. Present global development trends and the changes in our environment increasingly direct public attention to the significance of water, and it is coming to be seen as a strategic factor in its own right. Just as coal was regarded as the engine of economic development of the nineteenth century and industry and wars of the twentieth century circled around oil, the strategic natural resource of the twenty-first century is water.

If current trends do not change dramatically—and most likely they won't—demands for energy and water on our planet will increase 40% by 2030. It is projected that two-thirds of the Earth's potential population of eight billion will struggle for access to clean water, and two billion people will live in areas with a total lack of water.¹ This naturally will not only lead to migration, it will generate economic, social, political, and ultimately military conflicts.

Water Management, Regional Crises and Water Diplomacy

The awareness of the strategic role of water management is enhanced by the realization that water is more and more frequently becoming a factor in regional crises. Making water management, sanitation, and flood prevention more effective is not only an issue for the developing world, but is an increasing challenge for the most developed regions and countries as well. The term “water diplomacy”

has already appeared in the vocabulary of international relations, and the creation of water related concepts, strategies, and doctrines has been given a priority on both a national and international level.

There are two-hundred and sixty-three listed international water catchment areas around the world,² many with reasons for a conflict to erupt. In most cases, the upper river countries ignore the needs of the downstream countries. There are also deficiencies in the water infrastructure or services within certain countries, which have a spill-over effect on their neighbors—because of issues like migration or diverting water—tempting them to counteract. Water can become a tool of pressure for an undemocratic government on specific regions, communities or separatist movements in a country which could again provoke intervention of a neighbor or an international formation. A further source for security risks and international conflict is the deliberate poisoning of water reserves, or terrorist attacks against water infrastructure. These cause significant harm to water and energy services and agricultural production, and it is expensive to try to prevent such attempts.

Water diplomacy is part of a developing toolkit that can prevent or manage such international conflicts. The legal framework for international regulations is still quite timid, despite several global and regional conventions. Some of these have not yet entered into force, or have an implementation issue. Beyond this developing framework, an important element of water diplomacy is mediation and/or arbitration, which is usually effective only if the parties are in the same “power league” or have a genuine common interest in a compromise. As well, providing technical assistance and “know-how” for water management and forging regional cooperation in such issues is becoming important. Ultimately, with all of these solutions, there is an intervention of foreign powers aiming at diminishing the consequences of a water-related catastrophe, or eliminating the originating factors of such a risk.

Since water scarcity and quality is a global problem, the United Nations (UN) has tried to take the helm on the issue. The UN has

put the issue of sustainable development, global climate change, and green economy on its agenda in a timely fashion. It has organized a series of meetings, conferences, and consultations in order to resolve the contradiction between short term economic and political interests and the long term needs of human existence.

Most recently, on June 20–22, 2012 in Rio de Janeiro, at the “Rio+20” summit—named after the anniversary of the “Earth Summit” in the same town twenty years ago—the UN tried to take the implementation of the targets set in 1992 a step further.³ It proved to be a “mission improbable” by trying to accomplish four goals simultaneously: economic/social development, diminishing poverty, reducing distress on the global environment, and saving natural treasures. The central issue on the agenda was a transition into a green economy by implementing environmentally friendly technologies. This was restricted by yet two other heavily debated issues: the financial aspect of a green economy, especially during a prolonged global economic crisis, and the legal, structural aspect—do we need new institutions for achieving these goals, or are the existing bodies of the UN sufficient?

Within this context, how has Hungary, a country with a unique position in regards to water issues, found its role in water developments?

Hungarian Water Diplomacy

Hungary’s geographical position makes it especially exposed and vulnerable. Ninety-six percent of the surface water in the country originates from beyond the current borders of Hungary, so it must be prepared for external factors both in terms of water quality and quantity. As well, 40% of its agricultural land, 32% of its train lines, and 20% of its GDP is constantly exposed to the risk of floods. Hungary has accumulated a substantial experience and expertise in flood prevention, and it has the longest dam network in Europe with more than 4000 km.⁴

Hungary is unique because it not only has water issues, but is set up to become a water logistics center, as well. Hungary sits at the intersection of major international waterways and is situated above the 5th largest thermal water reservoir of the world. This opens up opportunities both for producing mineral waters of excellent quality, and spa tourism. Another potential endeavor, geothermal energy, is also promising, although its exploitation is in its infancy. One third of the approximately 3,000 thermal water springs in Hungary are already in use as spas and health centers, and a high priority of Hungary's national development strategy is securing the necessary financial resources for this.

Hungary has aimed at establishing versatile cooperation in water management with its neighbors, both in a bilateral and in a regional framework. Several projects started in the fields of early warning protocols for flood and infrastructural developments on frontier rivers. For example bridges built over the Ipoly River; or the renovation and reopening of the bridge between Esztergom and Párkány on the Hungary-Slovakia border. Moreover, there have been several consultations with partners in the region about adjusting to the environmental and water management norms and regulations of the European Union. Water issues are also on the agenda of the Central European Cooperation. In 2013, Hungary will again play a key role in this framework since the country will assume the presidency of the Central European Cooperation and the Visegrad Group. Water issues could feature in its presidential agenda prominently.

