

Water

Turkey Weaponizes Water against NES People



www.asocenter.org
info@asocenter.org
(+964) 751-4413372

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ASO Center for Consultancy and
Strategic Studies
www.asocenter.org

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ASO Center for Consultancy and Strategic Studies

ASO Center for Consultancy and Strategic Studies is a research institution based in Syria and Iraq. It covers a wide regional field, and it is interested in following up on developments in wide geo-strategic arena that includes the Levant in particular and the Middle East in general, with interest in the Syrian and Iraqi affairs. The center works on providing intellectual significant knowledge contributions that concern the region and affect its future in the strategic, political consultations, economic, social, administrative, surveys, and administrative training fields. Following the principle of quality and excellence in serving the community, which created the main motive for the development process, ASO Center for Strategic Consulting and Studies was established to be a center for thinking and making public policies both locally and regionally, in addition to preparing, qualifying, and developing highly qualified cadres, core staff and leaders in various domains.

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Introduction:

It has become evident that Turkish government relies on water as one of its strategic weapons in Syria for the support of its military operations targeting the Kurdish presence in Syria, expanding its areas of control in NES and forcing the military and local residents to yield to its terms and policies in Syria. All military parties have weaponized water, since the beginning of the conflict in Syria, to achieve political, military and economic gains. Thus, water availability for the local population has become significantly dependent to military forces that control the water source, feeding their residential areas.

As a result, Syrian opposition factions have weaponized water to confront the Syrian regime. In 2015, opposition factions threatened the Syrian regime with bombing Al-Fijah spring in order to restrain the regime from its military operations in Damascus governorate countryside. They, also, have used water in exchange operations, where it was required to pump Ain Al-Fijah water to Damascus in exchange for a temporary truce with the regime.

Al-Nusra Front negotiated with the Syrian regime, soon after it stopped pumping drinking water (Suleiman Al-Halabi pumps), which resulted in cutting off water for all residential areas controlled by Syrian regime forces. Thus, it stipulated stopping air bombardment in exchange for restarting pumps. Furthermore, during ISIS control, the Syrian regime cut off electricity to water pumps in the northern countryside of Aleppo.

Executive Summary:

Despite the fact that Syrian and Turkish governments have signed several agreements regarding sharing Euphrates River waters starting from 1987¹ protocol; however, the Turkish government does not adhere to the signed agreements and weaponizes water to pass its interests in Syria, in particular in NES areas.

Reports and data issued by the Self-Administration, as well as, information collected by ASO Center for Consultancy and Strategic Studies on the ground, indicate that Euphrates water has decreased to its lowest levels since many years. In addition to this, the Turkish government that occupies parts of Al-Hasaka governorate, uses the water of Allok Water Station in SereKaniye/Ras Al-Ain city, which provides large areas of Al-Hasakah governorate, in order to subdue the local population and force them to accept Turkish policies in Syria. According to the United Nations and in light of COVID-19 pandemic outbreak, thousands of local residents are directly threatened with the infection risk with the emerging virus.² This is due to the

¹ Water geopolitics: Legal Basis for Distribution of Shared water in the Arab World, by Muhammad Ahmad Aqla al-Momani https://books.google.com.sa/books?id=DwnhDwAAQBAJ&pg=PT80&lpg=PT80&dq=%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87%20%20%D8%AA%D8%B1%D9%83%D9%8A%D8%A7%20%D9%88%D8%B3%D9%88%D8%B1%D9%8A%D8%A7&source=bl&ots=zWwRQ3pl_q&sig=ACfU3U1W1QvRfZBx16OaYH15FYzIEyBrxQ&hl=en&sa=X&ved=2ahUKEwjmo_ciq68jqAhVSjqQKHQbnCAEQ6AEwC3oECAgQAQ&fbclid=IwAR293pco2y7OqC-liqNZsxD5Wwx3h2k3tz6m4CqDOPeGVjnZeouTCBiY6Q#v=onepage&q&f=false

² Interruption to key water station in the northeast of Syria puts 460,000 people at risk as efforts ramp up to prevent the spread of Coronavirus disease <https://www.unicef.org/mena/ar/%D8%AA%D9%88%D9%82%D9%81-%D8%B6%D8%AE-%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87-%D9%85%D8%AD%D8%B7%D8%A9->



Turkish government cutting water to Al-Hasaka governorate and the unavailable potable water for civilians for washing and sterilization, including IDPs and refugees residing in camps.

Syrian-Turkish Agreement on Water:

In 1987 Syria and Turkey signed a protocol in Damascus, the Syrian capital, hence the water paragraph stated that Turkey pledges to provide annual rates of water in excess of 500 m³/s at the Syrian-Turkish border during the Ataturk Dam filling in Turkey until the final distribution of Euphrates waters between Turkey, Syria and Iraq. Moreover, in cases where the flow of the Euphrates River is below the level of 500 m³/s, Turkey compensates the disparity in the next month. Taking into account that Turkish and Syrian parties should work with the Iraqi party to distribute waters of Euphrates and Tigris rivers as soon as possible and establish joint projects on these rivers.³

In 1988, a statement was issued, based on good faith and good-neighboringliness, by the meeting of Irrigation and Water Ministers of Syria, Turkey and Iraq countries in Ankara, on the territorial waters of Tigris and Euphrates rivers. Consequently, they studied technical committees' proposals related to Tigris and Euphrates basin rivers and water needs of the three countries, as it was agreed on:⁴

First: Technical, water and hydrological data exchange between the three countries.

Second: The joint technical committee between the three countries records water needs of each country separately. Third: Providing holistic dimensions of the joint technical "Turkish, Syrian, and Iraqi" committee subsequent work.

Fourth: Submitting a technical water report by the joint committee of the ministerial meeting to be held in April of 1989 to take necessary decisions regarding waters of Tigris and Euphrates rivers use between the three countries.

