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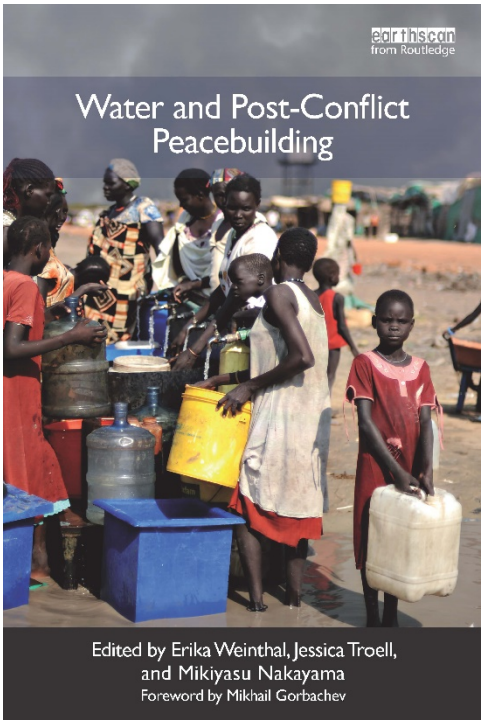

Transnational cooperation over shared water resources in the South Caucasus: Reflections on USAID interventions

Marina Vardanyan and Richard Volk [a]
[a] *U.S. Agency for International Development*

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Transnational cooperation over shared water resources in the South Caucasus: Reflections on USAID interventions

Marina Vardanyan and Richard Volk

This chapter provides a brief history of major conflicts in the South Caucasus and highlights the peacebuilding potential of cooperation on management of shared water resources. The chapter discusses two regional water programs run by the U.S. Agency for International Development (USAID) in the South Caucasus and identifies the initiatives' successes and failures in implementing transboundary water resource management in the region. USAID's efforts demonstrate how donor support of technical cooperation can promote peacebuilding despite ethnic tension and political stalemate. Although relatively little progress was made by the countries at the political level, USAID's attempts to foster collaboration at the technical level on water resource management yielded several notable achievements. The chapter concludes by considering the next steps to facilitate continued cooperation on water resource management in the South Caucasus and the broader lessons learned about donor assistance in integrated water resource management in regions emerging from conflict.

CONFLICT AND THE POTENTIAL FOR COLLABORATION ON SHARED WATERS

Countries in the South Caucasus gained independence with the dissolution of the Soviet Union in 1991. But since independence, Armenia, Azerbaijan, and Georgia have grappled with economic and political instability, ethnic conflict, and environmental degradation. Major conflicts in the South Caucasus center on ethnicity, Nagorno-Karabakh's efforts to gain independence from Azerbaijan, and Abkhazia's and South Ossetia's attempts to separate from Georgia (Wittich and Maas 2009). The conflicts involving Nagorno-Karabakh are of most immediate

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Marina Vardanyan is team leader for USAID (U.S. Agency for International Development)/ Armenia's water and energy portfolio and mission environmental officer. Richard Volk is a coastal and aquatic resources advisor for USAID's Water Team in Washington, D.C. In this chapter, the authors have drawn upon their experience in managing water projects in the South Caucasus.

relevance to water resource management in the Kura-Araks Basin because the nonrecognized-entity status of Nagorno-Karabakh is a source of ongoing tension between Armenia and Azerbaijan, which share the basin.[1]

During the Soviet era, Nagorno-Karabakh was given the rank of autonomous oblast (region) in the Republic of Azerbaijan, but at the time, its population was comprised largely of ethnic Armenians. In 1988, the Nagorno-Karabakh legislature resolved to join the Republic of Armenia and secede from the Republic of Azerbaijan (Beehner 2005). The resolution strained relationships between Azerbaijan and Armenia, resulting in violent conflict in the Nagorno-Karabakh region from 1992 to 1994. Over the course of the violent struggle, approximately 25,000 lives were lost (Beehner 2005; BBC 2010). By 1993, Armenian military forces controlled Nagorno-Karabakh and approximately 20 percent of the land surrounding the region, as well as an area called the Lachin corridor, which links the region to Armenia (Beehner 2005). In 1994, Russia negotiated a ceasefire that remains in effect, and the Organization for Security and Co-operation in Europe (OSCE) Minsk Group—led by France, Russia, and the United States—began to mediate between Azerbaijan and Armenia. Still, as many as 700,000 Azeri and 235,000 Armenian refugees remain displaced (Beehner 2005). The stalled conflict and continuing tension between Armenia and Azerbaijan have undermined cooperation

[1] Neither Armenia nor Azerbaijan recognizes Nagorno-Karabakh as an independent state.

on a number of critical regional issues, including management of and equitable access to water in the Kura-Araks Basin.

As the South Caucasus emerges from conflict, regional cooperation on water resource management will become increasingly important for economic recovery. The area faces many challenges related to water quantity and quality because of ineffective allocation of water resources and growing water-quality degradation from agricultural and urban pollution (Vener 2006; Vener and Campana 2010). Disputes over water quality and quantity grow in the absence of credible information and misinterpretation of existing data. Despite political tension, capacity building and technical cooperation on shared water resources can improve dialogue among states and be a stepping stone in establishing lasting peace in the region.