In the first half of 2011, during its presidency of the European Union, Hungary showed extraordinary activity and accomplished remarkable progress in water-related issues. The Hungarian presidency organized the Council of Ministers of the Environment in June 2011, which adopted the Council Conclusions on "Protection of water resources and integrated sustainable water management in the European Union and beyond." This calls for incorporating water as an integral component of the development strategies of various sectors.⁵

Beyond that, Hungary had a pivotal role in adopting the Danube Regional Cooperation Strategy in the EU (It was a magnificent diplomatic achievement that originated from an Austrian-Romanian idea, and was eventually completed as a Hungarian initiative). The Danube Strategy is the second macro-regional concept of the EU, after the Baltic Strategy. It provides a framework for promoting the cooperation projects of the EU member states of the Danube region, eliminating parallelisms, and utilizing the opportunities for interaction stemming from the river. Additionally, it is unique in that it involves those Danube countries which are not yet members of the EU. In turn, this framework initiative acts as a bridge for further enlargement of the EU, or the enhancement of the neighborhood policy of the Union.

Another major achievement of the Hungarian EU presidency was the EU-ASEM foreign ministerial meeting with Asian partner countries. A follow-up action was sharing the experience of designing the Danube Strategy with countries of the Mekong River Basin. The Budapest Initiative on ASEM Sustainable Development Dialogue was launched during a June 20–22 conference on the role of water in sustainable development strategies.⁶ This event started a dialogue process on water management and created an institutionalized exchange of experiences and sharing best practices between European and Asian countries.

An intriguing question is whether the European Union will be able to coordinate initiatives and activities of its member states and come up with a coherent concept based on European experience and expertise for giving answers to the global challenges of water. The alternative is to continue with fragmented and ad hoc national strategies, insufficient to reach the critical mass to influence global decisions and trends. At an informal meeting of EU Foreign Ministers in September 2012, High Representative Lady Ashton announced the quest for creating the conceptual framework for European water diplomacy by urging coordination among member states' activities, exchange of information, and making water issues a priority for the security considerations of the Common Foreign

and Security Policy of the EU.⁷ Hungary has suggested pooling the scientific and technical expertise of the member states that are most active in water issues. Budapest seems to be ready to join forces with those countries that have a niche capability to contribute to global and local efforts in this field.

Water is also a component of the international aid projects Hungary conducts.⁸ The most recent ones among these are the irrigation systems in the Kobo Girana Valley in Ethiopia, the sanitation center in the slums of Mombasa in Kenya, and the regional water management cooperation projects in the Herlen River Basin in Mongolia. In each of these initiatives technological assistance, training, and exchange of local water management experts are key components.

Hungarian diplomacy has been striving from the beginning to make an active contribution to the negotiation process on sustainable development under the auspices of the UN. The substantial Hungarian experience in dealing with water, and the geographical and hydrological peculiarities of Hungary make it a potential expert in the field. International recognition and utilization of these would bring significant soft power benefits to Hungary as well as the Hungarian scientific-technological base, to Hungarian entrepreneurs, and non-governmental organizations.

During the preparation for the “Rio+20” conference, Hungary—together with Finland, Tadjikistan, and Thailand—established the Steering Committee of the “Group of Friends of Water” at the UN. Diplomats of these four countries conducted several consultations in order to put the issue of water on the agenda of the Rio Summit and to encourage common thinking by elaborating on concrete recommendations and guiding principles. The paper the Group put out in the run-up to the Rio Summit⁹ recommends a unified approach to providing drinking water and sanitation, urges application of a complex strategy involving all the participating sectors and actors, stresses the importance of education, and takes side in the highly controversial issue by stating that access to clean water being a basic human right is not contrary to charging a fee for water services.

The Hungarian delegation at the “Rio+20” Summit—at its head H.E. János Áder, President of Hungary—aimed at placing the issue of water in the center of the discussion.

In his speech President Áder pointed out that 1 billion people on Earth currently live without healthy clean water, 10,000 children younger than 5 years die daily from diseases caused by polluted water, and almost half of the hospital beds in the world are filled by patients suffering from such diseases. He proposed that the issue of water be incorporated into the formulation of the goals of sustainable development, and stated that Hungary—using its rich experience—would actively contribute to this work.¹⁰ He then offered Hungary as the host for a Water Summit in 2013, which will take place in Budapest in the month of October and is organized by the Government of Hungary, UNESCO, and the World Water Council. President Áder raised this initiative again at the General Assembly in the fall of 2012, and there will be further intense discussions about it both at the level of the Secretary General of the UN, and among experts in the upcoming period.

This presidential declaration was made with previous consultations with all parliamentary parties in Hungary, who unanimously supported this idea. This is a solid base to make water a national issue for Hungary. In recent months, an inter-agency process has started to define the Hungarian position and the Hungarian initiatives to be launched at the 2013 world conference under the stewardship of the Ministry of Rural Development, the main coordinator of this topic. The Ministry—in cooperation with the Foreign Ministry—prepared the motion for the Government Decree, which will secure the institutional, organizational, and financial aspects of such a major conference. In the course of this process, representatives of related policy areas, the private sector, NGOs, and the academic community will need to continue to work together in order to successfully host the conference. In the upcoming months, several conferences are being organized in various aspects of water issues, such as the legal and the diplomacy aspects, as well as the technical sides of water management.

At the October Water Summit the Hungarian side intends to issue a closing statement called the “Budapest Statement on Water and Sanitation.” This would identify water-related goals which could be an integral part of elaborating the SMART Sustainable Development Goals. Central themes of the Summit will be: securing access to water and sanitation for all, integrated water management, good water governance, green economy with water, and last but not least financing these development goals. The Summit will have various side events like the Scientific Forum, the Business Forum, the Youth Forum, and the Civic Forum.¹¹

Alongside that, Hungary intends to actively participate in the follow-up work of the “Rio+20” Summit. The conference—which ran with a record high-level participation of the countries of the world—adopted a closing statement that was naturally criticized by several professional organizations who expected more in terms of coherence, resolutions of the international efforts toward sustainable development, and transiting to green economy. However, it was unrealistic to expect agreement on binding norms and principles. The achievable goal was to maintain a negotiation process, uphold a minimal global consensus and to build on that, making slow but steady progress to preserve economic growth on a sustainable path within the constraints of environmental protection. The new, post-“Millennium 2015” goals should be elaborated by a working group of representatives of 30 member states, to be established by fall 2013. Hungary has applied to be part of this working group, maintaining its water priorities.¹²

