

Dynamics of hydropolitics between Turkey and Syria: between cooperation and conflict.

In the context of scarce water resources and the use of water as a weapon in conflicts, it is necessary to observe future peace processes from an environmental perspective.

Carlos Ortega Sánchez, 13.02.2022

The shared water reserves between Turkey and Syria and their management has been implying since the 1970s a geopolitical dilemma over major resource management. During this decade, the modernization projects of Turkey, Syria and Iraq raised the first issues about the water management of the Euphrates River as a shared resource. With the rise in global temperature due to climate change, desertification and the implementation of new infrastructure, intensive agriculture and exploitation projects, the region's water reserves have come under excessive pressures. This has led to an exponential increase in vulnerability to drought and food insecurity.

Diplomatic disputes between the three governments over river management have been ongoing since the first infrastructure projects, and until 2011 these disputes were

accompanied by partial resolutions based on cooperation. However, today the disputes between the three states are still ongoing particularly due to the increasing water scarcity, the growing population and its needs as well as the lack of cooperation to solve these problems at the regional level. The war in Syria and the emergence of non-state actors fighting for control of resources has raised new dilemmas and the need for peace processes involving an environmental perspective.

Comprehensive cooperation at both regional and state levels for responsible and efficient management of water resources is more necessary than ever.

TURKEY, SYRIA AND THE WATER OF THE EUPHRATES

The Euphrates is one of the main water resources for Turkey, Syria and Iraq. It rises in Turkey's Erzurum province and flows through Syria to Iraq, merging with the Tigris to form the Shatt al-Arab River before flowing out into the Persian Gulf. Of its waters, 28.2% of the catchment area belongs to Turkey, 7.1% to Syria and 39.9% to Iraq. The river is of great value to all three states although the geographical characteristics of Syria make the river of special value, as the arid character of the country shows a severe shortage of water reserves and, therefore, a great dependence on the river's waters. In addition, as we will see below, the government's agricultural policies in recent decades have caused increased dependence and thus increased vulnerability. For Turkey, however, it also represents a major source of water, since, according to Verre (2020), the Euphrates basin in Turkey presents 25% of the country's hydraulic potential. That is why since the 1970s Turkey started to develop the Güneydoğu Anadolu Projesi (GAP), through which a series of

irrigation infrastructure projects as well as hydropower procurement were carried out. In the Iraqi case, by contrast, despite being of high value, reliance on food imports implied less dependence on water resources and thus less food vulnerability (Elkund, 2017).

In 1973 and 1974, the Tabqa and Keban dams were completed in Syria and Turkey respectively. In the context of tensions between the Syrian Baath and the Iraqi Baath, the construction of the Tabqa dam led to the first diplomatic crisis, culminating in Saddam Hussein sending Iraqi troops to the Syrian border. This is seen as the beginning of the use of water as a method a form of political leverage in the region. In order to ease tensions over water control, a permanent Joint Technical Committee was established between Iraq and Turkey in 1980, with Syria joining in 1983. The culmination of the negotiations was the Syrian Turkish Protocol for Economic Cooperation, which included the Water Allocation Protocol, through which Turkey would maintain a constant minimum water flow of 500 cubic meters per second (Kibaroglu and Caner Sayan, 2021).

However, tensions continued throughout the 1990s, especially after the completion of the construction of the Atatürk Dam. In this context, in 1997 the United Nations attempted to create an international legal framework based on the UN Watercourse Convention (Kibaroglu, 2014). Although Iraq and Syria signed and ratified the convention, the lack of both ratifications, including that of Turkey, made the document a precedent for cooperation but ineffective for the purpose of international legislation.

