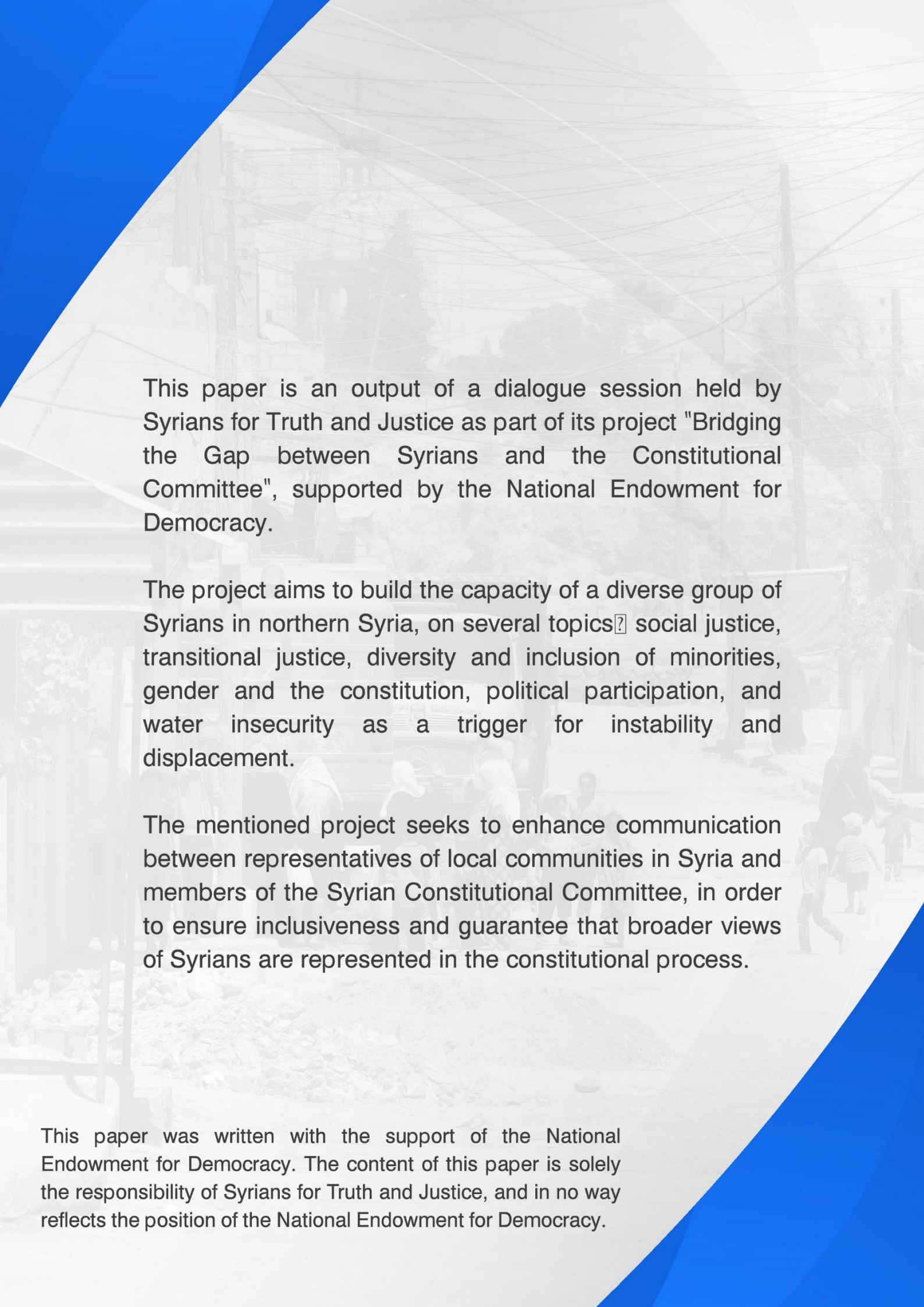


▶ Water Insecurity in North-Eastern Syria: A Trigger for Instability and Displacement



Water Insecurity in North-Eastern Syria: A Trigger for Instability and Displacement

An impartial and independent monitoring mechanism for transboundary water resources shared by Syria, Türkiye, and Iraq must be established to oversee the three States' compliance with signed agreements and the provisions of international law



This paper is an output of a dialogue session held by Syrians for Truth and Justice as part of its project "Bridging the Gap between Syrians and the Constitutional Committee", supported by the National Endowment for Democracy.

The project aims to build the capacity of a diverse group of Syrians in northern Syria, on several topics: social justice, transitional justice, diversity and inclusion of minorities, gender and the constitution, political participation, and water insecurity as a trigger for instability and displacement.

The mentioned project seeks to enhance communication between representatives of local communities in Syria and members of the Syrian Constitutional Committee, in order to ensure inclusiveness and guarantee that broader views of Syrians are represented in the constitutional process.

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Executive Summary

In conflict zones, potential disruptions in public service systems and weak State performance tend to have various ramifications for the population. In addition to limited access to a wide range of essential services, communities are threatened with scarcity of drinkable water and poor sanitation as consequences of damaged and/or attacked infrastructure or the weaponization of water by parties to the conflict.

Notably, disruptions in service systems are inevitable in countries struggling in the throes of protracted conflicts. This is particularly true in Syria, where most vital service sectors are incapacitated. Healthcare is one of the most severely impacted sectors. Therefore, high rates of disease incidence and mortality are a typical result of attacks on water, sanitation, and hygiene systems.

In north-eastern Syria (NES), the population continues to suffer from the woes of such repeated attacks, which target an area rendered fragile by the exceptional circumstances of water insufficiency and inadequate sanitation and hygiene. Both natural and conflict-related drivers are diminishing the NES water supplies and underlying the acute water crisis it is battling against. The crisis is a manifestation of climate change, a chronic decline in groundwater levels, the low flow of the Euphrates River, and the systematic use of the Alok Water Pumping Station as a weapon in the ongoing dispute.¹ Notably, the weaponization of water is not limited to the NES. In north-western Syria (NWS), in al-Bab city, the local community is denied access to allocations from the Ayn al-Bayda Water Pumping Station, which the Syrian government has been cutting off since 2017.²

Additionally, the natural triggers of the NES water crisis are plaguing the entire Syrian landscape. Similar to several countries in the Middle East and North Africa, Syria is struggling with low rainfall. Syria's average annual precipitation rate is less than 250 mm³ while 60 percent of its waters originate outside its borders.⁴ Syria shares five of its key rivers with neighboring countries, which has led to a history of cooperation and tension over the management of these rivers.

