

Case Study Transboundary Dispute Resolution: the Tigris-Euphrates basin

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1. Case summary

<i>River basin:</i>	Tigris-Euphrates (Figure 1, table 1)
<i>Dates of negotiation:</i>	Meetings since mid-1960s to present
<i>Relevant parties:</i>	Iraq, Syria, Turkey
<i>Flashpoint:</i>	Filling of two dams during low-flow period results in reduced flow to Iraq in 1975
<i>Issues:</i>	Stated objectives: negotiate an equitable allocation of the flow of the Euphrates River and its tributaries among the riparian states
<i>Additional issues:</i>	Water-related: water quality considerations, Orontes River; Non-water: Syrian support for PKK Kurdish rebels
<i>Excluded issues:</i>	Relationship between Tigris and Euphrates
<i>Criteria for water allocations:</i>	None determined
<i>Incentives/linkage:</i>	Financial: none; Political: none
<i>Breakthroughs:</i>	Adana Agreement (2001), in which Syria agrees to ban PKK rebels from country; Protocol of coordination between Turkey and Syria (2001) on respective development projects (GAP and GOLD)
<i>Status:</i>	Bilateral and tripartite negotiations continue with mixed success—no final agreement to date



Figure 1: Map of the Tigris-Euphrates Basin (TFDD, 2007).

Table 1: Features of the Tigris-Euphrates watershed.

Name	Riparian states (With % of national available water being utilized) b ^a	Riparian relations (with dates of most recent agreements)	Watershed features ^a			
			Average annual flow (km ³ /yr.) ^c	Size (km ²)	Climate	Special features
Tigris -	Iran (n/a), Iraq (86.3), Jordan	Cool	46	789,000	Dry to	On-going tripartite dialog
Euphrates	(n/a), Saudi Arabia (n/a), Syria (102.0), Turkey (12.1)				Mediterranea n	but no international agreement

a Values for lakes under "Annual Flow" are for storage volumes.

b Source: Kulshreshtha (1993) created in January 1993.

c Sources: Gleick ed. (1993); UN Register of International Rivers (1978).

Remaining data from TFDD, 2007.

2. Background

Bilateral and tripartite meetings, occasionally with Soviet involvement, had been carried out between the three riparians since the mid-1960s, although no formal agreements had been reached by the time the Keban and Tabqa dams began to fill late in 1973, resulting in decreased flow down-stream. In mid-1974, Syria agreed to an Iraqi request that Syria allow an additional flow of 200 MCM/yr from Tabqa. The following year, however, the Iraqis claimed that the flow had been dropped from the normal 920 m³/sec to an “intolerable” 197 m³/sec, and asked that the Arab League intervene. The Syrians claimed that less than half the river’s normal flow had reached its borders that year and, after a barrage of mutually hostile statements, pulled out of an Arab League technical committee formed to mediate the conflict. In May 1975, Syria closed its airspace to Iraqi flights and both Syria and Iraq reportedly transferred troops to their mutual border. Only mediation on the part of Saudi Arabia was able to break the increasing tension, and on June 3, 1975, the parties arrived at an agreement that averted the impending violence. Although the terms of the agreement were not made public, Iraqi sources are cited as privately stating that the agreement called for Syria to keep 42% of the flow of the Euphrates within its borders, and to allow the remaining 58% through to Iraq.

3. The problem

In 1975, unilateral water developments came very close to leading to warfare along the Euphrates River. The three riparians to the river—Turkey, Syria, and Iraq—had been co-existing with varying degrees of hydropolitical tension through the 1960s. At that time, population pressures drove unilateral developments, particularly in southern Anatolia (Turkey), with the Keban Dam (1965-73), and in Syria, with the Tabqa Dam (1968-73; Lowi, 1991, p. 108). Additional tensions between Turkey and Syria involving Syrian support for Kurdish separatists (Kurdish Worker’s Party, or PKK) and Turkey’s military support for Israel have exacerbated the water dispute (*Mideast Mirror*, 1998). Military tensions flared between Turkey and Iraq in 1997, as Turkey invaded northern Iraq to attack Kurdish rebels in the area (*Mideast Mirror*, 1997). In August of 1998, Turkey threatened military action against Syria if it continued to support the PKK (*Middle East Newsfile*, 1998).