Added to this was the growing enmity between Turkey and Syria caused by the Syrian protection since 1978 of the intellectual

leader of the terrorist group PKK (Kurdistan Workers' Party), Abdullah Öcalan as well as Syria's military support for the Kurdish guerrillas further complicated the relationship between the two states to the point of Turkey threatening a total cut off of the river water and even a land invasion (Verre, 2020). The Adana Agreement of 1998 put an end to much of the disputes and opened the way for new avenues of cooperation. Abdullah Öcalan left Syria at the height of tension between the two states and a period of positive relations based on Memorandums of Understanding (MoU) ensued that lasted from the early 2000s until the outbreak of the Syrian civil war in 2011.

The process of dialogue and cooperation between Turkey and Syria culminated in the so-called Friendship Dam on the border between the two countries. The dam would be carried out in Hatay, an integral part of Turkey but historically claimed by Syria, so in addition to the benefit in resources, it would also be loaded with symbolism. However, the outbreak of the civil war was interrupted, opening a new period in the region based on the use of water as a weapon and its management by non-state actors.

TURKEY AND ITS REGIONAL WATER POLICY

Turkey's transboundary water policy is based on two considerations: the economic and social needs of the country as well as relations with downstream countries. Since the 1970s, with the implementation of the first infrastructure projects, Turkey invested in a project for the development of the southeastern region of the country, aiming at maximizing the use of resources: the GAP. In its relations with the other states and in its geographic role as an upstream country, most of the disputes with its neighbours have been

raised by ambitious infrastructure projects. With this project, Turkey has currently built 22 dams as well as 19 hydroelectric power plants, with new projects currently underway.

In the early 2000s, the OiEau (Office International de l'Eau, 2002) analyzed the impact of Turkey's water infrastructure on the waters of Syria and Iraq, concluding that these projects have caused both a drastic reduction of the watercourse and a drop in water quality. The study stated that even then the reduction of the riverbed would soon reach 50% as well as significant water pollution, with very high salinity levels.

Despite not ratifying the UN convention, starting in the 2000s, following the 1998 Adana agreement with Syria, Turkey began to harmonize its domestic legislation with that of the European Union in the context of its candidacy for membership. Various initiatives were undertaken and Turkey, starting with the Directorate General for Water Management, became involved in improving water quality. The candidacy served as an impetus for increased cooperation with Syria and Iraq, with agreements and MoUs being carried out in line with international law. Despite not being legally binding, these agreements served to reach basic agreements on joint management of the watercourse, minimum quantities of water in the watercourse and pollution prevention (Kibaroglu, 2014).

However, despite these agreements, the emergence of new regional dynamics such as droughts, the Syrian civil war, the emergence of non-state actors such as ISIS or the Kurdish People's Protection Units have significantly changed the landscape and Turkey's perspective on the region.

SYRIA: HIDRIC RESOURCES MISMANAGEMENT AS A SOURCE OF CONFLICT

Syria's water policy has always been contingent on its relations with Turkey as an upstream country as well as its food independence projects. Thus, Syria's water reserves are much smaller than those of Turkey and Iraq, being the main sources of water Lake Assad and the Euphrates. During the first decade of the 2000s the government's quest for food security caused severe land degradation resulting in high vulnerability to drought. Until then, Syrian water policy had been based, like Turkey, on the construction of dams such as Tabqa.

According to Samuel Northrup (2017), in pre-war Syria 40% of the population was linked to agriculture. However, studies by Lina Eklund (2017) show that while during the 2000s Turkey improved its agricultural capacity thanks to the GAP, Syria underwent a process of desertification. During this decade the Syrian government began to rely increasingly on groundwater, which it managed poorly, handing over exploitation concessions to loyalist families without studying risks due to overexploitation. Thus, groundwater exploitation levels reached 160%, which, together with the development of the food independence program and the creation of new intensive irrigated crops, led to the 2007 drought that lasted until 2010 and caused the migration of 1.5 million people. Between 2007 and 2008 agricultural production in the north fell by 47% and 67% respectively, with 80% of the livestock in northern Syria dying (Feitelson and Tubi, 2017; GAR, 2011).