In conclusion, it is fair to say that Hungary recognizes the growing strategic importance of water, and based on its advantageous geographical and hydrological peculiarities, can make a substantial contribution to designing an international strategy on coping with water issues. Regional and global initiatives originating from Hungary promise a central role for Hungarian water diplomacy. Hosting the 2013 World Conference on Water could be the crowning event for these efforts, and could open up new opportunities to showcase Hungarian interests on a global scene. However, serious

internal groundwork, inter-agency collaboration, and conceptual preparation are needed in order to take advantage of this opportunity, and for the title of this article to become more than just a promise.

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Author Biography

Jozsef Imre Toth has spent all of his adult life so far in diplomacy, with prestigious foreign postings in Berlin (West), London, Washington D.C., and Athens. He went through the career ladder from Assistant Attaché to Ambassador. Between postings he occupied top positions in the Foreign Ministry of Hungary, like the Head of the Bilateral European Department, Head of Press and Communications and Chief of Staff for the State Secretary of the MFA. He was in London during the historic political changes in Hungary and participated in the establishing of a new cooperation between Hungary and the UK. He served for five and a half years as Deputy Chief of Mission of the Hungarian Embassy in Washington D.C. during highly defining processes like Hungary's accession to NATO, the Yugoslav war and 9/11 with its aftermaths.

Currently he is in the private sector, working for ING—the Amsterdam based multinational insurance company in Hungary. He also advises *Diplomatic Magazine* and assists a Vienna based consultancy firm, as well as the Hungarian–American Football Federation. He has joined the Doctoral School of the University of Pécs as a PhD candidate to study the topic of water diplomacy and water-related conflicts.

Turkey: Building Water Wells in Somalia

by Emine Akcadag



Map of Somalia. Original image from CIA World Factbook.

Summary

Access to clean and safe drinking water is a crucial problem for Somali people suffering from severe droughts. This tragic situation in Somalia, a result of the the lack of the ability on the part of the government to meet the population’s basic human needs, has prompted Turkey to step in and implement projects to supply potable water by drilling water wells. Today, Turkey’s image and its positive perception in Somalia support the notion that water diplomacy can be an effective tool of public diplomacy and strengthening relationships and attitudes between a country and foreign public.

Somalia’s Water Crisis

In 2011, the Horn of Africa suffered from the worst drought in 60 years, which put more than 11 million people in danger of

malnutrition and starvation. Somalia, a civil war-torn nation in the Horn of Africa, was one of the countries most affected by this drought. Many refugees from southern Somalia fled to the capital, Mogadishu, or to refugee camps in neighboring Kenya and Ethiopia in order to find food and shelter. While the situation has improved today, UNICEF estimates that 2.34 million people still require life-saving assistance.¹

In Somalia, substantial water scarcity problems resulted in devastating and appalling living conditions for both people and livestock. The facilities that were previously set up for water supply and irrigation were decimated during the civil war, most of water wells dried up, and the traditional borehole water rigs went out of order.

Water is a vital natural resource for all aspects of human life, including health, economic development, quality of life, and social stability. Water, the determining factor in the fragile system of life in rural areas, is one of Somalia's main traditional sources of social conflict. Water scarcity has led to the creation of a vulnerable population in which having control over or access to water has become a social, environmental, socio-economic, and political influencer. As a result, "water warlords," armed men who control the access to water sources in communities and provinces, have emerged due to the lack of an effective central government. These water warlords fight each other to maintain control over water sources, thus endangering the local population.

Moreover, due to lack of government regulation or infrastructure, the little water the Somali people do receive contains harmful bacteria. Diarrhea and cholera infections are particularly prevalent amongst children, and constitute a major cause of preventable deaths. Between January to August of 2011, some 4,200 cases of acute watery diarrhea/cholera were reported in Benadir Hospital in Mogadishu alone.²

The vulnerability the people of Somalia face due to lack of safe water has prompted Turkey to implement projects to supply potable water. Turkey has given priority to water well drilling projects in the region, as well as supplying water wells that can be built in convenient locations so populations can receive convenient and clean water free of any harmful bacteria and ready to drink.

Turkey's Water Diplomacy: Involvement in Aiding Somalia

Apart from sustaining and saving life, water is a key component in the avoidance of social conflict. Access to safe water ensures a public and nation's security. As mentioned above, because of political disorder, warlords and other armed people control the limited water resources in Somalia and extort others into paying for access to water.

Water diplomacy is typically applied to bilateral and multilateral negotiations on water issues between and among states. However, this narrow scope ignores how water diplomacy can also serve to ensure economic and social development and prevent vulnerability-related conflicts in unstable countries. That is the primary reason Turkey went into Somalia to conduct water well projects and should be considered an example of water diplomacy.