4. Attempts at conflict management

The Southeast Anatolia Development Project (GAP is the Turkish acronym) has given a sense of urgency to resolving allocation issues on the Euphrates. GAP is a massive undertaking for energy and agricultural development that, when completed, will include the construction of 21 dams and 19 hydroelectric plants on both the Tigris and the Euphrates. 1.65 million ha of land are to be irrigated and 26 billion kWh will be generated annually with an installed capacity of 7,500 MW. If completed as planned, GAP could significantly reduce downstream water quantity and quality.

A Protocol of the Joint Economic Committee was established between Turkey and Iraq in 1980, which allowed for Joint Technical Committee meetings relating to water resources. Syria began participating in 1983, although meetings have been intermittent at best.

A 1987 visit to Damascus, Syria, by Turkish Prime Minister Turgut Ozal reportedly resulted in a signed agreement for the Turks to guarantee a minimum flow of 500 m³/sec across the border with Syria. According to Kolars and Mitchell, this total of 16 BCM/yr is in accordance with prior Syrian requests. However, according to Naff and Matson, this is also the amount that Iraq insisted on in 1967, leaving a potential shortfall. A tripartite meeting between Turkish, Syrian and Iraqi ministers was held in November 1986, but yielded few results.

Talks between the three countries were held again in January 1990, when Turkey closed the gates to the reservoir on the Ataturk Dam, the largest of the GAP dams, essentially shutting off the flow of the Euphrates for 30 days. At this meeting, Iraq again insisted that a flow of 500 m³/sec cross the Syrian-Iraqi

border. The Turkish representatives responded that this was a technical issue rather than one of politics and the meetings stalled. The Gulf War that broke out later that month precluded additional negotiations.

In their first meeting after the war, Turkish, Syrian, and Iraqi water officials convened in Damascus in September 1992, but broke up after Turkey rejected an Iraqi request that flows crossing the Turkish border be increased from 500 m³/sec to 700 m³/sec. In bilateral talks in January 1993, however, Turkish Prime Minister Demirel and Syrian President Assad discussed a range of issues intended to improve relations between the two countries. Regarding the water conflict, the two agreed to resolve the issue of allocations by the end of 1993. Prime Minister Demirel declared at a press conference closing the summit that, "There is no need for Syria to be anxious about the water issue. The waters of the Euphrates will flow to that country whether there is an agreement or not" (cited in Gruen, 1993). Despite this pledge, no agreement was reached in the allocated timeframe.

In February 1996, a joint Syria-Iraq water coordination committee convened in Damascus, where the two sides discussed what would be a fair and reasonable distribution of the Euphrates and Tigris between Turkey, Syria, and Iraq. In this meeting, Syria and Iraq decided to coordinate their positions on the water dispute. In May of the same year, Turkey called on Syria to engage in talks over water. Turkey wanted to resolve the dispute by dividing water by cultivated land, whereas Syria wanted to divide the water equally (Gruen, 1993.).

Tension between Syria and Turkey escalated in late 1998 over Kurdish rebels. To avert invasion by Turkey, Syria agreed to ban the PKK from Syria (Iltter, 2000) with the signing of the Adana Agreement on October 20, 1998 (Mideast Mirror, 2000).

5. Outcome

In 2001, Syria and Iraq held talks about the water of the Euphrates, and restated their commitment to take a united stand on the issue in any negotiations with Turkey (*Technical Review Middle East*, 2001). In August of 2001, Syria and Turkey agreed on a protocol of cooperation for Turkey's GAP and Syria's corresponding GOLD (General Organization for Land Development) projects.