This drought can be considered as a catalyst for the protests and one of the key factors in understanding the ongoing of the war, arguing

that climatic factors and poor management of water resources accentuated the food vulnerability of the population. Already in 2011, the Global Assessment Report on Disaster Risk Reduction (GAR) warned of the high vulnerability of droughts in Syria. The report stated both the serious problems of food security, the onset of mass migrations to the city and of increasing desertification.

The press on the Orestes River could have satisfied the intense irrigation needs as well as initiated a series of diplomatic solutions to the hydraulic disputes between the two states. However, the outbreak of the war not only interrupted the construction of the Friendship Dam but also caused the emergence of new actors, this time non-state actors, to the problem of water scarcity in Syria.

WEAPONIZATION OF THE WATER DURING THE SYRIAN WAR

With the outbreak of the Syrian conflict in 2011 and in the context of the end of the drought Syria plunged into agrarian collapse. With the outbreak of the war, the various actors focused their power on the control of water resources and weaponizing them against their rivals (King and Leanne, 2021).

As reported by the International Committee of the Red Cross in 2021, 50% of the sanitation infrastructure has been deliberately destroyed since 2021. Water scarcity implies a water management system focused on certain points. The control of these points or their destruction has become a fundamental element in the war, with devastating consequences for the population. An example of this is the direct destruction of sewage treatment plants in Damascus in 2012, resulting in a risk to public health as well as a source of contamination of scarce groundwater (Relief Web, 2021; ICRC, 2021).

According to research by open-source journalism (Knipp, 2017), the government of Al Assad polluted and destroyed several water springs so that, if they fell into the hands of rebel groups, they would not be able to access them.

In addition to the government, the Islamic State of Iraq and Syria (ISIS) has used control of water as part of its de facto power, since control of water implies control over the food security of the population. An example of this is the siege and control of the Mosul press (Pimodan, 2016).

With the decline of ISIS power new actors have gained presence, such as Al Qaeda or Kurdish groups. The PKK, allied with the Syrian People's Defense Units (YPG) have become one of the regional non-state actors with the largest presence. Although at the beginning of the Syrian war Turkey increased the flow for humanitarian purposes, Turkey's confrontation with Kurdish armed groups has led it to use water control as a weapon. Especially after the occupation of a strip of land in Operation Olive Branch, Turkey has gained control of new resources which, as reported by Deutsche Welle (Holleis, 2021), it has used strategically. Thus, reports by Human Rights Watch (2020) denounce that Turkey has been diminishing riverbeds flowing into northern Syria, such as that of the Allouk station, which seriously endangers the food security of around one million people.

According to the Humanitarian Practice Network (2021), in addition to the blockage of the Allouk station, there are recent allegations from aerial footage about the decrease of the water of the Euphrates riverbed, which would have fell from the 500m³/s agreed in 1987 to 200m³/s in April 2021. This would endanger the livelihood of a large part of the population

of Northern Syria which as we have seen has the Euphrates as its main source of livelihood, and can be seen as part of the war Turkey is waging against the YPG/PKK armed groups (Hurriyet, 2021).

CONCLUSIONS

Since the 1960s, water resources on the Turkey-Syria border have been the cause of diplomatic conflicts. Over time, the rise of pacts and agencies for its management has given way to politicization and securitization of water. Lack of cooperation coupled with water mismanagement and climate change have made water in the region an issue of greater urgency than ever before.

Over the coming decades, hydropolitics will become more and more important, and it is imminently necessary to reflect on the need for cooperation at the regional level as well as to promote the proper management of water resources in order to reduce their impact on the environment and ensure food security for the population.