Syria's dearth of water does not end at the surface. Agricultural water mismanagement and a lack of sustainable practices have always been associated with fading groundwater, making the country susceptible to droughts. Over the past few decades, Syria faced frequent droughts, which were also induced by hydrologic changes. Syria suffered one of its most severe droughts between 2006 and 2010 and witnessed yet another and more intense in the summer of 2021.

¹ "Turkey Continues to Weaponize Alok Water amid COVID-19 Outbreak in Syria", STJ, 28 April 2022 (Last visited: 22 September 2023). <https://stj-sy.org/en/turkey-continues-to-weaponize-alok-water-amid-covid-19-outbreak-in-syria/>

² "Al-Bab's Thirsty: Is the Syrian Government Using Dehydration as a Punishment?", STJ, 28 July 2023 (Last visited: 22 September 2023). <https://stj-sy.org/en/al-babs-thirsty-is-the-syrian-government-using-dehydration-as-a-punishment/>

³ "Syria Average Precipitation", Trading Economics, last updated September 2023. <https://tradingeconomics.com/syria/precipitation>

⁴ Tabor, R., Almhawish, N., Aladhan, I., Tarnas, M., Sullivan, R., Karah, N., Zeitoun, M., Ratnayake, R., & Abbara, A. (2023, February 4). Disruption to water supply and waterborne communicable diseases in northeast Syria: a spatiotemporal analysis. *Conflict and Health*, 17(1). <https://doi.org/10.1186/s13031-023-00502-3>

The extended dry spells adversely affected livestock breeding, as cattle lacked access to water and pastures. This is pushing the pastoral communities to "the brink of poverty".⁵

Before the conflict, 90 percent of Syria's population had access to drinkable water.⁶ However, since the start of the conflict, dwindling energy supplies, consumables, and funds and the displacement of trained professionals have led to a significant malfunction in water infrastructure and inadequate resource reach. The situation only worsened with the direct and indirect attacks on water infrastructure. UNICEF recorded 46 attacks on water facilities in Syria in 2019 alone.⁷

According to recent data, nearly 60 percent of Syria's population does not have stable access to safe drinking water.⁸ Due to this, civilians turned to "informal or private water providers such as water trucks," which "has led to significant economic burdens on civilians, with Syrian households estimated to spend a quarter of their income on water."⁹

The repercussions of constrained access to water stretch beyond the financial aspect. With the few allocations they are provided, Syrian families resort to rationing. Self-imposed controls on water usage are affecting hygiene practices, including shower times. In tandem, families are heavily relying on untreated wells and truck waters, rendering them defenseless against epidemics and skin diseases. In the NES, conditions such as diarrhea, when coupled with food insecurity,¹⁰ cause the rates of malnutrition to climb.

Notably, defective Syrian laws also play a critical role in aggravating the water crisis and amplifying the effects of its natural and conflict-related stimuli. Domestic legislation offers only little guidance on water management. The Constitution has no articles that expressly address water or food security. Therefore, the Syrian Constitutional Committee (SCC) has to pave the path for developing water-specific legislation, establish a water executive body, and grant that body legal powers to implement its tasks, including rationalization, protection, and conservation of existing water resources. Additionally, relevant legislation should provide grounds for consistent awareness campaigns, led by schools, the media, and the government, that shed light on the necessity of safeguarding and preserving available resources.

Addressing the international aspects of the Syrian water crisis, the competent authorities, in turn, should call upon the relevant international institutions and treaties to establish an

⁵ "We fear more war, we fear more drought," PAX for Peace, 16 February 2022 (Last visited: 22 September 2023). <https://paxforpeace.nl/publications/we-fear-more-war-we-fear-more-drought/>

⁶ Tabor, R., Almhawish, N., Aladhan, I., Tarnas, M., Sullivan, R., Karah, N., Zeitoun, M., Ratnayake, R., & Abbara, A. (2023, February 4). Disruption to water supply and waterborne communicable diseases in northeast Syria: a spatiotemporal analysis. *Conflict and Health*, 17(1). <https://doi.org/10.1186/s13031-023-00502-3>

⁷ "UNICEF Executive Director Henrietta Fore's remarks at the Security Council briefing on the humanitarian situation in Syria", UNICEF, 29 March 2021. <https://www.unicef.org/mena/press-releases/unicef-executive-director-henrietta-fores-remarks-security-council-briefing>

⁸ Tabor, R., Almhawish, N., Aladhan, I., Tarnas, M., Sullivan, R., Karah, N., Zeitoun, M., Ratnayake, R., & Abbara, A. (2023, February 4). Disruption to water supply and waterborne communicable diseases in northeast Syria: a spatiotemporal analysis. *Conflict and Health*, 17(1). <https://doi.org/10.1186/s13031-023-00502-3>

⁹ Ibid.

¹⁰ "Organization: Over 16,000 Children have Malnutrition in Northeastern" (in Arabic), Swiss Info, November 2022 (Last visited: 22 September 2023). <https://www.swissinfo.ch/ara/afp/%D8%A3%D9%83%D8%AB%D8%B1-%D9%85%D9%86-16-%D8%A3%D9%84%D9%81-%D8%B7%D9%81%D9%84-%D9%8A%D8%B9%D8%A7%D9%86%D9%88%D9%86-%D9%85%D9%86-%D8%B3%D9%88%D8%A1-%D8%AA%D8%BA%D8%B0%D9%8A%D8%A9-%D9%81%D9%8A-%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%85%D9%86%D8%B8%D9%85%D8%A9-/48046210>

impartial and independent monitoring mechanism for transboundary water resources shared by Syria, Türkiye, and Iraq to oversee the three States' compliance with signed agreements and the provisions of international law and support dialogue between stakeholders to help them reach a sustainable settlement on the equitable and reasonable utilization of shared watercourses.

Introduction

The criteria and requirements established by the United Nations Environment Programme (UNEP) constitute a frame of reference for priority issues in all areas related to the environment. Commitment to these requirements is a prerequisite for achieving environmental safety and security. UN-Water defines water security as "[t]he capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters [drought and floods], and for preserving ecosystems in a climate of peace and political stability."¹¹

Viewing the water situation in Syria, it transpires that the country lacks all the factors that usually enhance a population's water security and the peace and political stability it brings about. Besides climate-related drivers, which led to extended droughts, and the misgovernance of existing waters, the use of water as a military and/or political tool for establishing dominance over territories inhabiting a plurality of races and religions posed a multi-dimensional threat to affected regions. Such control-aimed instrumentalization not only threatens to deepen the water crisis by hampering access to sufficient water allocations for agriculture and household uses, but it also exceeds that to becoming a trigger for local communities' migration and displacement and a factor tearing up the interrelationships existing between members of these communities.¹²

Therefore, finding solutions to safeguard locals' sustainable access to sufficient water is regarded as a primary means to realize stability and limit migration. Solutions, in their turn, lie in a deep investigation into the water crisis's social, economic, and political dimensions concurrently.

