Hydropolitics in the MENA Region

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If ever there was a time when the popular and political debate was concerned about the water crisis and water conflicts, that time is certainly now. Wherever we look, be it newspapers, websites or policy papers, we find warnings about an impending – and sometimes already happening – water crisis. Much of the mainstream political conceptualizations and global concerns over the water crisis are generally summarized under the "too much, too little and too dirty" paradigm (United Nations, 2023). Consequently, our future world tends to be catastrophically and simplistically imagined as a world without water, or where water will paradoxically become over-abundant due to sea-level rise and floods, and at the same time too polluted to sustain life. And yet, the planet's water resources are not scarce in absolute terms, but rather they are unevenly distributed. At the geographical level, certain countries have more water than others, and within countries, certain regions have more water than others, as in the case of the dry northeast region of water-rich Brazil. At the socioeconomic level, income, class, race, gender and age might determine who gets or does not get access to clean and safe water at a particular moment in time. While the water crisis is today a global phenomenon that interests pretty much all countries and regions across latitudes – as evidenced by recent events in Italy, Spain, South Africa, Chile or India – the MENA (Middle East and North Africa) region is often singled out as a key hotspot for both the water crisis and water conflicts. Why is this the case?

The MENA Region

At the global level there are 310 international river basins – i.e. rivers that span the borders of two or more countries – along with an unspecified number of transboundary aquifers. The watersheds associated with these rivers and aquifers cover approximately 47.1% of the Earth's surface (excluding Antarctica), house 40% of the global population and account for 80% of the planet's freshwater flow. Overall, the MENA region has a population of over 500 million people and it comprises, in its more recent definitions, the following 20 countries: Algeria, Bahrain, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, State of Palestine, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen. The MENA region is marked, overall, by a semi-arid or Mediterranean climate, and is one of the most vulnerable to climate change, whose impacts include an increase in drought conditions, heatwaves, aridity and sea level rise. There are several international rivers in the region, with the most important being: the Nile (one of the longest rivers in the world which flows through several countries in North Africa, including Egypt, Sudan, South Sudan and Ethiopia); the Tigris and Euphrates (both shared by Turkey, Syria and Iraq); the Jordan (which runs through Jordan, the Palestinian West Bank, Israel and southwestern Syria); and the Orontes (shared by Lebanon, Syria and Turkey). Over the last decades, all of these rivers have been subject to unprecedented anthropogenic pressure, characterized by increasing levels of urbanization, industrial activities, environmental degradation and population growth. While water resources remain the same, the political and social contexts that revolve around them have considerably changed, and this has led to increasing ten-

sions over the sharing and management of these transboundary water resources. In this article, I will briefly discuss the two most significant water conflicts in the MENA region, most notably those over the Nile and the Jordan, outlining the main nodes of contention and possible future scenarios.

The Nile River

The Nile is the world's longest river, and eleven countries share the water of its two main tributaries, the White Nile and the Blue Nile: Burundi, DR Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, South Sudan, the Sudan, Tanzania and Uganda. Among them, Egypt is both the most downstream and the most dependent on the river, which is crucial for sustaining its ecosystems and livelihoods. In 1959, Egypt and Sudan signed the Agreement for the Full Utilization of the Nile Waters, which allocated 55.5 billion cubic metres (BCM) of water to Egypt and 18.5 BCM to Sudan, and thus institutionalized the former's historical demands over the Nile. But the Nile River is not shared by Egypt and Sudan only, and the other basin riparians never acknowledged this bilateral agreement. When it comes to rivers, international water law is regulated by the United Nations Convention on the Non-Navigational Uses of International Watercourses. According to the Convention, states that share an international watercourse are obliged to utilize it in an equitable and reasonable manner, refraining from causing harm and informing other states if there is an intention to construct a structure that could alter its flow, such as a large dam.