Working together, the Turkish International Cooperation and Development Agency and Turkey's State Waterworks Authority have drilled a number of wells across Mogadishu, providing access to potable drinking water to 30,000 people. Well digging projects are currently still ongoing in different areas across the country.³ This is a multi-track initiative, as public institutions are not the only Turkish players in Somalia's water crisis. Turkish NGOs also participate in water well drilling projects. *Kimse Yok Mu?* (Is Anybody There?), a humanitarian aid organization, has built four water wells and five fountains. It plans to open 120 wells to provide for the daily water needs of 26,000 people.⁴ Some Turkish universities, municipalities, and trade associations have also participated in the efforts to drill water wells in Somalia. Currently, these public and non-governmental

efforts have opened 340 water wells in Somalia to date, and the IHH İnsani Yardım Vakfı (Humanitarian Relief Foundation) has announced it receive donations that will enable a total of 636 water wells to be built in Somalia.⁵

Did Turkey Listen? Public Diplomacy at Work

In regards to the success of Turkey's water diplomacy, the Somali ambassador to Turkey, Nur Sheikh Hamud Mursal, mentioned that "the Somali people see Turkey as a savior sent by God to Somalia. Somali people are looking at Turkey not as a foreign country but as their real brother. Turkey did lots of things in a short time and it is really amazing. Turkey is helping us in many fields: education, health, construction."⁶

The attitude of the Somali people towards Turkish aid workers is another demonstration of Turkey's success. Even though Mogadishu is a dangerous place, remarkably, there have been no reports of Turkish nationals being killed or kidnapped in Somalia. In her article published in *Foreign Policy*, Laura Heaton made interesting observations in the camps for displaced people in Mogadishu. It was common for children and adults alike to shout out in excitement, "Turkei! Turkei!"—the presumed nationality of anyone obviously not Somali. Turkish aid workers in the camp wore bright-colored vests bearing the emblems of their organizations, not body armor. This was a far cry from the typical UN approach of coming into a camp in an armored personnel carrier, sporting flak jackets and helmets, and encircled by a group of well-armed peacekeepers.⁷ Heaton summarized Turkey's success in this sentence: "there's no question that Turkish aid workers have received a warm welcome among Somalis, achieving a level of access that their Western counterparts can only dream of."⁸

It would not be wrong to say that through the conduct of water diplomacy as a public diplomacy initiative, Turkey has managed to "win the hearts" of the Somali people. Turkish water diplomacy in Somalia answered a crucial question often asked by recipients

of public diplomacy efforts: “What can you do for us?” For this reason, water diplomacy should be considered a vital part of public diplomacy.

To augment its water diplomacy efforts, Turkey sent more than \$365 million in aid to Somalia in 2011, organized fundraising drives, and provided full scholarships to hundreds of Somali students. Although all of these activities are important in public diplomacy efforts, sometimes it is difficult to see the immediate impact of foreign development aid, scholarships, or technical support. But as access to clean water is an urgent and basic need, its fulfillment immediately reflects positively on everyday life of Somali people.

If public diplomacy is to consist of service rather than propaganda, water diplomacy is the kind of venture that can advance national interest while also providing help to people who desperately need it.⁹ In addition to saving lives, Turkey’s engagement in Somalia has strengthened Turkey’s image as a responsible power and has promoted a positive perception of Turkey in the region. As a result, Turkey obtained a seat as a non-permanent member on the UN Security Council in 2009 thanks in part to votes from African nations.

In sum, it is apparent that Turkey has acknowledged the importance of implementing a public diplomacy strategy that can save lives and promote stability, while at the same time building a positive national brand in the eyes of a foreign public. In conclusion, Turkey is well aware of the public diplomacy components and benefits of conducting water diplomacy.

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Author Biography

Emine Akcadag is a research fellow at Wise Men Security for Strategic Studies (Turkey) and her areas of scholarly interest include international security, European studies and public diplomacy. She has authored numerous analysis and articles. She received her MA in European Studies from Strasbourg University in France. She is currently a third-year PhD student in the Strasbourg Institute of Political Studies.

The Necessity of Water Diplomacy in Ghana, Iraq and Uzbekistan

by Emily Chin

Case Study: Volta River Basin



The Volta River Basin. Original image from CIA World Factbook

Background

The Volta river basin is shared by Burkina Faso, Benin, Côte d’Ivoire, Ghana, Mali, and Togo. Burkina Faso and Ghana share the major parts of the basin which together amount to 85% of the total Volta Basin area.¹ The Volta river system comprises of the Black Volta, the Red Volta and the White Volta, all of which originate from Burkina Faso. The Volta River System is joined by many tributaries, which have their sources within Ghana. In the Kassena region of Upper East Ghana, lack of coordinated development of water resources by regional governments, a rapidly increasing population, unsustainable agricultural practices, and competing uses of water have placed enormous pressure on the already scarce water resources.² In general, irrigation and hydropower generation are the major uses of water in the basin. In rural parts of the basin, farming and cattle herd maintenance are the greatest drains on water resources. The time required to find water impedes the education of young people and limits crop production, creating a cycle of poverty.

Water Vulnerability and Conflict in the Volta River Basin

The situation in the Volta River Basin is considered by researchers to be vulnerable but fairly peaceful compared to some other transboundary water systems. In the Upper East region of Ghana, throughout the 1960s and early 1970s, the relationship between Kassena agro-pastoralists and Fulbe herdsmen was positive, with both ethnic groups cooperating for mutual economic benefit. “Several Kassena households entrusted their cattle herds to Fulbe herdsmen, preferring to keep only their small stock within the vicinity of their settlements. The Fulbe were tasked with managing the grazing and water-finding of the larger herds.”³

Relations between the two groups began to deteriorate in the late 1970s and early 1980s following recurring incidences of cattle rustling. Several instances of cattle going missing after Kassena owners collaborated with Fulbe herdsmen caused parts of the Kassena population to become suspicious of the Fulbe and blame them of aiding and abetting cross-border cattle rustling. The Kassena cattle owners accused the Fulbe herdsmen of collaborating with rustlers. The Kassena suggested that the Fulbe entrusted with the herds would claim that, while grazing, the cattle had strayed into Burkina Faso and out of the Kassena’s ownership rights, after the Fulbe deliberately drove their charges across the border. In retaliation, the Kassena expelled Fulbe herdsmen from their traditional land. The animosity continued, with those Kassena cattle-owners who attributed their problems with rustlers to the Fulbe sought to avenge themselves upon the now landless and homeless Fulbe herdsmen, who made the mistake of straying into Kassena land while trying to reach the greener grazing grounds in Northern Ghana. The mistrust and competition for resources in tern created a cycle of intensified crime, violence, ethnic conflict, and cattle rustling along the Ghana-Burkina Faso border.⁴