Within this context, this brief report aims to shed light on the evolution of Syria's water status before and throughout the conflict to identify the factors underlying the country's present water security crisis. Syria's future water policy should centralize around these factors to end the depletion of water resources and reduce social tension, apart from the political and military agendas of the parties involved in the conflict.

This report primarily builds on the outputs of a workshop organized by Syrians for Truth and Justice (STJ) under its project "Bridging the Gap between Syrians and the SCC". The event addressed water security as a modern concept in international relations. Furthermore, it

¹¹ UN Water, 2013.

https://www.unwater.org/sites/default/files/app/uploads/2017/05/unwater_poster_Oct2013.pdf

¹² Haj Asa'ad, A. (August 2020). Water Security Challenges in Syrian Jazira: Governance of Water Shortage, from Mismanagement to Political Settlements (in Arabic). *AlSharq Strategic Research* (Last visited: 22 September 2023). <https://research.sharqforum.org/ar/2022/10/24/%D8%A7%D9%84%D8%A3%D9%85%D9%86-%D8%A7%D9%84%D9%85%D8%A7%D8%A6%D9%8A-%D9%81%D9%8A-%D8%A7%D9%84%D8%AC%D8%B2%D9%8A%D8%B1%D8%A9-%D8%A7%D9%84%D8%B3%D9%88%D8%B1%D9%8A%D8%A9/>

touched on international legislation and treaties on non-navigational watercourses governing the relations of riparian States, with a focus on the water relationship between Syria and Türkiye and the means to manage the problems arising from this relationship. The workshop also discussed Syrian laws and legislation on water security and the extent to which they contribute to promoting water security in the country.

In addition to delving into these three topics, the workshop reviewed the status of water security in Syria during the conflict, the impact actors' practices had on water security, and how some parties in the conflict used water security as a pressure tool against other parties that lacked command over existing water resources. Based on the extensive discussion, the workshop yielded recommendations for the SCC and international entities concerned with water issues, inscribed into the report's beginning. The goal of these suggestions is to help affected communities emerge from the water crisis that has beset all of Syria but which has hit the NES particularly hard.

In addition to inputs from the workshop, this report draws on several studies and reports on water security in general and others specific to the water dilemma in Syria and the NES.

Water Crisis in the NES

The NES (al-Jazira) relies on three water sources: rainfall, groundwater, and rivers. These sources cover the needs of nearly 4,800,000 beneficiaries, among them over half a million internally displaced people (IDPs).¹³

Notably, six key rivers traverse the region:

River	Total length and Span in Syria
Euphrates	2280/610 km
Tigris	1718/50 km
Khabur	477/402 km
Jarjab	78/26 km
Zarkan	125/45 km
Jaghjagh	124/100 km

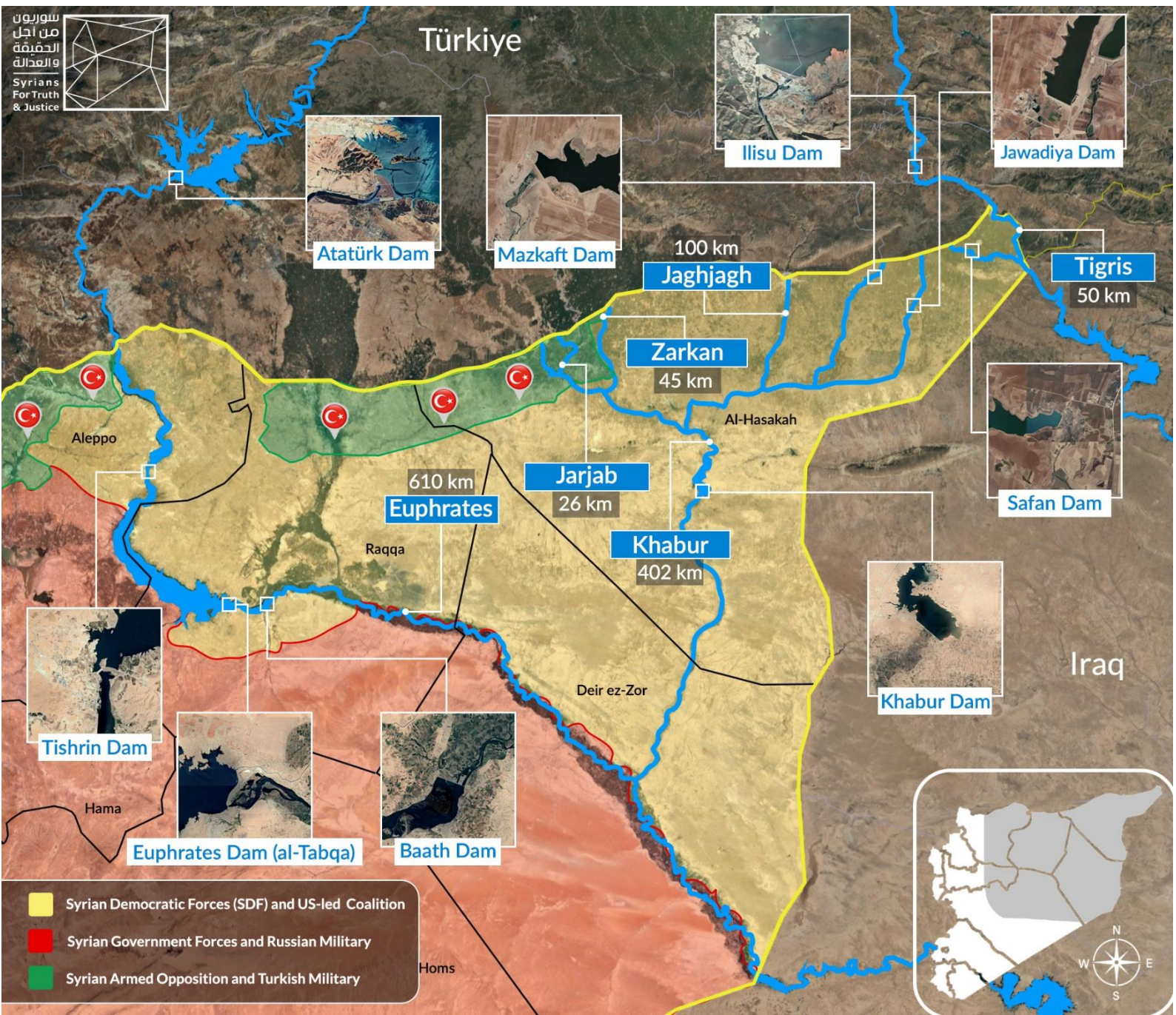
For storage and retention of rain and water from the upstream country, several dams dot these rivers, notably the Euphrates Dam (also al-Tabqa or al-Thawra), Khabur Dam, Safan Dam, Jawadiya Dam, and Mazkaft Dam.