[%D8%A7%D9%84%D8%B1%D8%A6%D9%8A%D8%B3%D9%8A%D8%A9-%D8%B4%D9%85%D8%A7%D9%84-%D8%B4%D8%B1%D9%82-%D8%B3%D9%88%D8%B1%D9%8A%D8%A7-%D9%8A%D8%B9%D8%B1%D8%B6-460000-%D8%B4%D8%AE%D8%B5-%D9%84%D9%84%D8%AE%D8%B7%D8%B1-%D9%83%D9%88%D8%B1%D9%88%D9%86%D8%A7/%D8%A7%D9%84%D8%A8%D9%8A%D8%A7%D9%86%D8%A7%D8%AA-%D8%A7%D9%84%D8%B5%D8%AD%D9%81%D9%8A%D8%A9](#)

³ Water geopolitics: Legal Basis for Distribution of Shared water in the Arab World, by Muhammad Ahmad Aqla al-Momanihttps://books.google.com.sa/books?id=DwnhDwAAQBAJ&pg=PT80&lpg=PT80&dq=%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87%20%20%D8%AA%D8%B1%D9%83%D9%8A%D8%A7%20%D9%88%D8%B3%D9%88%D8%B1%D9%8A%D8%A7&source=bl&ots=zWwRQ3pl_q&sig=ACfU3U1W1QvrfZBx16OaYH15FYzIEyBrxQ&hl=en&sa=X&ved=2ahUKEwjmo_ciq68jqAhVSjqQKHQbnCAEQ6AEwC3oECAgQAQ&fbclid=lwAR293pc02y7OqC-liqNZsxD85Wwx3h2k3tz6m4CqDOPeGVjnZeouTCBiY6Q#v=onepage&q&f=false

⁴ Water geopolitics: Legal Basis for Distribution of Shared water in the Arab World, by Muhammad Ahmad Aqla al-Momanihttps://books.google.com.sa/books?id=DwnhDwAAQBAJ&pg=PT80&lpg=PT80&dq=%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87%20%20%D8%AA%D8%B1%D9%83%D9%8A%D8%A7%20%D9%88%D8%B3%D9%88%D8%B1%D9%8A%D8%A7&source=bl&ots=zWwRQ3pl_q&sig=ACfU3U1W1QvrfZBx16OaYH15FYzIEyBrxQ&hl=en&sa=X&ved=2ahUKEwjmo_ciq68jqAhVSjqQKHQbnCAEQ6AEwC3oECAgQAQ&fbclid=lwAR293pc02y7OqC-liqNZsxD85Wwx3h2k3tz6m4CqDOPeGVjnZeouTCBiY6Q#v=onepage&q&f=false



In 1992, the meeting of Syria and Turkey Foreign Ministers statement affirmed Turkey's commitment to pass 500 m³/s from Euphrates River waters to Syria and affirmed Turkey's principled position, which calls for not to prejudice Syria and Iraq rights to water.⁵

The joint statement of Syria and Turkey Heads of Government in 1993, stated the need to reach, before the end of 1993, a final solution that would determine the three parties' shares; Turkey, Syria, and Iraq, in Euphrates waters.⁶

The Syrian Republic registered this protocol with the United Nations on November 16, 1994. It was followed in 1988 by a ministerial statement on water needs of the three countries.

In analyzing this protocol circumstances, we conceive that Damascus and Baghdad have well took advantage of the Kurdish case, based on interest conflicts regarding the water sharing matter, given the armed anti-Turkish Kurdish parties proliferation on their borders.

This, in its turn, allowed the agreement on Euphrates between Turkey and the Syrian Republic. The agreement also included, in addition to economic and technical understandings, the prevention of any party from supporting armed resistance groups from the territory of the other party. Thus, the Syrian Republic obtained 500 m³/s of Euphrates water and agreed with Iraq to obtain 58% of it.⁷

The 1998 Adana Accord between Turkey and Syria paved the way toward improved relations. Turkey has agreed to let a minimum of 15.768 BCM per year flow through the Turkish-Syrian border of which Syria has committed to give 9.145 BCM/year to Iraq. In 2008, Turkey allowed Syria to use one BCM /year from the Tigris water. Turkey argues that it provides more than the minimum guaranteed water while Syria accuses Turkey of supplying less than the stipulated amount.⁸

This confusion arises due to seasonal and yearly variation of river discharge. Either country can select discharge data at the border of a particular month in a particular year to prove its argument. This problem will continue until there is standardisation of measurements.⁹

Both Iraq and Syria insist that the Use of International Watercourses Agreement is the basis that should be referred to when sharing waters of the Tigris and Euphrates rivers between the

⁵ Water geopolitics: Legal Basis for Distribution of Shared water in the Arab World, by Muhammad Ahmad Aqla al-Momani [⁶ Water geopolitics: Legal Basis for Distribution of Shared water in the Arab World, by Muhammad Ahmad Aqla al-Momani \[⁷ Special Agreements on Sharing Waters of Al-Khasieb Crescent Rivers between Conflict, Integration and Natural Right 4/2 <https://www.al-binaa.com/archives/article/47367>\]\(https://books.google.com.sa/books?id=DwnhDwAAQBAJ&pg=PT80&lpg=PT80&dq=%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87%20%20%D8%AA%D8%B1%D9%83%D9%8A%D8%A7%20%D9%88%D8%B3%D9%88%D8%B1%D9%8A%D8%A7&source=bl&ots=zWwRQ3pl_q&sig=ACfU3U1W1QvRfZBx16OaYH15FYzIEyBrxQ&hl=en&sa=X&ved=2ahUKEwjmo_ciq68jqAhVSjqQKHQbnCAEQ6AEwC3oECAgQAO&fbclid=IwAR293pco2y7OqC-liqNzsxD85Wwx3h2k3tz6m4CqDOPeGVjnZeouTCBiY6Q#v=onepage&q=&f=false</p></div><div data-bbox=\)](https://books.google.com.sa/books?id=DwnhDwAAQBAJ&pg=PT80&lpg=PT80&dq=%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87%20%20%D8%AA%D8%B1%D9%83%D9%8A%D8%A7%20%D9%88%D8%B3%D9%88%D8%B1%D9%8A%D8%A7&source=bl&ots=zWwRQ3pl_q&sig=ACfU3U1W1QvRfZBx16OaYH15FYzIEyBrxQ&hl=en&sa=X&ved=2ahUKEwjmo_ciq68jqAhVSjqQKHQbnCAEQ6AEwC3oECAgQAO&fbclid=IwAR293pco2y7OqC-liqNzsxD85Wwx3h2k3tz6m4CqDOPeGVjnZeouTCBiY6Q#v=onepage&q=&f=false</p></div><div data-bbox=)