The conflict between the Kassena and Fulbe resulted in a drastic reduction in the number of Kassena households owning cattle and—for those families already in poverty or suffering from food stress—a

corresponding decrease in grain production. The overall effect has reduced farm sizes and, consequently, grain production.⁵

The Fulbe population too has suffered from this increased tension. Not only have they been denied access to the grazing and watering grounds where their people have found refuge for generations, but the Fulbe have been driven far from other settlements, as attacks from members of the Kassena population grew more frequent. Due to their knowledge of the region, the Fulbe found the change in location and expansion of their traditional grazing areas to be manageable; however, the task of finding a sufficient and reliable source of water for herds and humans, particularly in the peak dry season, has been a nearly insurmountable challenge.⁶

Large portions of previously cattle-owning Kassenas now cultivate bush farms, due in large part to this lack of access to water and adequate grazing lands. Ranching is no longer an option for the Kassena, which have become another area of contention as Fulbe pastoralists compete for the same land for pasture use. Not only are the lands a traditional refuge for the Fulbe, but they also suffer from the need to feed and hydrate the herds that they own. While grazing areas are available in the neighboring districts, the stress and lack of sufficient water sources, especially during the many dry months, is an ongoing issue for the Fulbe and Kassena alike. The cycle of mistrust and blame continues as the Fulbe lead their herds to dam sites at night in order to avoid suspicion, which in turn increases the chance of retaliation from the Kassena, who attribute low water levels in their community dams to the sneaking of resources by the Fulbe.⁷

Additionally, in Burkina Faso, the resulting growth in agriculture which came upon the heels of the construction of the Bagré Dam caused the loss of land rights, water sources, and pasture fields that both the Fulbe and Kassena relied heavily upon to support their herds and communities.⁸

Steve Tonah, the author of “State Policies, Local Prejudices and Cattle Rustling along the Ghana: Burkina Faso Border,” suggests:

“An analysis of the situation reveals that the ultimate causes of the conflict and the changing relations between Fulbe pastoralists and Kassena farmers lie in the general deterioration of resources and the increased competition for access to and control of those resources. Factors that have contributed to the intensification of competition between the two ethnic groups include land degradation and erosion due to increased human and livestock populations, the droughts and famines of the 1970s and 1980s, and the appropriation of land by the government for the production of cash crops on irrigated fields.”⁹

Water Diplomacy Activity

Launched in 2006 with the goal of managing the Volta River water resources holistically, a transboundary watershed management organization called the Volta Basin Authority (VBA) was created by the six riparian countries. However, the VBA has yet to take on a role in attending to the problems of water management, coordinating water projects or resolving water conflicts in the Basin. Merely signing a convention and statutes and having an institutional structure are not enough to solve water issues. Rather, as stated by Bruce Gregory, Director of the Public Diplomacy Institute at George Washington University, “To build consent, there must be a basis for trust in what they say and do, an inclination by others to believe, and perceptions of reliability over time. Credibility is diminished when words and actions do not match, when statements directed to multiple audiences are inconsistent, when overt and covert activities are seen to be co-funded and co-located.”¹⁰

Burkina Faso is one of WaterAid’s newest country programs, however WaterAid is not working at the border communities, and rather simply focusing on water issues within Burkina Faso. Since 2001, WaterAid has worked in the rural Garango, Ramongo, and Bokin districts. Nonetheless, WaterAid has dedicated its resources and energies to the area, partnering with seven local Burkina Faso organizations with the intention of “helping the most disadvantaged in society gain access to safe water, sanitation and good hygiene.”¹¹ WaterAid also hopes to grow both its policy and advocacy work in

Burkina Faso with the goal of encouraging further attention of water sanitation and access issues within local and national government.

USAID works in Ghana through USAID's West Africa Water Initiative (WAWI) Global Development Alliance. The WAWI is piloting an innovative sanitation intervention program that goes beyond providing latrines and instead uses participatory activities to motivate entire communities to decide to build and use them. The countries in which USAID is implementing WAWI are Mali, Ghana, and Niger¹²—Mali and Ghana are both located in the Volta River Basin, however each activation was country-specific and not cross-boundary.

The World Bank has supported the promotion of communication with respect to water issues between Burkina Faso and Ghana through the Volta Basin Water Resources Management Initiative, although activation is mostly at the governmental level, rather than directed to the public.

Analysis

The VBA, while highly visible, is ineffectual in alleviating tensions among populations. The VBA is the most prominent institution to date with the goal of fostering cooperation of people and government in the management of the Volta River Basin. However, experts assert that the VBA has been “unable to ameliorate, strengthen or empower communities due to its lack of institutional integration, unclear decision-making processes, and lack of transformations of the conventions and statutes into actions.”¹³

Learning Points

Dhirendra Vajpeyi suggests encouraging the VBA become more active in capacity-building by holding training workshops for the member states and their local community leaders. These programs must integrate traditional education, regional best practices, as well as the mindset of sustainability to support future Volta water resources use: “Indeed, integration should begin on the village level

and regional level, particularly close to the rural borders where relations may be strained.”