In 2023, precipitation rates in al-Hasakah province were estimated to be 60 percent lower than the average documented over the previous three years,¹⁴ reflecting the drought warning issued by the Global Drought Observatory (GDO) for eastern Syria in April 2021.¹⁵

¹³ "Allegation Letter Addressed to United Nations Special Procedures Regarding the Water Crisis in Northeast Syria", STJ, 14 July 2023 (Last visited: 22 September 2023). <https://stj-sy.org/en/allegation-letter-addressed-to-united-nations-special-procedures-regarding-the-water-crisis-in-northeast-syria/>

¹⁴ "Drought in Syria and Iraq - April 2021", GDO, 22 April 2021. https://edo.jrc.ec.europa.eu/documents/news/GDODroughtNews202104_Syria_Iraq.pdf

¹⁵ "Climate Change its Causes & Consequences", HDC, https://www.hdcorganisation.com/files/ugd/5f262a_e154c459a4d34bc58b8ba2b38a0914ca.pdf



Map by STJ of major transboundary rivers passing through the NES and dams constructed on these rivers in Syria and Türkiye.

In tandem with the poor rainfall in al-Hasakah, the entire NES experienced a significant decline in groundwater levels. Data collected from November 2021 to October 2022 revealed that some areas of the region experienced levels that were five times lower than usual, relative to the long-term average.¹⁶

Notably, the water crisis has had adverse impact on the agricultural, animal farming, and energy sectors. According to data collected in 2021, cultivated land dropped to 53 percent due to a lack of water supplies and farmer migration. The agricultural sector's recession has had consequences for the livestock sector. Animal farming declined by 39 percent in 2020 compared to 2008, owing to the difficulty of obtaining feed and veterinary treatments.¹⁷ Furthermore, the Euphrates River's low levels have had disastrous implications for the output of hydroelectric dams, whose power generation capacities have shrunk by more than 66 percent. The average amount of energy produced has decreased from 415 MW in 2020 to 141 MW in 2021.¹⁸

In addition to low precipitation rates and drought, the decline in river water levels that feed the region is also attributed to the fact that all of these rivers originate outside the Syrian border, specifically from sources in Türkiye. Due to this, Türkiye exercises control over the rates of flow streaming to the Syrian territories.

Water Security in International Legislation and Treaties

Today, more than ever, water is at the center of international policy—especially given the overall depletion of global water resources and predictions of a worldwide water paucity under which there would not be enough water for everyone on Earth. Other factors contribute to the prioritization of water-related issues, including potential water-scarcity-driven disputes between countries that would seek to meet the needs of their communities at the expense of others. While it should come as no surprise that regions with fewer waters would be the most likely locations of the fiercest international water conflicts. Recurrent references to "water wars" around the world, including in the Middle East, are an indicator of the seriousness of such predictions and the violence they seem to prophesy.¹⁹

To address potential problems in cases of dispute between States, numerous international conventions and treaties have been written and adopted to govern international relations. However, on water issues— particularly in the domain of humanitarian needs—international law remains poor. The 1997 Convention on the Law of Non-navigational Uses of International Watercourses (UN Watercourses Convention) is the only international convention establishing the principles and rules for cooperation between States on the management, use, distribution, and protection of international watercourses. Syria and Iraq are parties to the Convention, which entered into force in 2014.

¹⁶ "Current Situation of the Water Crisis in Northeast Syria and its Humanitarian Impacts", REACH, 26 June 2023. <https://reliefweb.int/report/syrian-arab-republic/current-situation-water-crisis-northeast-syria-and-its-humanitarian-impacts-july-2023-northeast-syria>

¹⁷ "Water Crisis and Its Repercussions", HDC, https://www.hdcorganisation.com/files/ugd/5f262a_ad65c5b99b39498381a51b14cf5a66d7.pdf

¹⁸ Ibid.

¹⁹ Obaidi, A., (2010). Problems of Syria-Turkey Water Relations (in Arabic), *Magazine of Education and Knowledge*, 17(2). P. 58.

There is also the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki Convention),²⁰ overseen by the United Nations Economic Commission for Europe (UNECE). In 2003, the UNECE ratified that all State Parties to the UN Watercourses Convention can accede to the Helsinki Convention. In the Middle East, Iraq was the first to assent to the treaty. Notably, Article 5 of the UN Watercourses Convention provides:²¹

1. **Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.**
2. **Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.**

Additionally, the Convention's Article 7, on the obligation not to cause significant harm, prescribes that "**Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.**" Besides these two articles, several others have been inscribed into various UN treaties, which intersect as they address water-related issues. Such treaties include the United Nations Framework Convention on Climate Change,²² and the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa,²³ backed by international law and customary international law, both of which advocate for an equitable sharing of watercourses.²⁴

Despite these articles, all promoting equitable use of shared watercourses, the treaties framing them remain non-binding to State Parties and, naturally, non-Party States. The non-binding nature of treaties and agreements on shared waters is at the heart of the NES water struggles. Despite the bilateral agreements between Syria and Türkiye, the latter maintains hegemony over the sources of the major rivers flowing through and directly feeding the region. Türkiye—especially after it has engaged in the conflict—also continues to weaponize water to break the population's will and force its policies on the region.

²⁰ Frequently Asked Questions on the 1992 Water Convention, UNECE, September 2020:

<https://unece.org/info/publications/pub/21771>

²¹ Convention on the Law of the Non-navigational Uses of International Watercourses. Adopted by the General Assembly of the United Nations on 21 May 1997. Entered into force on 17 August 2014. See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49). https://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf

²² United Nations Framework Convention on Climate Change. Adopted on 9 May 1992. Entered into force on 21 March 1994. <https://www.wipo.int/wipolex/en/treaties/details/268>

²³ United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa. Adopted 22 December 2000. Entered into force on 6 September 2001. <https://www.wipo.int/wipolex/en/treaties/details/937>

²⁴ Shalal, S. (2020). *The Extent of Application of Frames on the Use of International Watercourses for Non-navigational Purposes* [in Arabic Master's Thesis, Middle East University].

The first Syria-Türkiye water agreement dates back to October 1921,²⁵ signed by the latter and France as the government of the mandate for Syria. The agreement established Aleppo's right to use the Euphrates' water to cover the area's needs.