⁸ The Bule PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf

⁹ The Bule PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf



riparian countries (Turkey - Syria - Iraq). Until 2004, no denial of the international law principles was issued by any of the countries of Tigris Euphrates rivers, for watercourses use for non-navigational purposes.¹⁰

In 1964, Turkey offered the Syrian Republic a corresponding agreement on waters of Orontes River that flows into the Gulf of Iskenderun, which is the Syrian brigade that France delegated to Turkey, in 1939, abandoned. Thus, Damascus rejected this offer, which also implied recognition of this attachment.

During the negotiations in 1965, the three parties demanded shares that exceeded the level of Euphrates River by one and a half times. Moreover, the years 1966, Baath Party division, and 1967, the year of June War, witnessed the deterioration of relations between Iraq and the Syrian Arab Republic. Both parties disagreed on their water shares. Since, while Iraq demanded a share of 16 KM³, the Syrian Republic only agreed on the passage of 9 KM³ to the Iraqi territory.¹¹

Water for Electricity:

Since 2018, the Turkish government has been targeting Allok water station in the countryside of SereKaniye/Ras al-Ain city and it is using it as a leverage in the ongoing conflict in Syria. On March 19, 2018, the Turkish army artillery bombed Allok water station in Serekaniye/Ras al-Ain city, which made it become out of service and entire water cut from Al-Hasaka city and its countryside. In view of this, the Turkish Border Guard forces targeted maintenance workshops attempting to get the station back to work, thus, a number of workers were wounded.¹²

On October 9th, 2019, Turkish forces and Syrian Islamic factions launched a military operation entitled "Spring of Peace" to occupy the cities of Serekaniye/Ras al-Ain in Al-Hasakah governorate and Tell Abyad in Raqqa governorate.

The Self-Administration/SDF and parts of the Syrian government, sharing control of Al-Hasaka city, attempted to return "Allok" water station to service, with direct assistance from the Russian military leadership in NES, which practically conducted talks with Turkey and interfered with more than once to urge Turkish forces to operate the station.

However, the latter stipulated the maintenance of a "power plant in the town of Mabrouka" west of Serekaniye/Ras al-Ain, which is under Turkish forces control and the Syrian National Army/opposition, as well as, feeding it with electricity from the "Tishreen Dam" which is jointly

¹⁰ Water geopolitics: Legal Basis for Distribution of Shared water in the Arab World, by Muhammad Ahmad Aqla al-Momani https://books.google.com.sa/books?id=DwnhDwAAQBAJ&pg=PT80&lpg=PT80&dq=%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87%20%20%D8%AA%D8%B1%D9%83%D9%8A%D8%A7%20%D9%88%D8%B3%D9%88%D8%B1%D9%8A%D8%A7&source=bl&ots=zWwRQ3pl_q&sig=ACfU3U1W1QvRfZBx16OaYH15FYzIEyBrxQ&hl=en&sa=X&ved=2ahUKEwjmcig68jqAhVSjqQKHQbnCAEQ6AEwC3oECAgQAQ&fbclid=IwAR293pco2y7OqC-lijNZsxD5Wwx3h2k3tz6m4CqDOPeGVjnZeouTCBiY6Q#v=onepage&q&f=false

¹¹ Special Agreements on Sharing Waters of Al-Khasieb Crescent Rivers between Conflict, Integration and Natural Right 4/2 <https://www.al-binaa.com/archives/article/47367>

¹² Turkey: Water War against Syrian Kurdistan <https://daraj.com/4869/>



controlled between the Syrian government and Self-Administration, in exchange for operating "Allok" water station.¹³

In early March, the Commander-in-Chief of the Russian forces in the northern Syria region, General Alexei Anatoly, stated at a meeting with journalists, in this regard, that he had met the Turkish Coordination Center head, General Burhan Aktash in the Turkish city of Nusaybin, less than 24 hours after the first water suspension in the station which Anatoli described as "illegal and immoral work", since it "took place without prior notice", as Turkish forces expelled technicians, without explaining reasons to the Russian party, despite the agreement signed by both presidents of both countries on the region in last October.

Anatoly added that the Turkish general had explicitly called for providing Ras Al-Ain and Tell Abyad regions with electricity from Tishreen dam in exchange for pumping back water, the regions of which are controlled by Syrian National Army factions supported by Turkey, since the "Spring of Peace" battle that was launched to control the border strip in north of Al-Hasaka in October 2019.¹⁴

Turkish forces controlling the station allowed, after the start of talks between Russian and Turkish forces in the region, a team of workers in "Allok water station", accompanied by the Syrian government Electricity Corporation in Al-Hasaka and the Syrian Arab Red Crescent, to enter the station for the first time after "Spring of Peace" operation on November 9, 2019, in order to check and work on operating it.¹⁵

Turkey did not fulfill its obligations, according to Anatoly. Although Self-Administration maintenance workshops have re-extended electricity lines that were connected to Mabrouka station, supplying areas of Ras Al-Ain and Tell Abyad with electricity, noting that they were damaged due to hostilities during the Turkish military operation.