“Additionally, water governance in the Volta River basin must take traditional values into account, especially since traditional or religious leaders have control over various aspects of allocation and use of national resources in rural Africa, and thus affect the right of the villagers to fish and farm. In relation to this, and mindful of the variations in custom and culture across the six riparian signatory countries, they suggest that the traditional leaders, namely the chief and highly respected senior members of the village, will need to be consulted regarding water disputes that occur among villagers... in order for international basin management to be effective, the mechanism must also embrace a bottom-up approach to include the participation of grassroots actors.”¹⁴

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Case Study: Tigris-Euphrates River Basin



The Tigris and Euphrates Rivers. Original image from CIA World Factbook

Background

Both the Euphrates and Tigris rivers originate in the south east region of Turkey. The Euphrates flows from Turkey to Syria then to Iraq. The Tigris flows through Turkey, then it makes the border between Turkey and Syria for around 32 km before it flows through Iraq, where it receives some tributaries from Iran.¹ About 90% of Euphrates’ total annual flow originates in Turkey, while the remaining part is added in Syria, but nothing is contributed further downstream in Iraq. In general, the stream varies greatly in its flow from season to season and year to year.² The Tigris and Euphrates provide 98% of the water resources in Iraq and 90% of Syria’s water resources. The Euphrates basin lies 28% in Turkey, 17% in Syria, 40% in Iraq, and 15% in Saudi Arabia.³ This study focuses specifically on the Kirkuk Province of Iraq, the scarcity of water serving this Province and the dependency on Turkey to supply adequate amounts of water.

Water Dependency in Iraq

In the Kirkuk Province of Iraq, approximately 40% of the water of both the Tigris and Euphrates Rivers, which originate in Turkey, are used by Turkey before they reach Iraq. Syria – through which the Euphrates flows on its way into Iraq – also dams and manages the water of the river, leaving Iraq’s water supply quite dependent on the actions of its neighbors.⁴

The development and implementation of the GAP Project (Southeastern Anatolia Project; in Turkish: Güneydoğu Anadolu Projesi) has caused an increase in tensions in the area, particularly from Syria and Iraq toward Turkey. The GAP Project plans to build 22 dams and 19 power plants on the two rivers, upstream of Syria and Iraq.⁵ Efforts have centered on the Atatürk Dam, built to generate electricity and to irrigate the plains in the region.⁶ At this point, the Atatürk Dam has cut the flow from the Euphrates by about a third.⁷

Both Syria and Iraq have raised the alarm, citing increased and intense water shortages that they blame on the GAP Project. They fault Turkey, suggesting that Turkey is turning the access to and use of water into a weapon by intentionally withholding the rivers’ flow to downstream neighbors. Turkey denies these claims, and insists it has always supplied its southern neighbors with the promised minimum of 500 cubic meters per second (18,000 cu ft/s) daily.⁸ Turkey even claims that its neighbors are protected by Turkey’s efforts to regulate the waters, with the dam preventing the cycle of droughts and floods that had previously plagued the region.

However, the discontent and frustration that Syria experienced over the GAP Project had larger consequences, one of which was the country’s decision to support to the Kurdistan Workers Party (PKK) in Turkey in the mid-1990s. Upon adding mounting ethnic tensions in Turkey, the PKK’s influence and anger ballooned into a terrorist threat to the Turkish state.⁹

Water Scarcity in the Tigris Euphrates River Basin

Out of Kirkuk's estimated 900,000 inhabitants, UN data shows some 31% live in rural areas. They represent all faiths present in Iraq, and are ethnic Arabs, Turkmen or Kurds.¹⁰ In this ethnically diverse area, known as the Kirkuk province, increasing water stress and resource shortages are causing increases in suspicion and tension. Arab farmers blame the ruin of their livelihoods and crops on the Kurdistan region, which regulates the damming of the river in wintertime. "At the heart of the conflict is the Dukan dam, built in 1955 in Iraq's northern autonomous region of Kurdistan, 75 kilometers (50 miles) northeast of Kirkuk province."¹¹

The dam seeks to maintain a strategic reserve of 700,000 cubic meters (which must not be used), which leaves 600,000 cubic meters of usable water. However, decreasing rainfall in the region, down 50% since 2008, has meant a corresponding decrease in dam water levels.¹²

According to Iraqi government figures, water flow in the Euphrates is currently approximately 200 cubic meters per second as it crosses into Iraq, less than half of the minimum amount required to help the country meet its basic needs. According to Shihab Hakim Nader, director of water resources in Kirkuk province, "the Kirkuk area receives only 30 cubic meters per second of water, when it should be receiving 75. This is only sufficient for drinking water."¹³

The issue has increased tension between inhabitants of the region, all of whom claim strong ethnic loyalties. As an example, Arabs accuse Kurds of intentionally harming the province. Additionally, Iraq's greater goal of post-conflict sustainable economic growth and regional stability are hindered in both the short and long term by poor water management in the Tigris-Euphrates basin, which in turn leads to poor relations internally and with Iraq's neighbors.