In July 1923, Türkiye, France, and Britain signed the Treaty of Lausanne,²⁶ which aimed at preserving the interests and rights each of the three States acquired. The treaty was the first multilateral agreement to dedicate independent text to the Euphrates and Tigris rivers. This was Article 109, which prescribed that "[i]n default of any provisions to the contrary when as the result of the fixing of a new frontier the hydraulic system (canalization, inundation, irrigation, drainage, or similar matters) in a State is dependent on works executed within the territory of another State . . . an agreement shall be made between the States concerned to safeguard the interests and rights acquired by each of them." From the text of the article, it is clear that the treaty is binding and applicable to Türkiye, Syria, and Iraq.

In May 1926, Türkiye and France signed yet another agreement. Called the Franco-Turkish Treaty of Friendship, Article 13 of this pact reaffirmed the provisions of the October 1921 agreement on Syria's right to the Queiq River and Aleppo's right to utilize the Euphrates' waters.²⁷ A fourth Franco-Turkish treaty was signed in 1929. It established the right of nomadic populations to utilize water on both sides of the border. Türkiye breached both agreements.²⁸

In May 1930, Türkiye and France entered another agreement. It provided for Syria and Türkiye's equal rights to utilize the Trigris water because the river is a shared watercourse. This also applies to the Euphrates River.²⁹

Involving Türkiye and Iraq, another friendship treaty followed in 1946. Protocol I of the treaty was dedicated to regulating the flows of the Euphrates and Tigris rivers. The treaty was binding on Türkiye. Another agreement between the two States was signed in 1971, called the Protocol on Economic and Technical Cooperation.³⁰

In 1953, the Syrian and Turkish governments held negotiations on the waters of the Jaghjagh River and agreed on exactly equal shares. However, Türkiye stalled on signing the agreement and proceeded with a project that culminated in its complete control over the river. In early July 1958, Türkiye blocked the river's waters entirely. Syria had access only to the river's overflowing waters in the winter.³¹ In the 1960s, Türkiye established hegemony over the largest watercourses passing through Syria, notably the Tigris and Euphrates, as it started building dams on the latter to generate electricity.³²

²⁵ The Franco-Turkish Agreement Signed at Angora on October 20, 1921.

https://web.archive.org/web/20170517110648/http://www.hri.org/docs/FT1921/Franco-Turkish_Pact_1921.pdf

²⁶ Lausanne Peace Treaty Part IV Communications and Sanitary Questions, Republic of Türkiye -Ministry of Foreign Affairs. <https://www.mfa.gov.tr/lausanne-peace-treaty-part-iv-communications-and-sanitary-questions.en.mfa>

²⁷ Rasoul, R. (2018). Water Security in Syrian Jazira (in Arabic). *Al-Furat Center for Studies*.

<https://firatn.com/?p=476>

²⁸ Ibid

²⁹ Ibid.

³⁰ Special agreements on sharing the waters of the Fertile Crescent rivers between conflict, integration, and natural right 4/2 (in Arabic), *al-Binaa*. <https://www.al-binaa.com/archives/article/47367>

³¹ Daoud, I. (1959). *Syrian Jazira between the Past and the Present* (in Arabic). Al-Taraqi Publishing House. P. 365.

³² Special agreements on sharing the waters of the Fertile Crescent rivers between conflict, integration, and natural right 4/2 (in Arabic), *al-Binaa*. <https://www.al-binaa.com/archives/article/47367>

In 1977, as Türkiye announced the Southeastern Anatolia Project (GAP) and installed dams on the Euphrates and Tigris, Türkiye, Syria, and Iraq declared the establishment of the Joint Regional Committee for Coordination of Cooperation on water-related issues.

Following the committee, Syria and Türkiye signed a Protocol on Matters Pertaining to Economic Cooperation in July 1987.³³ The protocol provided that "[d]uring the filling up period of the Ataturk Dam reservoir and until the final allocation of the waters of the Euphrates among the three riparian countries, the Turkish side undertakes to release a yearly average of more than 500 M³/Sec. five hundred cubic meters per second at the Turkish-Syrian borders, and in cases when the monthly flow falls below the level of 500 M³/Sec. five hundred cubic meters per second, the Turkish side agrees to make up the difference during the following month. The two sides shall work together with the Iraqi side to allocate the waters of the rivers Euphrates and Tigris in the shortest possible time." In 1994, Syria registered the agreement concluded with the Turkish government at the UN to guarantee the minimum right of Syria and Iraq to the waters of the Euphrates River,³⁴ but Iraq objected to the agreement citing insufficient shares.

In an April 1990 agreement, Syria and Iraq agreed on the respective shares of 42 percent and 58 percent of the Euphrates' waters at the Turkish-Syrian borders.³⁵

In its turn, the 1998 Adana Agreement included clauses on the water problems between Syria and Türkiye,³⁶ which they sought to address in 2008. During the initial talks, Türkiye, Syria, and Iraq agreed to establish an institution to work toward solving water disputes. However, the agreement saw no progress after the 2011 sweeping anti-government protests in Syria. Agreement negotiations were especially neglected by Türkiye.

Türkiye failed to adhere to any of the treaties and agreements it signed with Syria over shared watercourses. Türkiye even uses these agreements as a pressure card against the Syrian government now and then—especially as it shows an inconsistent stance on the issue of international rivers. Türkiye refuses to attribute to the rivers it shares with Syria and Iraq the status of international rivers it bestows on the Maritsa River, which originates in Bulgaria, trails in Türkiye, and is shared with Greece. Instead, Türkiye treats the rivers that Syria and Iraq also have access to as "national rivers" and subject to Turkish sovereignty, classifying them as transboundary watercourses while also refusing to acknowledge that the Euphrates and Tigris flow through two separate basins, insisting they share the same drainage area. Türkiye adopted this classification in a report the Turkish Embassy in Cairo filed with the Council of the Arab League for its 18th session in 1996. Furthermore, even though it is not a State Party to the UN Watercourses Convention, Türkiye holds to its Article 5, Paragraph 3, which provides that "[w]here a watercourse State considers that adjustment and application of the provisions of the present Convention is required because of the characteristics and uses of a particular international watercourse, watercourse States shall consult with a view to negotiating in good faith for the purpose of concluding a watercourse agreement or agreements." Therefore,

³³ Protocol on Matters Pertaining to Economic Cooperation between the Syrian Arab Republic and the Republic of Turkey, signed on 17 July 1987. <http://gis.nacse.org/tfdd/tfdddocs/1086ENG.pdf>