Furthermore, according to Anatoly, Turkey refuses to return technicians to Allok station under "the danger of the region" pretext and it also raised its electricity demands ceiling until it reached 30 megawatts for Ras Al-Ain area only.¹⁶

According to the supervising engineer in the Joint Electricity Committee between the Self-Administration and the Syrian government, after several rounds of negotiations between the

¹³ Turkey Continues to Weaponize Alok Water amid COVID-19 Outbreak in Syria <https://sti-sy.org/ar/%d8%aa%d8%b1%d9%83%d9%8a%d8%a7-%d8%aa%d9%83%d8%b1%d8%a7%d8%b1-%d8%a7%d8%b3%d8%aa%d8%ae%d8%af%d8%a7%d9%85-%d9%85%d9%8a%d8%a7%d9%87-%d8%b9%d9%84%d9%88%d9%83-%d9%83%d8%b3%d9%84%d8%a7%d8%ad-%d8%ae/>

¹⁴ Electricity in Exchange for Water: A Struggle that Northeastern Syria's Population has to live with <https://mari-sy.org/> / الكهرباء مقابل الماء - معادلة تقتل - كاهم

¹⁵ Turkey Continues to Weaponize Alok Water amid COVID-19 Outbreak in Syria <https://sti-sy.org/ar/%d8%aa%d8%b1%d9%83%d9%8a%d8%a7-%d8%aa%d9%83%d8%b1%d8%a7%d8%b1-%d8%a7%d8%b3%d8%aa%d8%ae%d8%af%d8%a7%d9%85-%d9%85%d9%8a%d8%a7%d9%87-%d8%b9%d9%84%d9%88%d9%83-%d9%83%d8%b3%d9%84%d8%a7%d8%ad-%d8%ae/>

¹⁶ Turkey Continues to Weaponize Alok Water amid COVID-19 Outbreak in Syria <https://sti-sy.org/ar/%d8%aa%d8%b1%d9%83%d9%8a%d8%a7-%d8%aa%d9%83%d8%b1%d8%a7%d8%b1-%d8%a7%d8%b3%d8%aa%d8%ae%d8%af%d8%a7%d9%85-%d9%85%d9%8a%d8%a7%d9%87-%d8%b9%d9%84%d9%88%d9%83-%d9%83%d8%b3%d9%84%d8%a7%d8%ad-%d8%ae/>



Russian military leadership in NES and Turkish forces, the latter allowed pumping back water to "Allok" station east of Serekaniye/Ras Al-Ain, on March 26, 2020, 5 days after it was suspended.

The last agreement between Turkish and Russian forces, provided that the power station "Mabrouka" west of Serekaniye/Ras Al-Ain should be supplied with a load ranging from 12 to 15 MW of electricity from Tishreen Dam, which is under the control of the Syrian government and Self-Administration, in exchange for allowing the operation of "Allok station" by the Turkish side.¹⁷

Despite March 29, 2020 agreement, Turkish forces cut off the water to Al-Hasaka city and its countryside for the second time in less than 10 days, after it stopped pumping from "Alok" station east of Serekaniye/Ras Al-Ain, before again allowing the station to operate, only one day after the cut, specifically on March 30, 2020, however, no guarantees were given about the continuation of the operation.¹⁸

¹⁷ Turkey Continues to Weaponize Alok Water amid COVID-19 Outbreak in Syria <https://stj-sy.org/ar/%d8%aa%d8%b1%d9%83%d9%8a%d8%a7-%d8%aa%d9%83%d8%b1%d8%a7%d8%b1-%d8%a7%d8%b3%d8%aa%d8%ae%d8%af%d8%a7%d9%85-%d9%85%d9%8a%d8%a7%d9%87-%d8%b9%d9%84%d9%88%d9%83-%d9%83%d8%b3%d9%84%d8%a7%d8%ad-%d8%ae/>

¹⁸ Turkey Continues to Weaponize Alok Water amid COVID-19 Outbreak in Syria <https://stj-sy.org/ar/%d8%aa%d8%b1%d9%83%d9%8a%d8%a7-%d8%aa%d9%83%d8%b1%d8%a7%d8%b1-%d8%a7%d8%b3%d8%aa%d8%ae%d8%af%d8%a7%d9%85-%d9%85%d9%8a%d8%a7%d9%87-%d8%b9%d9%84%d9%88%d9%83-%d9%83%d8%b3%d9%84%d8%a7%d8%ad-%d8%ae/>



Water Supply from Turkey during June and May: (Infographic)



Water Supply from Turkey on June

Date	Tishreen Supply	Euphrates Level	Tishreen Level	Tishreen Passage
1-6-2020	287	301.73	322.83	371
2-6-2020	460	301.70	322.91	312
3-6-2020	278	301.69	322.88	313
4-6-2020	322	301.67	322.85	357
5-6-2020	340	301.65	322.80	408
6-6-2020	338	301.61	322.83	273
7-6-2020	316	301.59	322.81	334
8-6-2020	230	301.55	322.73	348
9-6-2020	591	301.53	322.86	360
10-6-2020	488	301.54	322.89	424
11-6-2020	351	301.53	322.80	485
12-6-2020	328	301.52	322.78	346
13-6-2020	632	301.51	322.95	334
14-6-2020	294	301.48	322.86	428
15-6-2020	273	301.48	322.73	474
16-6-2020	362	301.46	322.71	380
17-6-2020	367	301.44	322.72	335
18-6-2020	419	301.43	322.69	454
19-6-2020	338	301.41	322.63	422
20-6-2020	301	301.40	322.58	369
21-6-2020	274	301.39	322.48	425
22-6-2020	281	301.37	322.40	399
23-6-2020	468	301.35	322.43	403
24-6-2020	463	301.32	322.42	465
25-6-2020	295	301.30	322.45	431
26-6-2020	264	301.28	322.38	366
27-6-2020	395	301.27	322.30	413
28-6-2020	344	301.25	322.27	379
29-6-2020	325	301.21	322.24	360
30-6-2020	491	301.19	322.65	409
	367	301.46	322.65	386
	Average	Average	Average	Average