To begin building a foundation for peace, USAID implemented two programs in the 2001–2008 timeframe, namely, the Water Management in the South Caucasus program and the South Caucasus Water Program (SCWP). While helping to improve the understanding of issues pertaining to the larger Kura-Araks Basin, the programs focused much of their attention on two subbasins: the Alazani Basin, straddling the border of Georgia and Azerbaijan, and the Khrami-Debed Basin, bestride the border of Georgia and Armenia. The programs strengthened scientific and analytical capacity by establishing monitoring capabilities, supporting data collection on water quality and quantity, and providing technical training. The initiatives additionally facilitated dialogue on transboundary water resource management by convening workshops for water technicians and engaging nongovernmental organizations (NGOs) and state ministries with authority over water.

Regional water: The Kura-Araks Basin

Consisting of ten thousand tributaries, the Kura-Araks Basin supports over 16 million people (UNEP, UNDP, and OSCE 2004; Vener 2006). The basin encompasses northeastern Turkey, central and eastern Georgia, northwestern Iran, and most of Azerbaijan and Armenia (see figure 1). The Kura River originates in Turkey and flows through Georgia and Azerbaijan, into the Caspian Sea. The Araks River also begins in Turkey and flows along the border of Armenia and Iran, into the Kura River in Azerbaijan (Vener and Campana 2010). Over forty of the Kura-Araks Basin's tributaries and river segments are transboundary (Vener 2006). The basin covers approximately 188,000 square kilometers, and two-thirds of the area is located across Armenia, Azerbaijan, and Georgia (Vener and Campana 2010).

Demographics and national boundaries result in some inequities in water resource distribution. Georgia has the second-largest population of the three countries and the smallest watershed (Vener 2006; Vener and Campana 2010). In contrast, Azerbaijan has the highest population and the largest watershed (Vener 2006; Vener and Campana 2010). Azerbaijan has one of the lowest per capita water availabilities globally (Vener 2006). Although it has a greater per capita water

Figure 1. Kura-Araks River Basin
Source: Adapted from Vener (2006).

availability, Armenia periodically experiences surface-water shortages due to poor water management (Vener 2006; Vener and Campana 2010). The Kura-Araks Basin captures 100 percent of Armenia's storm-water runoff and sewage discharge. It also captures 60 percent of Georgia's and 50 percent of Azerbaijan's storm-water runoff and sewage discharge (Vener and Campana 2010).

Because it has been an area of agricultural and industrial significance since the Soviet period, the region suffers from inefficient allocation of water resources and poor water quality due to agricultural and urban pollution (Vener and Campana 2010; Vener 2006). Water resources are essential to health and economic growth, but countries in the region do not fully understand that hydropower development, management of sediment (and other water-quality issues), and flood control are among the economic benefits they can derive from cooperation on water resource management.

From bilateral to transboundary water cooperation

Despite international attempts to reconcile disagreements through formal diplomacy, ethnic tension and political stalemate remain. Donors see cooperation on shared water resources as an opportunity for countries in conflict to engage in regional dialogue. Because livelihoods in Armenia, Azerbaijan, and Georgia depend on

improved water quality and sustainable water use, technical cooperation on water resource management, fostered through USAID's regional programs, led to political cooperation. USAID attempted to stimulate dialogue, problem solving, and capacity building for integrated water resource management.

USAID's regional investments built upon the work of two bilateral programs in Armenia—the Sustainable Water Management to Enhance Environmental Quality Program and the Institutional and Regulatory Strengthening of Water Management Program—which focused on national capacity building and benefited from the Armenian government's strong interest and will to reform the water sector. Following the government's creation of the Water Resources Management Agency (WRMA), with a mission to oversee decentralized water management in the country, USAID saw an important opportunity to help develop new policy and legal frameworks. Over several years, it supported a multi-sector process to develop the National Water Policy, the National Water Code, and the National Water Program. Capacity was built at the WRMA and other agencies to implement activities in support of decentralized and integrated water resource management. For example, efforts were made to develop and maintain the State Water Cadastre Information System to integrate multiagency data on water quality and quantity, catchment areas, water use and discharge permits, and water system–use permits. In an effort to standardize data sets, additional work concentrated on a national river network and a water resources–coding system. USAID also helped found basin-management organizations and offered specialized training to improve institutional capacities (Vardanyan et al. 2005). To round out its bilateral activities in Armenia, USAID backed improved monitoring of groundwater, which provides 95 percent of the drinking water in Armenia.

