Report on Turkey's Reduction of Euphrates Water Flow to Syria

Foreign Relations Commission in Jazeera Canton

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Introduction

The Euphrates River has historically been at the center of a conflict between Turkey on the one hand and both Syria and Iraq on the other. According to the international law, Euphrates is considered an international river because it crosses several States. The UN Convention on the Law of the Non Navigational Uses of International Watercourses adopted by the General Assembly of the United Nations in 1997 states that national governments have an obligation to notify and inform other national governments of any activities on shared watercourses that will affect them. Turkey is one of the few states in the world that opposed this UN Convention.

Turkey still regards the Euphrates River as not concerned with those international laws. Based on this, it has established water infrastructure projects on rivers without consulting the downstream states Syria and Iraq. Thus, it undermines the principle of shared rights of the riparian countries and violates the provisions of the international law, causing damage to many developmental projects due to reduction of water flow and decrease of water quality.

In 1987, a temporary agreement between Syria and Turkey was signed to share the water supplies of the Euphrates during the period when the basin of the Ataturk Dam was being filled. In virtue of the agreement, Turkey pledged to provide a flow of at least 500 cubic meters of water per second on the Turkish-Syrian borders within the consideration of each calendar month, until reaching a final agreement about sharing the water supplies of the river between the three countries. In 1994, Syria registered the agreement at the United Nations to guarantee the minimum amount of Iraq and Syria's right to the water from the Euphrates River.

However, according to the managing bodies of the dams in North Syria, Turkey does not abide by this agreement.

Water Flow into Syria after the Liberation of Rojava (Tishreen) Dam by the Syrian Democratic Forces (SDF)

After the liberation of the Rojava (Tishreen) dam by SDF in December 2015, the Turkish State significantly reduced the amount of Euphrates water into Syria, particularly during summer months (table 1 below).

Furthermore, Turkey has been sending irregular daily amounts of water, causing problems in generating electricity provided to the regions of Kobani, Manbij, and Sirrin (table 2 below).

Data below is taken from the management of Rojava (Tishreen) Dam

Table (1)

Mean Water Flow M^3/S	2017
690	January
529	February
399	March
440	April
350	May
239	June
425	July
353	August
362	September
234	October
226	November
-	December
394	Monthly Average Flow 2017

Table (2)

Water Flow M^3/S	February Daily Data
1326	1/2/2017
1236	2/2/2017
1273	3/2/2017
1206	4/2/2017
1222	5/2/2017
526	6/2/2017
1203	7/2/2017
527	8/2/2017
419	9/2/2017
278	10/2/2017
423	11/2/2017
307	12/2/2017
327	13/2/2017
246	14/2/2017
279	15/2/2017
233	16/2/2017
287	17/2/2017
412	18/2/2017
232	19/2/2017
265	20/2/2017
282	21/2/2017
177	22/2/2017
773	23/2/2017
262	24/2/2017
275	25/2/2017
267	26/2/2017
245	27/2/2017
306	28/2/2017

Water Flow during ISIS and SDF Phases

Data shows that there is significant difference between water flow during ISIS and SDF phases, particularly in summer and fall (Table 3 below).

Table (3)

SDF Phase		ISIS Phase	
Mean Water Flow M^3/S	2017	Mean Water Flow M^3/S	2015
239	June	223	June
425	July	319	July
353	August	618	August
362	September	471	September
234	October	420	October
226	November	351	November
306	Total	400	Total

Effects of Water Shortage and Low Water Level in the Lakes

The purpose of dams is to generate electricity, irrigate agricultural lands, and supply drinking water to cities and neighboring areas. The Euphrates River is the main source of water in Syria, and the construction of dams on this river has greatly benefited the areas adjacent to the river and Syria at large. However, the reduction of water flow and the low level of dam reservoirs during the past years, has negatively affected the northern and eastern parts of Syria. Following is a brief description of these effects.

Electricity

Before the beginning of the crisis in 2011, the Syrian Electricity Network depended on 14 power plants, three of which are hydroelectric on Euphrates dams and the others are thermal and connected with each other. Because of the war, only one thermal and three hydroelectric power plants supply electricity to north-eastern regions, which form more than 25 per cent of the Syrian area. Thus, when Turkey reduces water flow, these areas suffer from power cuts. Table 4 shows the effect of low water flow on electricity production.

Table (4)

Mean Water Flow M^3/S	Generated Power in Thousand KW/H	2017
690	80554	January
529	66346	February
399	36901	March
440	47762	April
350	56060	May
239	32242	June
425	45901	July
353	46361	August
362	47929	September
234	32795	October

Irrigation and Drinking Water

Euphrates River irrigates nearly 640,000 hectares of agricultural lands in Syria, and secures drinking water to the northern regions, such as Aleppo, Manbij, and Kobani.

Taking into consideration that the people in north Syria mainly depend on agriculture for their living, water cuts and low levels in the lakes (reservoir) have a negative impact on farmers and cause damage to their crops. In addition, low water flow halts the generation of electric power, which in turn halts pumping drinking water to the cities and neighboring areas.

According to some sources, every one billion cubic meters of water reduced from Syria's share means that 26,000 hectares of lands would become unsuitable for agriculture.