Water Supply from Turkey on May

Date	Tishreen Supply	Euphrates Level	Tishreen Level	Tishreen Passage
1-5-2020	443	302.88	323.80	561
2-5-2020	191	302.85	323.68	380
3-5-2020	168	303.85	323.52	425
4-5-2020	215	302.83	323.37	455
5-5-2020	352	302.73	323.39	408
6-5-2020	378	302.68	323.39	303
7-5-2020	311	302.68	323.33	363
8-5-2020	391	302.62	323.23	398
9-5-2020	325	302.44	323.20	546
10-5-2020	289	302.54	323.13	361
11-5-2020	199	302.55	323.01	393
12-5-2020	710	302.51	323.17	388
13-5-2020	390	302.46	323.07	423
14-5-2020	253	302.41	322.91	545
15-5-2020	395	302.36	322.82	510
16-5-2020	338	302.34	322.76	433
17-5-2020	244	302.34	322.76	425
18-5-2020	265	302.27	322.74	229
19-5-2020	375	302.25	322.82	284
20-5-2020	439	302.22	322.85	373
21-5-2020	669	302.19	323.01	382
22-5-2020	373	302.16	322.98	409
23-5-2020	204	302.11	322.93	274
24-5-2020	96	302.00	322.80	302
25-5-2020	331	301.95	322.76	384
26-5-2020	244	301.90	322.76	229
27-5-2020	456	301.89	322.84	305
28-5-2020	380	301.87	322.90	263
29-5-2020	293	301.82	322.90	278
30-5-2020	300	301.76	322.91	268
31-5-2020	300	301.73	322.89	319
	331	302.38	323.06	370
	Average	Average	Average	Average



The Self-Administration Response to Provide Water:

Water Directorate of the Democratic Self-Administration in Al-Hasaka-NES, has started setting a rapid response plan to implement a water project that would be a substitute for the water coming from Allok Station that is controlled by Syrian Islamic factions and Turkish forces. As it implemented a project to drill 50 water wells in Al-Hamma station located northwest of Al-Hasaka and is supposed to operate in a short period.¹⁹

Those who are responsible for Al-Hamma project implementation attributed their delay to reasons beyond the control of Water Directorate because of Corona pandemic's spread and that factories making the machines which operate these wells outside Syria had stopped.²⁰

The Democratic Self-Administration in NES communicated with international organizations and after 4 months, it was able to secure the needed parts and tools for operating 20 wells in Al-Hamma station, while the tools and parts needed for the remaining 30 wells will be available within a short period of time.²¹

The Self-Administration relies on measuring drinking water at Al-Hamma station on the specifications approved by the Syrian Water Ministry since 2004, and water will be monitored.²² Also, the Self- Administration is seeking to implement a strategic project with the aim of securing water for Al-Hasaka and its countryside, and it is expected to be implemented early next year. The project that is supposed to be implemented, is to increase water of Al-Khabour river to fill the eastern dam in the Al-Hasaka.²³

Through its local councils, the Self-Administration distributed drinking water to residential neighborhoods through water tanks, until completing Al-Hamma project or pumping water from Allok station in the countryside of Serekaniye/Ras Al-Ain.²⁴

The current water supply that reaches from Turkey to areas of the democratic Self-Administration in NES does not exceed 277 m³/s, bearing in mind that operating one turbine with its nominal capacity from Tishreen dam turbines requires 450 m³/s, while 250 m³/s is

¹⁹ Online Interview with Sozdar Ahmad, the Joint Head of Water Directorate in Al- Hasakah Region of the Democratic Self-Administration in NES

²⁰ Al-Hasaka: 20 Wells of Al-Hamma Station will be in Service in Less than One Month

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²¹ Al-Hasaka: 20 Wells of Al-Hamma Station will be in Service in Less than One Month

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²² Al-Hasaka: 20 Wells of Al-Hamma Station will be in Service in Less than One Month

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²³ Online Interview with Sozdar Ahmad, the Joint Head of Water Directorate in Al- Hasakah Region of the Democratic Self-Administration in NES

²⁴ How did Al-Hasaka People Overcome Water Crisis? What are Self-Administration Solutions?

<http://hawarnews.com/ar/haber/kjf-ajtaz-ahaly-alhskh-azmh-almyah-wma-hy-hlwl-alidahrhd89f-h31531.html>



required to operate a turbine in Al- Tabqa dam. The minimum level for Euphrates river is now 301 m³/s, and Tishreen dam is 321 m³/s²⁵

Syria's share of water was regular during the period of Islamic State's "ISIS" control of Tishreen dam in Aleppo governorate. Moreover, sometimes the amount granted to Syria was even higher than what was agreed between Syria and Turkey in accordance with protocols signed between both parties.²⁶

Areas of Al-Hasakah, Tal Tamr, Al-Houl, Al-Arish, Al-Shadadi, Markada and the displaced camps, which are inhabited by about 200 thousand people, require 80 thousand m³ of water per day.²⁷

Measures to Limit COVID-19 Spread while Cutting Water:

Self-Administration in NES has taken a number of preventive and precautionary measures, within the limits of its modest capabilities. The border crossing of Semalka with the KRI was closed in March, consequently, a curfew was imposed, and quarantines were imposed on everyone who came to the Self-Administration areas.²⁸

Decisions were followed by sterilization campaigns that targeted all the autonomous administration institutions and departments conducted in cooperation with the people municipalities in districts. Additionally, many streets, shops, squares, parks, and public utilities were sterilized.²⁹

The Self-Administration and humanitarian organizations in NES face significant obstacles during their attempts to develop a readiness plan to confront COVID-19 pandemic. However, they were not able to bring into the region additional supplies due to the borders closure with KRI. Likewise, the United Nations Security Council canceled the mandate for the passage of bodies through Al-Yarubia crossing point in January, under Russian pressure.³⁰

Nevertheless, these efforts and efforts made by the Self-Administration collide with a number of impediments, the most important of which is the Turkish government cutting water to areas suffering mainly from fragility in the medical sector and in the water sector.