Despite these strides, the situation remains unresolved. As of 2003, Turkey would not sign a final accord regarding the sharing of waters with Syria and Iraq (*United Press International*, 2003). Since the ousting of Saddam Hussein in Iraq by U.S.-led forces, the newly appointed Minister of Water Resources Abdul Latif Rasheed has stated that previous problems in trying to come to agreement on allocation of Tigris and Euphrates waters were due to the bad relations developed by the previous leadership. The new Iraqi government hopes to reach an agreement with Turkey and Syria over the waters (Hafidh, 2003). These new developments in the region may play a large role in the future of the sharing of the Euphrates.

6. Lessons learned

- *When one riparian holds the most geographic and military power, equitable agreements are difficult to reach.*

With the large majority of water originating in Turkey and Turkey having the most advanced military power, it has less incentive to work cooperatively with Syria and Iraq and to approach negotiations with a "basket of benefits" outlook.

- *When mostly bilateral talks are used to attempt to resolve issues, the most powerful country typically maintains their power.*

In bilateral talks, Turkey has succeeded in maintaining its power in the water dispute. Syria lost one of its "playing cards" in overall negotiations when it signed the Adana Agreement.

- *Unilateral development of water resources leads to increasing tension over water.*

Developments in the basin have been made unilaterally without the cooperation of other riparian

countries. This has increased resentment of downstream riparians who had no say in developments that occurred upstream.

7. Creative outcomes resulting from resolution process

Although no final resolution has been reached, the protocol for cooperation between Syria and Turkey is a step away from unilateral development. In addition, the signing of the Adana Agreement banning PKK rebels from Syria helped break the deadlock between countries.

8. Timeline

- Late 1973 Keban and Tabqa dams fill
- Mid 1974 Syria agrees to Iraqi requests to allow additional flow of 200 MCM/yr to Iraq
- 1975 Iraq claims that flow in Euphrates has dropped from normal 920 m³/sec to 197 m³/sec and requests that Arab League intervene; Syria claims less than average flow and drops out of Arab League
- June 3, 1975 Mediation by Saudi Arabia leads to agreement that averts war (though agreement is not made public); Syria uses 42% of water and allows 58% to flow to Iraq
- 1980 Protocol of the Joint Economic Committee is established between Turkey and Iraq, which allows for Joint Technical Committee meetings relating to water resources
- 1983 Syria begins participating in the Joint Economic Council
- November 1986 Tripartite meeting between Turkish, Syrian, and Iraqi ministers with few results
- 1987 Turkish Prime Minister visits Damascus and signs agreement for Turks to guarantee 500 m³/sec across the border to Syria
- January 1990 Talks between three countries held when Turkey begins filling the Ataturk Dam, shutting off flow to the Euphrates for 30 days; Iraq insists that 500 m³/sec reaches its border; Gulf War breaks out
- September 1992 Turkish, Syrian, and Iraqi water officials convene in Damascus but break up after Turkey rejects Iraqi request that flows crossing the Turkish border increase from 500 m³/sec to 700 m³/sec
- January 1993 Bilateral talks between Turkish Prime Minister and Syrian President where a range of issues are discussed to improve country relations; the two countries agree to resolve the issue of Euphrates water allocation by the end of 1993
- February 1996 Joint Syria-Iraq water coordination committee convenes in Damascus; here the two sides discuss what would be a fair and reasonable distribution of the Euphrates and Tigris between Turkey, Syria, and Iraq; Syria and Iraq decide to coordinate their positions on the water dispute
- August 1998 Turkey threatens military action against Syria if it continues to harbor PKK rebels
- October 1998 Adana Agreement signed by Turkey and Syria, in which Syria agrees to ban PKK rebels from the country
- January 2001 Syria and Iraq hold talks to establish water sharing; restate commitment to coordinate efforts in negotiations with Turkey
- August 2001 Syria and Turkey agree on a protocol of cooperation for Turkey's GAP and Syria's corresponding GOLD (General Organization for Land Development) projects
- 2003 Iraqi President Saddam Hussein ousted by U.S. led forces; later, new leadership states intentions to reach agreement with Turkey and Syria regarding allocation of the Tigris and Euphrates

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