In 2002, USAID elected to expand its bilateral water programs in Armenia, Georgia, and Azerbaijan through the Water Management in the South Caucasus program, which addressed transboundary water resource management. USAID believed that countries in the region were ready for national management of water resources, an essential precursor for transboundary cooperation. In 2005, efforts were extended to two subbasins—the Alazani Basin and the Khrami-Debed Basin—through the SCWP. SCWP worked in close partnership with the three governments, particularly with Armenia's Ministry of Nature Protection, Azerbaijan's Ministry of Ecology and Natural Resources and Ministry of Agriculture, and Georgia's Ministry of Environment Protection and Natural Resources. Both regional programs focused broadly on strengthening scientific and analytical capacity and facilitating dialogue on transboundary water management in the region.

USAID selected the two subbasins because of their location between countries with less tense relations. Although the riparian countries involved conducted joint monitoring of water in the subbasins, the data and analyses were openly shared with all three countries and others interested in the Kura-Araks Basin. The approach offered a less controversial mechanism for bringing regional actors together and revealed the benefits of collaboration on transboundary water resource management. The SCWP was designed, in part, as a prelude

to a larger program of the United Nations Development Programme/Global Environment Facility (UNDP/GEF). USAID cooperated closely with other donors, including the North Atlantic Treaty Organization (NATO) and OSCE, which also believed that technical cooperation on water by the three South Caucasus countries was important for the basin's immense development value and its peacebuilding potential.

Through the programs, several capacity-building initiatives were implemented in Georgia and Azerbaijan to complement bilateral programs in Armenia. For example, Georgia and Azerbaijan are completing national water resource–coding systems, which will allow more meaningful information coordination. The SCWP also helped establish regional monitoring and data sharing and national activities, such as institutional and regulatory strengthening of relevant ministries.

To further improve relations in the area and support efficient use of donor resources, USAID helped facilitate regular donor meetings. It also implemented joint activities, including programs sponsored by UNDP/GEF, OSCE, the European Commission, NATO, and the Regional Environmental Centre for the Caucasus. USAID cooperated with OSCE to cosponsor regional and national workshops on transboundary water priorities, including harmonization of water-related legislation. The workshops provided a valuable opportunity for networking and sharing information and data. Previously, in the absence of data collection and disclosure, many misperceptions existed (and open accusations were made) regarding sources of pollution and water use. Participation in data-sharing activities resulted in the three countries' deeper understanding of the causes and severity of water-quality and quantity problems and highlighted the need for regional cooperation. The program supported joint water quality–monitoring activities and passive exchange of water data through a new web portal. But misunderstanding and mistrust remain. To overcome them, further exchange of information, data analyses, and harmonization of monitoring procedures are required.

Finally, the USAID-supported SCWP offered small grants to local NGOs to facilitate their involvement in and coordination of water resource management. The NGOs helped raise public awareness by publishing the first-ever report card on the health of water in the Kura-Araks Basin. It provided, to the extent data were available, valuable baseline information on the biological, chemical, and physical parameters of the basin. The report card remains a layperson's tool for understanding what makes the basin important to decision makers and the public.

CONCLUSIONS AND LESSONS LEARNED

USAID's regional water programs in the South Caucasus present interesting lessons for regional cooperation and capacity building on water resources shared by post-conflict states. Multiyear efforts at the national and regional levels led to significant progress in water resource monitoring, national water planning and coordination, and integrated and decentralized river basin management. The

strategic direction of USAID's investment was to develop national institutional capacity and political support as a critical precursor for regional cooperation. The cooperation—including political cooperation—intentionally focused in the early years on the technical staff of key ministries in the three countries. USAID's efforts were premised on the notion that cooperation at the technical level would enhance dialogue on the political level and ultimately serve regional peace and security.

Despite political tension in the region, USAID's South Caucasus water programs achieved many successes in transboundary water cooperation. The initiatives improved monitoring, data analysis, and information exchange, as well as dialogue between stakeholders on water resource management. Water resources are fundamental to national and regional development and stability; they sustain the health of communities and activities essential to economic growth. But lack of data, information, and agreement on what drives the subbasins' water quantity and quality still constrains consensus on the benefits of improved and collaborative water management at the regional level.

Because of the different stages of national water sector reform and the persistent tension between Armenia and Azerbaijan, several years will probably pass before SCWP gains traction at the political level. USAID's push for ministerial representatives to sit on the same panel at the 4th World Water Forum in Mexico, in 2006, is but one example of backing that should be strategically encouraged.

Although USAID supported the collection and sharing of data and information on water quality and quantity, additional work is needed to ensure that the data are fully analyzed and made available to decision makers and civil society. Investments in data analysis and application are necessary for capacity building and political commitment over the long term. Future efforts on transboundary water resource management in the South Caucasus should focus on evaluating available information, identifying the causes of water resource challenges, and determining joint solutions. Capacity building of national and subnational leaders and institutions must precede political acceptance of the mutual benefits of transboundary cooperation on water resource management.

Through its experience in the region, USAID is familiar with the stakeholders in and constraints to transboundary water resource management. Although some goals will be achieved rather quickly, others will be hindered by persistent tension between Azerbaijan and Armenia. Seemingly apolitical issues can quickly become political. Shifting long-held convictions takes time, so efforts such as the Water Management in the South Caucasus program and the SCWP should be supported with long-term funding and ongoing donor coordination.

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