Water Diplomacy Activity

In 2009, USAID, through its Blue Revolution initiative, joined members of the Iraqi government at an irrigation conference titled “Reviving Irrigation Districts,” inaugurated by USAID Deputy Mission Director Thomas R. Delaney and the Iraqi Minister of Water Resources Dr. Abdul Latif Jamal Rashid in Baghdad. With the goal of addressing and tackling the issues around water and agriculture with impactful, viable solutions, USAID-Inma Agribusiness Program brought together Iraq’s foremost economists, agricultural researchers, and policy experts to scrutinizing past farm production practices, and identifying opportunities to revitalize and update the existing water resources.¹⁴ This collaborative effort in water management complemented USAID’s other work in Iraq, which has focused on empowering local and provincial communities and governance through infrastructure development, made possible by investing \$6 billion USD on projects nation-wide since 2003.¹⁵

Additionally, in April 2008 the Food and Agriculture Association of the UN (FAO) led cooperation efforts by creating a water institute between Turkey, the Syrian Arab Republic, and Iraq. The project brought together experts from each country, eighteen collaborators working on water-related issues, with the goal of providing feasible, fair, and long-term trans-boundary solutions. Much of the work by these experts is to take place at the existing Atatürk Dam facilities.¹⁶ The establishment of the water institute has been notable as a means of exchanging developments in water technology for the renovation of irrigation and portable water systems.¹⁷

Analysis

International complaints and protests of damming practices by Turkey and Syria are often challenged on the grounds that the dams are domestic infrastructure projects.¹⁸ Capacity-building has been the focus, rightfully so, but progress has been limited by a lack of regional cooperation. The internal efforts of each country and region have bred distrust of those neighbors upstream, regardless of where

on the rivers a community is situated. Additionally, the infrastructure necessary for efficient water transportation, purification, and access are lacking in those places that do have water flow—best practices exchanged among academics cannot be applied without basic repair to leaky canals and wasteful irrigation practices¹⁹

Learning Points

Exchange and collaboration seem to be the best suggestion for the region—national-level communication must be followed through with regional, local, and inter-ethnic communication. Some analysts predict that even when tensions in the regions mount, armed conflict is unlikely as Iraq is so dependent on Syria and Turkey for its scarce water resources.²⁰ Nonetheless, at the village/regional level, distrust and desperation, particularly between those ethnic groups that have traditionally struggled for land rights.

In terms of socio-economic development, Turkey, Syria, and Iraq have diverged over the last few decades and, as a result, their views on each other and their water sharing policies also evolved differently. Sharing water from the Tigris Euphrates River Basin is at the heart of many political and social problems. As seen in the case of the Jordan River Basin, “Education and water have an important symbiotic relationship. Access to fresh water is necessary for education, and education is vital to inform people about water. Understanding the issues related to water facilitates the planning for a sustainable future through changing society’s behavior and increasing awareness.”²¹

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Case Study: Amu Darya Basin



The Amu Darya River Basin. Original image CIA World Factbook

Background

The Amu Darya forms part of Afghanistan’s northern border with Tajikistan, Uzbekistan, and Turkmenistan,¹ draining mostly in Tajikistan, the southwest corner of Kyrgyzstan, the northeast corner of Afghanistan, a long narrow portion of western Turkmenistan, and about half of Uzbekistan. In terms of drainage and borders, a portion of the river’s drainage marks the divide between Tajikistan and China (in the east) and Pakistan (to the south).² Of the total drainage, approximately 60% occurs within the borders of Tajikistan, Uzbekistan and Turkmenistan, while approximately 40% lie in Afghanistan.³ This study focuses on Karakalpakstan, an autonomous republic of Uzbekistan. It occupies the whole western end of Uzbekistan, on the Amu Darya flatlands and southern shores of the Aral Sea.⁴ The Amu Darya is formed by the Panj River in Afghanistan and the Vakhsh River in Tajikistan and then continues into Uzbekistan and Turkmenistan and ultimately into the autonomous republic of Karakalpakstan in Uzbekistan before emptying into the Aral Sea. The Aral Sea basin defines Central Asia’s physical environment and political economy.⁵

Water Boundaries between New Nations

The end of the Soviet Union marked distinct changes in the resources needed and political and economic structure and demands of the region. There is intense competition for water resources and the Amu Darya and Syr Darya Basins' inability to fully meet the demands of the independent states that rely upon them has become a key challenge. "During the period from 1960 until 1992 the area of the sea was halved and its volume quartered, as the Amu-Darya and Syr-Darya rivers were channeled and dammed to provide irrigation for agriculture."⁶ From the 1960s through the mid 1990s, the surface area of the lake shrank at an alarming rate, from 64,500 km² to less than 30,000 km²; while lake volume decreased, dropping the surface by 19 meters, and salinity tripled.⁷ More than 50 lakes in the Amu Darya Delta dried up and its wetlands shrank from 550,000 hectares to less than 20,000 hectares.⁸ The areas most affected are Karakalpakstan (which contains the Aral Sea) and the neighboring region of Khorezm, which together contain a population of over 2.5 million people at risk.⁹

Water Scarcity and Poverty in Uzbekistan

The drastic change in water levels and access in recent years is all too obvious. The scene is striking: "The Karakalpak town of Moynaq, which boasted the second-largest fishing fleet on the Aral, now lies more than 70 miles from the shore."¹⁰ Due to its locations as the area farthest downstream of the Amu Darya and the collection point of waterways in the region, Moynaq is burdened with all the pollution that flows within the rivers and its tributaries. The disappearance of the Aral Sea has led to drier summers and harsher winters.¹¹ As the area grew drier, soil quality changed, the increasing salinity created a detrimental reaction in cotton production, with yields dropping. The health concerns in the area grew as well, the increasingly arid and salty soil became susceptible to wind and sandstorms. These high winds carried toxins, left over from weapons testing in the Soviet era, and are poisoning the local populations.¹²

“In Karakalpakstan the fishing industry that once employed tens of thousands of people is gone, and agricultural land is no longer productive, resulting in the rapid loss of employment opportunities for local people. Consequently, vulnerability to poverty increased, and is exacerbated by the disappearance of the social security net and a failing education system. Forty percent of the rural population depends on small subsistence plots of land for their livelihoods; however, these plots are adversely affected by water shortages or pollution and consequently the rural population face increasing hardship, malnutrition, and illness.”¹³

In terms of ethnic relations, Uzbekistan is the home of a population of approximately 400,000 Karakalpaks—whose name translates into “Black Hats”—“a Turkic people that traditionally herded and fished, once had a striking culture. [The Karakalpaks] are now the poorest group in Uzbekistan, and many are destitute.”¹⁴ In the Amu Darya Basin, the largest reservoir has a storage capacity of 7.8 km³. Known as the Tuymuyun, this reservoir is actually made up of four separate reservoirs, one of which is called the Karparas. The FAO predicts that in the future, the Karparas reservoir will be dedicated as the sole supply of potable drinking water for the region. The extreme changes in environment and the effect of the shrinking Aral Sea are simply compounding the key regional issue: a lack of usable water for the local people.¹⁵ At present, the drinking water supply for this zone comes from groundwater, which is too saline to be potable and leaves these publics increasingly vulnerable.