³⁴ Protocol on Matters Pertaining to Economic Cooperation: Signed at Damascus on 17 July 1987. No. 30069. Syrian Arab Republic and Turkey, United Nations Office of Legal Affairs, *UN i-Library*. DOI: <https://doi.org/10.18356/350747e9-en-fr>

³⁵ Khzaim, J. (2020). Water: a weapon used by Türkiye against the people of northern and eastern Syria (in Arabic). *ASO Consultancy and Strategic Studies*. PP.5-6. <https://www.asocenter.org/ar/node/601>

³⁶ Special agreements on sharing the waters of the Fertile Crescent rivers between conflict, integration, and natural right 4/2 (in Arabic), *al-Binaa*. <https://www.al-binaa.com/archives/article/47367>

Türkiye alleges that Syria and Iraq's problem lies in the fact that they have large unproductive areas that have no agricultural economic viability, despite which both insist that Türkiye allocates them water.³⁷

Moreover, Türkiye claims that its stance is grounded in the position of Stephen C. McCaffrey, former special rapporteur for the UN International Law Commission, who stresses that **"the downstream State of the international river, which has developed its water resources before other States cannot prevent the upstream State from developing its resources later on under the pretext that the development would bring it harm [. . .]"**. This stance must be evaluated in light of the fact that both Syria and Iraq started constructing dams on the Euphrates River before Türkiye.³⁸

However, Türkiye's determination to classify the Euphrates and Tigris as transboundary watercourses and refusal to identify them as international rivers, thus their being subjects to international law, contradicts its approach during the bilateral and trilateral talks it had with France and Britain first and then with Syria and Iraq. These negotiations demonstrated that Türkiye bestows an international character on the two rivers' basins. Beyond its blatantly inconsistent attitude in river discussions, the international doctrine did not support Türkiye's adopted definition of transboundary rivers. The rejection of the definition was especially clear when Türkiye attempted to join the European Union (EU). Environmental issues, such as water management, are still one of the main concerns of EU law. This law spells out specific rules for how each country must handle water and requires EU members living along river basins to work together to reach the goals set by the EU's environmental directives. Türkiye's transboundary approach to water management was, therefore, a key subject in accession negotiations to ensure it complies with European environmental and water gains.³⁹

In addition to the conventions and treaties listed above, there are several other international legal instruments, including those that reflect customary international law and govern international relations concerning international watercourses. Furthermore, the state of armed conflict, ongoing since 2011 and in which Türkiye is involved, invokes relevant provisions of International Humanitarian Law (IHL). Under IHL, inscribed into the Geneva Conventions Additional Protocol I (Protection of Victims of International Armed Conflicts), attacks on 'objects indispensable to the survival of the civilian population', (including water infrastructure), are prohibited.⁴⁰ The prohibition is further established in Principle 12 of the Geneva List of Principles on the Protection of Water Infrastructure⁴¹ and in Rule 10 of the ICRC's Guidelines on Protection of the Environment in Armed Conflict,⁴² as well as in Article 51 of the 2004

³⁷ Shalal, S. (2020). *The Extent of Application of Frames on the Use of International Watercourses for Non-navigational Purposes* [in Arabic Master's Thesis, Middle East University]. P. 79.

³⁸ Ibid.

³⁹ Kibaroglu, A., Scheumann, W., & Kramer, A. (2011, August 19). *Turkey's Water Policy*. Springer Science & Business Media. P. xxvi.

⁴⁰ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977. ICRC. <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977>

⁴¹ The Geneva List of Principles on the Protection of Water Infrastructure, Geneva Water Hub, Geneva, 2019. https://www.genevawaterhub.org/sites/default/files/atoms/files/gva_list_of_principles_protection_water_infra_w ww.pdf

⁴² Guidelines on protection of natural environment in armed conflict, ICRC, 25 September 2020. <https://www.icrc.org/en/document/guidelines-protection-natural-environment-armed-conflict-rules-and-recommendations-relating>

cases of water resource misuse. There is also the 1985 Wells Law No. 165, specific to the use of public surface and groundwater.⁵⁰ The law conditioned the use of water on authorizations. However, due to corruption within government administrations, government officials used the authorizations for their personal interests.

In addition to deficient water laws, Syria has a dearth of national water strategies and plans. "Public finance policies in Syria have focused in the past decades on supply-led water development. This has meant securing water supplies through building storage capacity and expanding water and—to a lesser extent—sanitation services. High levels of storage capacity and wide coverage of water supply and irrigation infrastructure have led to a new set of water management issues. Almost 70% of the total public investment budget for agriculture and irrigation was spent on irrigation infrastructure (on- and off-farm)."⁵¹ Water problems were also aggravated by agricultural policies that encouraged the cultivation of low-value and water-consuming grains.

Furthermore, the government's treatment of drinking and irrigation water as a service and non-profit sector—having put little to no fee on water consumption—has impaired water policies dedicated to the protection of water resources and the improvement of related sectors.

Beyond poor water governance, the Syrian government sought to manage its dispute over the Euphrates River with Türkiye by exploiting the Kurdistan Workers' Party's (PKK) rebellion in the 1980s. The government attempted to reach a settlement with Türkiye over its shares of the Euphrates' waters, in return for which it had to expel the PKK's leader and designate the party as a terrorist group. This exchange materialized in several items that were added to the 1998 Adana Agreement.⁵² Notably, the aftermath of this opportunistic policy remains felt today, for Türkiye continues to weaponize water against the NES population.⁵³

After the 2011 uprising, Syria's role as a sovereign State waned. Several areas broke out of the control of the central government in Damascus and were then ruled by de facto authorities. The areas are partitioned as the NWS, administered by the Syrian Interim Government and the Salvation Government, and the NES, administered by the Autonomous Administration of North and East Syria. To the disadvantage of populations in both strips, these nascent structures have so far displayed a lack of vision in the management of water resources. While the majority of the Syrian opposition's political bodies, including the National Coalition of Syrian Revolution

[D8%B5%20%D8%A7%D9%84%D9%82%D8%A7%D9%86%D9%88%D9%86%20%D8%B9%D9%84%D9%89%20%D9%87%D8%B0%D8%A7%20%D8%A7%D9%84%D8%AC%D8%B1%D9%85](http://www.parliament.gov.sy/arabic/index.php?node=201&nid=6368&ref=tree&#:~:text=%D8%AA%D8%B9%D9%8A%D9%86%20%D9%88%D8%B2%D8%A7%D8%B1%D8%A9%20%D8%A7%D9%84%D8%A3%D8%B4%D8%BA%D8%A7%D9%84%20%D8%A7%D9%84%D8%B9%D8%A7%D9%85%D8%A9%20%D8%A8%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D9%86%D8%A7%D8%AF.%D8%A7%D9%84%D9%84%D8%A7%D8%B2%D9%85%20%D9%88%D8%A8%D8%AD%D8%B3%D8%A8%20%D8%A3%D9%88%D8%B6%D8%A7%D8%B9%20%D9%83%D9%84%20%D9%85%D9%86%D8%B7%D9%82%D8%A9)

⁵⁰ The 1985 Wells Law No. 165 (in Arabic), Syrian Arab Republic-Parliament.