Humanitarian organizations indicate that they have decided to raise awareness of handwashing practices due to limited options, however, frequent cuts of water hinder even their ability to encourage this measure. Also, pumping water alternatives for Allok water station is not sufficient; as humanitarian organizations are currently bringing water tanks in an

²⁵ Online Interview with Sozdar Ahmad, the Joint Head of Water Directorate in Al- Hasakah Region of the Democratic Self-Administration in NES

²⁶ Online Interview with Aheen Swaied, Joint Head of Energy Commission, in Al-Jazeera Region

²⁷ Online Interview with Sozdar Ahmad, the Joint Head of Water Directorate in Al- Hasakah Region of the Democratic Self-Administration in NES

²⁸ COVID-19 in North and Eastern Syria: Threat, Response and Challenges <https://www.asocenter.org/ar/node/500>

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³⁰ COVID-19 in North and Eastern Syria: Threat, Response and Challenges <https://www.asocenter.org/ar/node/500>



intermittent and time-consuming process. According to a report issued by a group working to provide water and sanitation in NES, transporting water with tanks provides less than 50% of the population's needs, in addition to its large cost.³¹

Human Rights Watch has documented dire conditions in these camps, including overflowing latrines, sewage trickling into tattered tents, and residents drinking wash water from tanks containing worms. These conditions are likely to be exacerbated with the water supplies cut off, and will only put the population at greater risk of contracting coronavirus³².

UNICEF has warned that "The interruption of water supply during the current efforts to curb the spread of the Coronavirus disease puts children and families at unacceptable risk. Handwashing with soap is critical in the fight against COVID-19." It also, stated that "No child should have to live even one day without safe water. Clean water and handwashing save lives."³³ UNICEF has rejected using water and water facilities for military or political gains. It also referred to its support along their partners of families in Al-Hasaka city and camps for displaced families with water trucking, however, this barely covers minimum needs if the water supply is interrupted again.³⁴

According to Human Rights Watch, Turkish authorities' inaction to ensure adequate supplies of water to NES areas, is detrimental to the ability of humanitarian organizations, in light of the spread of the Corona virus pandemic, to provide vulnerable communities for their protection. "In the midst of a global pandemic that is overloading sophisticated governance and infrastructure systems, Turkish authorities have been cutting off the water supply to regions most under strain in Syria," said Michael Page, deputy Middle East director at Human Rights Watch.³⁵

Before the March 2011 uprising, Syria was the only country in the region that was self-sufficient in food production and especially in main agricultural crops such as wheat and barley. It had

³¹ Turkey/Syria: Weaponizing Water in Global Pandemic? <https://www.hrw.org/ar/news/2020/03/31/340129>

³² Turkey/Syria: Weaponizing Water in Global Pandemic? <https://www.hrw.org/ar/news/2020/03/31/340129>

³³ Interruption to key water station in the northeast of Syria puts 460,000 people at risk as efforts ramp up to prevent the spread of Coronavirus disease [https://www.unicef.org/mena/ar/%D8%AA%D9%88%D9%82%D9%81-%D8%B6%D8%AE-%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87-%D9%85%D8%AD%D8%B7%D8%A9-%D8%A7%D9%84%D8%B1%D8%A6%D9%8A%D8%B3%D9%8A%D8%A9-%D8%B4%D9%85%D8%A7%D9%84-%D8%B4%D8%B1%D9%82-%D8%B3%D9%88%D8%B1%D9%8A%D8%A7-%D9%8A%D8%B9%D8%B1%D8%B6-460000-%D8%B4%D8%AE%D8%B5-%D9%84%D9%84%D8%AE%D8%B7%D8%B1-%D9%83%D9%88%D8%B1%D9%88%D9%86%D8%A7-%D8%A7%D9%84%D8%A8%D9%8A%D8%A7%D9%86%D8%A7%D8%AA-%D8%A7%D9%84%D8%B5%D8%AD%D9%81%D9%8A%D8%A9](https://www.unicef.org/mena/ar/%D8%AA%D9%88%D9%82%D9%81-%D8%B6%D8%AE-%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87-%D9%85%D8%AD%D8%B7%D8%A9-%D8%A7%D9%84%D8%B1%D8%A6%D9%8A%D8%B3%D9%8A%D8%A9-%D8%B4%D9%85%D8%A7%D9%84-%D8%B4%D8%B1%D9%82-%D8%B3%D9%88%D8%B1%D9%8A%D8%A7-%D9%8A%D8%B9%D8%B1%D8%B6-460000-%D8%B4%D8%AE%D8%B5-%D9%84%D8%AE%D8%B7%D8%B1-%D9%83%D9%88%D8%B1%D9%88%D9%86%D8%A7-%D8%A7%D9%84%D8%A8%D9%8A%D8%A7%D9%86%D8%A7%D8%AA-%D8%A7%D9%84%D8%B5%D8%AD%D9%81%D9%8A%D8%A9)

³⁴ Interruption to key water station in the northeast of Syria puts 460,000 people at risk as efforts ramp up to prevent the spread of Coronavirus disease

<https://www.unicef.org/mena/ar/%D8%AA%D9%88%D9%82%D9%81-%D8%B6%D8%AE-%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87-%D9%85%D8%AD%D8%B7%D8%A9-%D8%A7%D9%84%D8%B1%D8%A6%D9%8A%D8%B3%D9%8A%D8%A9-%D8%B4%D9%85%D8%A7%D9%84-%D8%B4%D8%B1%D9%82-%D8%B3%D9%88%D8%B1%D9%8A%D8%A7-%D9%8A%D8%B9%D8%B1%D8%B6-460000-%D8%B4%D8%AE%D8%B5-%D9%84%D9%84%D8%AE%D8%B7%D8%B1-%D9%83%D9%88%D8%B1%D9%88%D9%86%D8%A7-%D8%A7%D9%84%D8%A8%D9%8A%D8%A7%D9%86%D8%A7%D8%AA-%D8%A7%D9%84%D8%B5%D8%AD%D9%81%D9%8A%D8%A9>

³⁵ Turkey/Syria: Weaponizing Water in Global Pandemic? <https://www.hrw.org/ar/news/2020/03/31/340129>



even turned into a regional exporter before a major drought in 2008–2009 forced the country to import large quantities of wheat for the first time in many years.

Before the start of the Syrian revolution in March 2011, Syria was self-sufficient in food production, in particular the staple agricultural crops, such as; wheat and barley. It was expected that Syria would turn into a regional source had it not been for the low rainfall rate between 2008 and 2009, to have affected the country's agricultural reality and caused a major drought, which forced Syria to import large wheat quantities for the first time in many years.