Since the summer of 2000 and continuing into 2001, levels in the lower reaches of the Amu Darya had dropped noticeably as a consequence of Turkmenistan’s construction of the “Golden Lake,” a large artificial lake with an area of 2,000 square kilometers in the KaraKum desert. “In 2001, an increasing number of people in both Karakalpakstan and Khorezm lacked both irrigation and drinking water, driving a large number of the region’s residents to flee to the neighboring regions of Turkmenistan and Kazakhstan.”¹⁶ These many environmental, economic, and ethnic dynamics, combined with the central issue—the lack of water—have led to great distrust

between national neighbors, the breakdown of transboundary communications efforts, and ineffective unilateral approaches to solution-seeking.¹⁷ The United Nations suggests that the nationalist movement of the Karakalpak population demanded that the republic be given full independence, but such demands have been curtailed by the fact that Uzbeks control the flow of water to Karakalpakstan, which has been rendered nearly powerless and waterless due to the severe desiccation of the Aral Sea.¹⁸

Water Diplomacy Activity

The Global Environment Facility (GEF) program, in coordination with the International Fund to Save the Aral Sea (IFAS),¹⁹ and the UN-backed Special Program for the Economies of Central Asia (SPECA), are all working on water management in the Amu Darya region. However, none of these initiatives have made much headway in dealing with the key political obstacles, particularly the unwillingness of the states to cooperate.

UNICEF worked with the World Bank and the Asian Development Bank “to improve the safe water supply and environmental sanitation, and to encourage the adoption of better hygiene practices in the most acutely affected rural districts.”²⁰ Additionally, in response to the drought of 2001 and 2002 in Karakalpakstan and Khorezm, the Government of Japan provided assistance through UNICEF. Aid brought significant improvements in terms of upgrading water and sanitation facilities, health reform, and improvements in maternal and child health.²¹

Especially active in the area were the United Nations Development Programme (UNDP), the EU Programme of Technical Assistance to the CIS (TACIS), and the United States Agency of International Development (USAID),²² which together have invested millions in the effort to better understand and seek a solution to the issues plaguing the Aral Sea and Amu Darya Basin. Unfortunately, due to the lack of structural support and institutional water management, “this approach has yielded some moderate results, most noticeably with small projects.”²³

Analysis

According to Professor Gustaf Olsson of Sweden, “There is considerable skepticism in Central Asia about foreign involvement in resolving water issues. Donors have favored technical rather than political solutions, and funds have been earmarked for the repair and replacement of inefficient irrigation installations.”²⁴ This mistrust and detachment has left much work available at the community level, especially in building collaborative efforts. Because the work has been high-level and accompanied by a “let us rescue you” outlook, community support for this water aid has been lacking, and therefore preventing truly meaningful changes to the water situation among the locals.

Learning Points

A multifaceted regional approach that addresses the various aspects of water use is needed. Thus far, emphasis has been placed on bilateral agreements that lack political weight and cannot resolve this regional, human, and cultural issue. The International Crisis Group suggests that the issue lies in the lack of *public* diplomacy: “Management of water must be reformed to increase accountability and transparency, however the public, NGOs, and the media have little access to information or the decision-making process.”²⁵ Therefore, the community responsibility and collaboration around best practices should be employed to encourage joint-ownership and partnership in water resources. The power of water diplomacy lies in combining public outreach, community buy-in, collaboration with local experts, and multi-national support. Rather than simply addressing the scientific and engineering solutions at the Aral Sea—the termination point of water ways and water issues—a joint effort with the region’s traditional ethnic groups and traditional village leaders, with their backing and enforcement of the program, will help to support the NGO and governmental programs and discourage local violators. The International Crisis Group states the issue clearly and concisely: “Technical solutions will only have a limited impact, if not accompanied by political measures.”²⁶ In order to empower

the local population, already so affected by the vulnerable water resources, communication must bring those on-the-ground into the conversation, acknowledge their ownership, address their needs, and incorporate their existing knowledge into the process of creating a sustainable and equitable water resource for the region.

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Author Biography

Emily Chin (MPD 2012) is a former USC CPD Water Diplomacy Initiative research intern. In her time with CPD, she focused her efforts on crafting effective and listening-based outreach programs around the issues of water access and food science. As of March 2013, she returned to USC as an Assistant Lecturer in the College, supporting the development of leadership through MDA 365: The Art and Adventure of Leadership.

Prior to pursuing her Master of Public Diplomacy, Emily worked as an Account Manager at On Board Experiential Marketing, a boutique marketing agency focused on impactful community marketing and large-scale events. There, Emily specialized in projects with Nike in the Los Angeles, San Francisco and Chicago markets. Her experiences in sports and wellness combined with her interest in the communication of food have fueled her passion to explore the future of the food and water communication. Emily received her B.A. in English Creative Writing with a minor in French from the University of Southern California in 2007.

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