<http://www.parliament.gov.sy/arabic/index.php?node=201&nid=6368&ref=tree&#:~:text=%D8%AA%D8%B9%D9%8A%D9%86%20%D9%88%D8%B2%D8%A7%D8%B1%D8%A9%20%D8%A7%D9%84%D8%A3%D8%B4%D8%BA%D8%A7%D9%84%20%D8%A7%D9%84%D8%B9%D8%A7%D9%85%D8%A9%20%D8%A8%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D9%86%D8%A7%D8%AF.%D8%A7%D9%84%D9%84%D8%A7%D8%B2%D9%85%20%D9%88%D8%A8%D8%AD%D8%B3%D8%A8%20%D8%A3%D9%88%D8%B6%D8%A7%D8%B9%20%D9%83%D9%84%20%D9%85%D9%86%D8%B7%D9%82%D8%A9>

⁵¹ "Water Management in Syria", Water in the Middle East and North Africa, 13 March 2019 (Last visited: 22 September 2023). <https://water.fanack.com/syria/water-management/>

⁵² "The Adana Agreement: Ankara and Damascus' 10 Mutual Concessions" (in Arabic), Asharq Al-Awsat, <https://aawsat.com/home/article/1561746/%C2%AB%D8%A7%D9%84%D8%B4%D8%B1%D9%82-%D8%A7%D9%84%D8%A3%D9%88%D8%B3%D8%B7%C2%BB-%D8%AA%D9%86%D8%B4%D8%B1-%D9%86%D8%B5-%D8%A7%D8%AA%D9%81%D8%A7%D9%82-%D8%A3%D8%B6%D9%86%D8%A9-10-%D8%AA%D9%86%D8%A7%D8%B2%D9%84%D8%A7%D8%AA-%D9%85%D8%AA%D8%A8%D8%A7%D8%AF%D9%84%D8%A9-%D8%A8%D9%8A%D9%86-%D8%A3%D9%86%D9%82%D8%B1%D8%A9-%D9%88%D8%AF%D9%85%D8%B4%D9%82>

⁵³ Daoudy, M. (2020). *The Origins of the Syrian Conflict*. Cambridge University Press. P. 91.

and Opposition Forces, are based in Türkiye, they failed to press Türkiye into adopting a fair approach to the distribution of the Euphrates' waters. For its part, the AANES inherited the enmity that defined the water relations between the Syrian and Turkish governments and fell under the burden of the PKK's involvement as a tool in the Syria-Türkiye dispute over the waters of the Euphrates and Tigris rivers. Türkiye constantly uses water to pressure the AANES, which, in turn, has no clear policies on water management and meeting the local community's demands for water purification, sterilization, and storage.

The Water War and Its Impact on the NES

Syria has been struggling with high water consumption since before 2011, for the successive Syrian governments have focused entirely on the economic returns of agricultural production while dedicating zero energy to environmental dimensions.⁵⁴

In 2011, experts estimated Syria's annual water consumption rates of internal renewable water resources at 160 percent, compared to 80 percent in Iraq and 20 percent in Türkiye.⁵⁵ For its part, in mid-2021, the UN warned of wide-ranging humanitarian impacts due to low water levels for millions of people in Syria due to reduced water levels, whereby over 5 million people in the NES, depending on the Euphrates River, would suffer.⁵⁶

In addition to the plummeting levels of the Euphrates River, the Khabur River—which once fed the area stretching from Ras al-Ayn/Serê Kaniyê to al-Hasakah—has thinned into a wintery stream after its springs dried up. The sources of the river are located around Ras al-Ayn/Serê Kaniyê in the al-Hasakah suburbs on the Syria-Türkiye border. The springs receded due to a multiplicity of reasons: continued and unrestrained drilling of boreholes in the river basin; the stress on both sides of the border; and the transformation of rainfed areas used as pastures into irrigated cultivation areas. The diminishing flow of the river not only denied people in towns and villages along its watercourse access to drinking and irrigation water, but it also created a shift in cultivation and animal-rearing trends. Farmers on the river banks opted for planting low-cost, unirrigated, and aromatic crops, such as truffles and cauliflowers. They also reduced the number of livestock. This triggered mass and individual migrations; "there are barely 800 people left in the villages across the Khabur River basin."⁵⁷ The same fate faced communities across the Balikh River banks.

⁵⁴ Haj Asa'ad, A. (August 2020). Water Security Challenges in Syrian Jazira: Governance of Water Shortage, from Mismanagement to Political Settlements (in Arabic). *AlSharq Strategic Research* (Last visited: 22 September 2023). <https://research.sharqforum.org/ar/2022/10/24/%D8%A7%D9%84%D8%A3%D9%85%D9%86-%D8%A7%D9%84%D9%85%D8%A7%D8%A6%D9%8A-%D9%81%D9%8A-%D8%A7%D9%84%D8%AC%D8%B2%D9%8A%D8%B1%D8%A9-%D8%A7%D9%84%D8%B3%D9%88%D8%B1%D9%8A%D8%A9/>

⁵⁵ "An Unprecedented Decrease in Euphrates River's Flow Level" (in Arabic), BBC, 19 May 2021 (Last visited: 22 September 2023). <https://www.bbc.com/arabic/middleeast-57001890>

⁵⁶ "United Nations Resident Coordinator and Humanitarian Coordinator for Syria, Imran Riza, and Regional Humanitarian Coordinator for the Syria Crisis, Muhannad Hadi - Statement on Essential Services in Syria [EN/AR]," 17 June 2021. <https://reliefweb.int/report/syrian-arab-republic/united-nations-resident-coordinator-and-humanitarian-coordinator-12>

⁵⁷ Jamous, A. (2023). Droughts Threaten Syria's Food Basket (in Arabic). *The Tahrir Institute for Middle East Policy* (Last visited: 22 September 2023). <https://timep.org/post-arabic/%d9%85%d9%88%d8%ac%d8%a7%d8%aa-%d8%a7%d9%84%d8%ac%d9%81%d8%a7%d9%81-%d8%aa%d9%87%d8%af%d8%af-%d8%b3%d9%84%d8%a9-%d8%b3%d9%88%d8%b1%d9%8a%d8%a9-%d8%a7%d9%84%d8%b2%d8%b1%d8%a7%d8%b9%d9%8a%d8%a9/>

Notably, the conflict has exacerbated the environmental problems in Syria, owing to the disregard for environmental protection policies in a variety of domains, particularly the energy industry. Oil extraction and transport are drivers of water and soil pollution. Both the water accompanying oil production and crude oil pipelines, used beyond their standard life span, are causing the contamination of agricultural land. Additionally, the private and unofficial oil refineries that have proliferated in the region since the start of the conflict are driving up rates of surface and groundwater pollution. The refineries drain their waste into nearby valleys.