Water Cuts Impact on Food Security in Syria:

Syria's farming sector had seen sizable public and private investment in fast-growing modern farming techniques and infrastructure before the crisis in 2011. In NES, the authorities were even beginning to invest in sprinkler irrigation in many of the larger state-run projects, as was the case with some large private investments. Today, much of this infrastructure is either damaged or lying idle.³⁶

The impact of the Syrian crisis on agriculture is particularly important because the sector is the main source of income for a large proportion of the population. According to local Syrian experts and UN agricultural economists, up to 40 percent of livelihoods in Syria are connected to agriculture in one way or another.³⁷

More than 80 per cent of the available water is used for agricultural purposes and only 16 per cent of farmers use modern irrigation systems. Water losses from seepage and evaporation are more than 40 per cent of the water used, due to old systems of water conveyance and distribution.³⁸

The conflict has led to the shrinkage of sown areas for various reasons such as, power cuts, damage to irrigation canals, and the high cost of fuel. The rotation in cereals and legumes cultivation can help restore or sustain soil nutrients and reduce the risks of pests, however, that has been neglected, which also poses a serious problem.³⁹

The impact of the depletion of aquifers, as farmers exploit the crisis to pump water from new wells, is a problem that will accentuate the country's long-term water crisis, with a trend in declining water tables. In the short term, however, it has been one of the factors of resilience of rural communities that has helped them grow enough food in local areas and mitigate the disruption of trade routes.⁴⁰ The water deficit in Syria at present is increasing at alarming rates,

³⁶ Food Insecurity in War-Torn Syria: From Decades of Self-Sufficiency to Food Dependence <https://carnegie-mec.org/2015/06/04/ar-pub-60866>

³⁷ Food Insecurity in War-Torn Syria: From Decades of Self-Sufficiency to Food Dependence <https://carnegie-mec.org/2015/06/04/ar-pub-60866>

³⁸ The Blue PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf

³⁹ Food Insecurity in War-Torn Syria: From Decades of Self-Sufficiency to Food Dependence <https://carnegie-mec.org/2015/06/04/ar-pub-60866>

⁴⁰ Food Insecurity in War-Torn Syria: From Decades of Self-Sufficiency to Food Dependence <https://carnegie-mec.org/2015/06/04/ar-pub-60866>



which will result in several consequences in the future. Less water available for agriculture would also lead to food shortages.⁴¹

Other experts also claim that with the rising temperature and lack of adequate rainfall, the region will get drier, and during the same period approximately 60 per cent of the land in Syria will face the threat of desertification. The biggest impact of this will be seen in the agricultural sector where lack of rainfall, less water in the rivers and decreasing groundwater will affect the productivity, directly affecting food security and the economy.⁴²

A factor less investigated, though equally important, is how climate change is affecting the land quality and consequently resulting in new threats to livestock and herders, as well as the ecosystems of the ranges. In the part of Syria's prime agricultural land that is along the Mediterranean Coast, there exists a threat from rising sea levels and saltwater intrusion into groundwater sources. Currently Syria's main concern is improving their age-old methods of irrigation and to apply effective methods of water management. Any future drought in Syria would exacerbate the conditions facing water supply for irrigation, domestic needs and industry in an already water-stressed country.

Accurately assessing the impact of climate change on Syria requires preparing a climate simulation model for the Middle East region with the Tigris Euphrates Region as its major core. Simulating the climate of the region is a challenge for climate models, due in part to the high natural inter-annual variability, the topography of the region - which includes multiple mountain ranges and inland seas - and the presence of a slight cooling trend in recent decades despite the global trend which some researchers describe as warming. The proposed regional model could extend from the Zagros Mountains in Iran, Tauros Mountains in Turkey to include the Gulf, Saudi Arabia, the Red Sea and Mediterranean Seas.⁴³

The annual precipitation ranges from 300 mm in the north-west regions bordering Turkey, to 1,400 mm in the mountains and coastal areas.

Essentially, NES areas are experiencing a crisis in the agricultural sector, which may, practically, result in reluctance of farmers to grow agricultural crops in the coming period. The region has been experiencing arsons, shortly before the harvest, for two years, which has caused thousands of farmers to lose their annual production, due to low wheat prices as a result of the high dollar prices and the economic crisis that the country suffers from.

Water cuts by the Turkish government can be a serious factor in declining agriculture in NES. Consequently, affecting the food security of Syrians increasingly. Noting that the Self-Administration accuses them of arsons through sleeper cells belonging to Islamic factions and ISIS in AL-Hasaka, Raqqa, and Deir Ezzor governorates.

⁴¹ The Bule PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf

⁴² The Bule PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf

⁴³ The Bule PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf



Syria is using almost all its renewable fresh water resources which is extremely unsustainable in the long run. Without increasing their marginal water capacities, reducing water losses and controlling their demand, the country is sure to experience severe water stress within the next ten years. It cannot be assumed that the future geo-political situation will change and drastically alter the water balances. Climate change and unpredictable weather patterns could also exacerbate the situation in the future. The north-eastern part of the country is especially vulnerable to severe water stress during periods of low rain. Special care also needs to be taken of Barada basin where the capital and political center is located in the interests of social harmony in the country.⁴⁴

Recommendations and Conclusions:

Expectations indicate NES is on the threshold of a humanitarian and environmental catastrophe with the possibility of COVID-19 pandemic outbreak in Self-Administration areas and in particular in camps in their areas of control, based on the previous data for the context in which the democratic Self-Administration areas in NES are undertaking and in light of the continued weaponization of water by the Turkish government in the face of local population. Moreover, making the region thirsty for water and controlling its water resources, the inability of the Self-Administration and local organizations to secure adequate and proper water resources for civilians, the displaced and refugees residing in camps, and in the absence of pressure on the Turkish government to stop using water in the military and political conflict.