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And indeed, in recent times, the most important conflict over the waters of the Nile has revolved around the Grand Ethiopian Renaissance Dam (GERD), a mega-dam currently under construction along the Blue Nile in Ethiopia, with the project awarded to the Italian company Webuild (formerly Salini-Impregilo, one of the world's leading dam builders) (Menga, 2017). Once completed, it will be the largest dam in Africa, with a reservoir covering 1,875 km2 and a total installed capacity of 5,150 MW,

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equivalent to that of five large nuclear power plants. In the past, Egypt had threatened to wage war if Ethiopia attempted to build dams on the Blue Nile. In 1979, Egyptian President Anwar Sadat dramatically declared that "the only issue that could lead Egypt back to war is water," adding a year later that "if Ethiopia takes any action to block our right to the Nile's water, there will be no alternative but to use force." This threat held until 2011. However, when Egypt found itself without a government during the Arab Springs, Ethiopia seized the moment and, without warning, began construction on the GERD. Egypt fears a reduction in the flow of water from the Nile – crucial for its agricultural sector, which employs a third of its population – and sees the project as a violation of its historical rights over the river. These rights were affirmed, for example, in the 1960s by Gamal Abdel Nasser through the construction of another dam, the Aswan High Dam. Nevertheless, the GERD is now nearing completion, and in this case infrastructural progress goes hand in hand with diplomacy. Egypt, which appears to have resigned itself to the idea of having another large dam in the Nile, has participated in numerous negotiation sessions with Ethiopia, mediated by the United States and the United Arab Emirates, but so far, no agreement has been reached regarding the operation of the dam. While it is hard to predict what the future of the GERD holds, one thing seems certain: in the future, this type of conflict is bound to increase. The effects of climate change make the need for adaptation tools increasingly urgent, and large dams are well-suited for the task. The fact that these structures can also generate renewable energy will make them even more popular, despite the

significant environmental and geopolitical issues associated with them.

The Jordan River

The Jordan River is probably the most conflictual river in the world, or at least, it is the river that is more frequently singled out as a key conflict hotspot worldwide. And for good reason. The river is undoubtedly one of the most eloquent examples that the politics of freshwater resources are indissolubly tied with the "high politics" of the State, and with matters related to national and international security. While this short contribution cannot provide a comprehensive summary of hydropolitics in the Jordan River (for an excellent, albeit slightly dated, overview, refer to Zeitoun, 2008), it is nevertheless worth noting that since the construction of the National Water Carrier of Israel in 1964 and the Six-Day War of 1967 – when Israel seized the Golan Heights – Israel has de facto controlled water resources in the region. Subsequently, this control became increasingly evident, disproportionately affecting the State of Palestine and Palestinians residing in the Gaza Strip and the West Bank, who have experienced a relentless diminishment of their ability to access water resources. This inequality is exemplified by striking figures. While almost the entire population of Israel has access to running water and basic hydraulic infrastructure, the same applies to only 36% of all West Bank Palestinians. Furthermore, while the average daily water consumption per person in Israel is 247 litres (well above the World Health Organization's recommended minimum of 100 litres), West Bank Palestinians consume only a third of this amount (82 litres), and those not connected to the water grid receive only 26 litres per day. In areas of the occupied West Bank under full Israeli control, Palestinians are unable to excavate or expand wells without acquiring difficult-to-obtain permits, and, since 2021, Israeli authorities have destroyed close to 160 Palestinian reservoirs, sewage systems and wells throughout the occupied West Bank and East Jerusalem, claiming they were unauthorized, as reported by the United Nations humanitarian agency, OCHA. Even more strikingly, OCHA also reports that following the devastation of Gaza and the conflict in Israel, water availability for those living in the Gaza Strip has dropped to less than three litres per day per person.

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Due to overextraction for agricultural and domestic use, diversion for irrigation projects, pollution from various sources including untreated sewage and industrial effluents and the construction of Israeli hydraulic infrastructure, the Jordan River is now a shadow of its former self in terms of water supply. Also in this case, while it is hard to predict what the future of the Jordan River looks like, we can safely assume that the ever-increasing competition over dwindling water resources will lead to even harsher conditions for all parties sharing the river, except for Israel.

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