Bibliography

- Elkund, L, Thompson, D. (2017). Differences in resource management affects drought vulnerability across the borders between Iraq, Syria and Turkey. *Ecology and Society*, 22(4): 99.
- Erian, W., Katlan B., Babah, O. (2011). Drought vulnerability in the Arab region: Special case study: Syria. *Global Assessment Report on Disaster Risk Reduction*.
- Feiltenson, E. Tubi, A. (2017). A main driver or an intermediate variable? Climate change, water and security in the Middle East. *Global Environmental Change*, 44, 39-48.
- Kibaroglu, A., Caner Sayan, R. (2021). Water and 'imperfecto peace' in the Euphrates-Tigris river basin. *International Affairs*, 97, 1, 139-155.
- Kibaroglu, A. (2014). An Analysis of Turkey's water diplomacy and its evolving position vis-à-vis international water law. *Water international*.

With a broader perspective, it is possible that climate change and the growing desertification of the region will lead to greater cooperation between states, and that this cooperation will include civil society as a fundamental actor.

In the specific case of Turkey, Syria and Iraq, new water security arrangements are urgently needed to prevent further crises. The possibility of new droughts is increasing exponentially due to continued mismanagement of water and lack of cooperation between states. The need for new tools for dialogue and new mechanisms for the use of resources is more urgent than ever, otherwise new management errors and lack of communication will have a major impact on the food vulnerability of the population and will be a source of future conflicts. Thus, in the context of scarce water resources and the use of water as a weapon in conflicts, it is necessary to observe future peace processes from an environmental perspective.

OiEau. (2002) Downstream Impacts of Turkish Dam construction on Syria and Iraq.

Pimodan, Q. (2016). The Dams War: How water scarcity helped create ISIS and why combating it would undo it. Research Institute for European and American Studies (RIEAS), No. 1.

Verre, F. (2020). Water conflicts in Western Asia: the Turkish-Syrian regional rivalry over the Euphrates River. *Rivista di Studi Politici Internazionali*, 87(3).

Web bibliography

Al Jabbari, M., Ricklefs, N, Tollast, R. (23/08/2015). Rivers of Babylon. Iraq's Water Crisis- and What Turkey Should Do. *Foreign Affairs*.

Holleis, J. (24/01/2021). Syria: Are water supplies being weaponised by Turkey? Deutsche Welle. <https://www.dw.com/en/syria-are-water-supplies-being-weaponized-by-turkey/a-56314995>

Human Rights Watch (31/03/2020). Turkey/Syria: Weaponizing Water in Global Pandemic? Human Rights Watch. <https://www.hrw.org/news/2020/03/31/turkey/syria-weaponizing-water-global-pandemic>

Humanitarian Practice Network (16/07/2021). Water weaponisation and displacement in Northeast Syria. Humanitarian Practice Network. <https://odihpn.org/blog/water-weaponisation-and-displacement-in-northeast-syria/>

Hürriyet (05/11/2021). Son dakika! Türkiye suyu kesti, PYD'yi karanlığa gömdü. *Hürriyet*. <https://www.hurriyet.com.tr/dunya/son-dakika-turkiye-suyu-kesti-pydyi-karanliga-gomdu-40386497>

International Committee of the Red Cross (01/10/2021). Syria Water crisis: up to 40% less drinking water after 10 years of war. ICRC. <https://www.icrc.org/en/document/syria-water-crisis-after-10-years-war>

King, M.D., LeHane, R. (2021). Drought is Leading to Instability and Water Weaponization in the Middle East and North Africa. The Center for Climate & Security.

Knipp, K. (07/01/2012). Syria: Water as a weapon of war. Deutsche Welle. <https://www.dw.com/en/syria-water-as-a-weapon-of-war/a-37049413>

Northrup, S. (2012). The Growing power of water in Syria. Fikra Forum. The Washington Institute for Near East Policy. <https://www.washingtoninstitute.org/policy-analysis/growing-power-water-syria>

Relief Web News and Press Release (01/10/2021). Syria Water Crisis: Up to 40% less drinking water after 10 years of war. Relief Web. <https://reliefweb.int/report/syrian-arab-republic/syria-water-crisis-40-less-drinking-water-after-10-years-war>

Verre, F. (27 of November, 2020). Transboundary Water Issues Between Syria and Turkey. Eurasian Research Institute.