Based on this, the international community has a historical and humanitarian responsibility for immediate and rapid intervention and response to support the local authorities and relevant civil organizations, as contributing partners to providing water sources for civilians in NES, which can be carried out through:

- 1- Press Turkish authorities for their commitment to the protocol signed with the Syrian government on Syria's share of Euphrates water and cease water exploitation as a weapon against civilians in NES. As well as, instant pumping back of water.
- 2- Support NES camps with the necessary preventive supplies to combat Corona virus pandemic.
- 3- Provide support to local humanitarian civil organizations operating in camps.
- 4- Support local civic organizations in awareness programs related to Corona Virus pandemic.
- 5- Support the provision of additional water sources in Al-Hasaka governorate and in a distance from conflict environment.

⁴⁴ The Bule PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf



References:

- 1- 11 Water geopolitics: Legal Basis for Distribution of Shared water in the Arab World, by Muhammad Ahmad Aqla al-Momani
https://books.google.com.sa/books?id=DwnhDwAAQBAJ&pg=PT80&lpg=PT80&dq=%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87%20%20%D8%AA%D8%B1%D9%83%D9%8A%D8%A7%20%D9%88%D8%B3%D9%88%D8%B1%D9%8A%D8%A7&source=bl&ots=zWwRQ3pl_q&sig=ACfU3U1W1QvRfZBx16OaYH15FYzIeyBrxQ&hl=en&sa=X&ved=2ahUKEwjmcig68jqAhVSjqQKHQbnCAEQ6AEwC3oECAgQAQ&fbclid=IwAR293pco2y7OqC-lijNzsxD5Wwx3h2k3tz6m4CqDOPeGVjnZeouTCBiY6Q#v=onepage&q&f=false
- 2- Interruption to key water station in the northeast of Syria puts 460,000 people at risk as efforts ramp up to prevent the spread of Coronavirus disease <https://www.unicef.org/mena/ar/%D8%AA%D9%88%D9%82%D9%81-%D8%B6%D8%AE-%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87-%D9%85%D8%AD%D8%B7%D8%A9-%D8%A7%D9%84%D8%B1%D8%A6%D9%8A%D8%B3%D9%8A%D8%A9-%D8%B4%D9%85%D8%A7%D9%84-%D8%B4%D8%B1%D9%82-%D8%B3%D9%88%D8%B1%D9%8A%D8%A7-%D9%8A%D8%B9%D8%B1%D8%86-460000-%D8%B4%D8%AE%D8%B5-%D9%84%D9%84%D8%AE%D8%B7%D8%B1-%D9%83%D9%88%D8%B1%D9%88%D9%86%D8%A7/%D8%A7%D9%84%D8%A8%D9%8A%D8%A7%D9%86%D8%A7%D8%AA-%D8%A7%D9%84%D8%B5%D8%AD%D9%81%D9%8A%D8%A9>
- 3- The Bule PEACE Rethinking Middle East Water file:///C:/Users/Jin-pc/Desktop/The-Blue-Peace-Report_en.pdf
- 4- Special Agreements on Sharing Waters of Al-Khasieb Crescent Rivers between Conflict, Integration and Natural Right 4/2 <https://www.al-binaa.com/archives/article/47367>
- 5- Turkey: Water War against Syrian Kurdistan <https://daraj.com/4869/>
- 6- Erdogan Announces the Launch of "Spring of Peace" Turkish Operation in North Syria <https://www.france24.com/ar/20191009-%D8%B3%D9%88%D8%B1%D9%8A%D8%A7-%D8%B4%D8%B1%D9%82-%D8%A7%D9%84%D9%81%D8%B1%D8%A7%D8%AA-%D8%A7%D9%84%D8%A3%D9%83%D8%B1%D8%A7%D8%AF-%D8%B9%D9%85%D9%84%D9%8A%D8%A9-%D8%B9%D8%B3%D9%83%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B1%D8%AF%D9%88%D8%BA%D8%A7%D9%86-%D9%86%D8%A8%D8%B9-%D8%A7%D9%84%D8%B3%D9%84%D8%A7%D9%85-%D8%AA%D9%84-%D8%A3%D8%A8%D9%8A%D8%B6-%D8%B1%D8%A3%D8%B3-%D8%A7%D9%84%D8%B9%D9%8A%D9%86>
- 7- Turkey Continues to Weaponize Allok Water amid COVID-19 Outbreak in Syria <https://stj-sy.org/ar/%d8%aa%d8%b1%d9%83%d9%8a%d8%a7-%d8%aa%d9%83%d8%b1%d8%a7%d8%b1-%d8%aa%7%d8%b3%d8%aa%d8%ae%d8%af%d8%a7%d9%85-%d9%85%d9%8a%d8%a7%d9%87-%d8%b9%d9%84%d9%88%d9%83-%d9%83%d8%b3%d9%84%d8%a7%d8%ad-%d8%ae/>
- 8- Electricity in Exchange for Water: A Struggle that Northeastern Syria's Population has to live with
- 9- Online Interview with Sozdar Ahmad, the Joint Head of Water Directorate in Al- Hasakah Region of the Democratic Self-Administration in NES
- 10- Al-Hasaka: 20 Wells of Al-Hamma Station will be in Service in Less than One Month https://www.npasyria.com/blog.php?id_blog=11236&sub_blog=12&name_blog=20%_عشر:_20%_مياه الحسكة
- 11- How did Al-Hasaka People Overcome Water Crisis? What are Self-Administration Solutions? <http://hawarnews.com/ar/haber/kyf-ajtaz-ahaly-alhskh-azmh-almyah-wma-hy-hlwl-alidarhd89f-h31531.html>
- 12- Online Interview with Aheen Swaied, Joint Head of Energy Commission, in Al-Jazeera Region
- 13- COVID-19 in North and Eastern Syria: Threat, Response and Challenges <https://www.asocenter.org/ar/node/500>
- 14- Turkey/Syria: Weaponizing Water in Global Pandemic? <https://www.hrw.org/ar/news/2020/03/31/340129>
- 15- Turkey/Syria: Weaponizing Water in Global Pandemic? <https://www.hrw.org/ar/news/2020/03/31/340129>
- 16- Food Insecurity in War-Torn Syria: From Decades of Self-Sufficiency to Food Dependence <https://carnegie-mec.org/2015/06/04/ar-pub-60866>





Water

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www.asocenter.org
info@asocenter.org
(+964) 751-4413372

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