Other practices contribute to rising pollution levels. These include the dumping of untreated solid waste near water sources, as is the case with the Qamishli landfill in the al-Hilaliya area, which is situated not far from a cluster of wells. There is also the disposal of untreated sewage into natural watercourses and dam lakes, as in the case of the Tell Abyad landfill, which drains into the springs of the al-Balikh River.⁵⁸

On top of the many practices serving to undermine water security and foster hostility towards the environment, Syria is also suffering the dire effects of the transformation of water into a weapon of war, especially in the NES, which areas constitute the Euphrates and Tigris rivers' basins. With this violent instrumentalization of water, control over water resources has become a strategic objective for the conflicting militaries, whereby hegemony over water supplies guarantees their strategic domination over towns and villages.

The shift towards the weaponization of water is evident in Türkiye's policies. Türkiye has repeatedly used water as a weapon and a strategic pretext to extend its presence to several areas in Syria. After the Turkish military controlled the Euphrates' Shield strip, named after its 2016 operation, Türkiye sought to provide the water and energy needs of the strip through other incursions and control over larger batches of Syrian territory. This manifested in 2018 with Operation Olive Branch, after which the Turkish military took over the Afrin region. In the aftermath of the invasion, Türkiye funneled water and electricity produced by the Maydanki Dam in Afrin to A'zaz and al-Rai in the strip.⁵⁹

This reoccurred following the 2019 Operation Peace Spring, which led to the Turkish military's control over Tell Abyad and Ras al-Ayn/Serê Kaniyê. Türkiye then seized the springs of the Khabur River and water pumping stations, including Alok. Notably, both incursions provoked large-scale internal displacements and immigration movements and were accompanied by multiple environmental violations perpetrated by the Türkiye-backed Syrian armed opposition groups, which participated in the military assaults in 2018 and 2019.⁶⁰

The seizure of the khabur's course was another factor that contributed to the river's vanishing waters. The armed groups of the Syrian National Army controlled the water movement and

⁵⁸ Haj Asa'ad, A. (August 2020). Water Security Challenges in Syrian Jazira: Governance of Water Shortage, from Mismanagement to Political Settlements (in Arabic). *AlSharq Strategic Research* (Last visited: 22 September 2023). <https://research.sharqforum.org/ar/2022/10/24/%D8%A7%D9%84%D8%A3%D9%85%D9%86-%D8%A7%D9%84%D9%85%D8%A7%D8%A6%D9%8A-%D9%81%D9%8A-%D8%A7%D9%84%D8%AC%D8%B2%D9%8A%D8%B1%D8%A9-%D8%A7%D9%84%D8%B3%D9%88%D8%B1%D9%8A%D8%A9/>

⁵⁹ Hussain, M. (2022). Searching for Clean Water in Northern Syria (in Arabic), *al-Jumhuriya* (Last visited: 22 September 2023). <https://aljumhuriya.net/ar/2022/10/18/%D8%A7%D9%84%D8%A8%D8%AD%D8%AB-%D8%B9%D9%86-%D9%85%D8%A7%D8%A1-%D9%86%D8%B8%D9%8A%D9%81-%D9%81%D9%8A-%D8%B4%D9%85%D8%A7%D9%84-%D8%B3%D9%88%D8%B1%D9%8A%D8%A7/>

⁶⁰ "Northeast Syria: Weaponizing Water During Conflict Exacerbates Humanitarian Crisis and Jeopardizes Cultural Identity and Civilians Lives", Synergy Association, 19 June 2023 (Last visited: 20 September 2023). <https://hevdesti.org/en/weaponizing-water-during-conflict-in-syria/>

installed several dirt mounds over the river's canal to block its flow toward the AANES-ran areas.⁶¹ Additionally, several agreements between Türkiye and the AANES-affiliated Syrian Democratic Forces (SDF) failed. Under the agreements, the SDF consented to extend a power line to the Mabrouka Water Station, Tell Abyad, and Ras al-Ayn/Serê Kaniyê, which Türkiye controls.⁶² In return, Türkiye had to warrant the reoperation of the often disrupted Alok Water Station and allow it to stream water to areas across al-Hasakah, which the SDF controls. None of these agreements reached fruition, even though UNICEF intermediated the negotiations and often stressed that the issue with the Alok water station was political rather than technical.⁶³

⁶¹ "Killing the Khabur: How Turkish-backed armed groups blocked northeast Syria's water lifeline", PAX, 3 November 2021 (Last visited: 22 September 2023). <https://paxforpeace.nl/news/killing-the-khabur-how-turkish-backed-armed-groups-blocked-northeast-syrias-water-lifeline/>

⁶² "Syria: Parties to Conflict Aggravate Cholera Epidemic", HRW, 7 November 2022 (Last visited: 22 September 2023). <https://www.hrw.org/news/2022/11/07/syria-parties-conflict-aggravate-cholera-epidemic>

⁶³ "Water Directorate: UNICEF Siad Alock Station's Problem is Political, Not Technical" (in Arabic), North Press, 1 August 2023 (Last visited: 22 September 2023). <https://npasyria.com/161351/>

► About Us:

Syrians for Truth and Justice (STJ) started as an idea in a co-founder's mind while attending the U.S. Middle-East Partnership Initiative's (MEPI) Leaders for Democracy Fellowship program (LDF) in 2015. The idea became a reality and flourished into an independent, non-profit, impartial, non-governmental human rights organization.

STJ's beginnings were more than humble; initially, it only reported stories of Syrians who experienced arbitrary arrest, enforced disappearance, or torture. Planted in fertile soil, the seed of this project grew into an established human rights organization licensed in the Middle East and the European Union. STJ today undertakes to detect and uncover violations of all types committed in all Syrian parts by the various parties to the conflict.

Convinced that Syria's diversity is a wealth, our researchers and volunteers serve with unflinching dedication to monitor, expose, and document human rights violations that continue unabated in Syria since 2011, regardless of the affiliation of the victims or perpetrators.



 editor@stj-sy.org

سوريون
من أجل
الحقيقة
والعدالة
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