

SNAPSHOT

“SUMMER IS COMING?” ESCALATING HOST–REFUGEE TENSIONS OVER SCARCE WATER IN JORDAN

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ABSTRACT

In the Hashemite Kingdom of Jordan, water scarcity was treated as a fundamental, but seemingly manageable challenge at the beginning of the 21st century. The number of refugees, though, has increased very significantly since the eruption of the Syrian civil war in 2011. According to a government report, the total figure can even reach 1.4 million—still counting. The flow of refugees substantially worsens the already existing tensions within the population due to water scarcity. The article focuses on this phenomenon, when the possibility of water conflict is inherent but apparently manageable in a society, but an external factor quickly worsens the situation to the critical level—bringing conflict within reachable distance.

KEYWORDS

Jordan, water scarcity, refugees, conflict over water, Syrian civil war

* The author is a PhD student at the Corvinus University of Budapest. The author is indebted to Campus Hungary and to Dr. László Csicsmann, Dean of the Faculty of Social Sciences at Corvinus University of Budapest, who supported the author’s study trip to Jordan.

INTRODUCTION

The nexus between water scarcity and violent conflict has been a widespread topic of scholarly articles dealing with environmental security.¹ A number of these studies focus on the possibility of so-called water wars, the aim of which is to ensure states' security and survival through fighting for the necessary amount of water. When we understand the notion of water wars in such a narrow way, we can conclude that, so far, no water wars have occurred.² Partly for this reason, the mainstream of water security experts refuses this radical understanding, and argues that water scarcity, in itself, is not a direct factor which typically causes war. Rather, they concentrate on the role of water scarcity as an exacerbating factor for already existing tensions. In accordance with this assumption, other analysts deal with the question how cooperation over water can decrease existing tensions among states.

These approaches commonly focus on the role of water scarcity as a catalyst for conflict. However, a recent example shows that this causal direction can occur inversely as well. In the Hashemite Kingdom of Jordan, water scarcity was treated as a fundamental, but seemingly manageable challenge at the beginning of the 21st century. Nevertheless, no one counted with a major flow of refugees when the prospects of the Water Strategy for 2008–2022³ were calculated. The number of refugees, though, has increased very significantly since the eruption of the Syrian civil war in 2011. In March 2014, the number of Syrian refugees was around 600 000, and beyond registered refugees, hundreds of thousands Syrians were reported to have crossed the border to Jordan. According to a government report, the total figure can even reach 1.4 million—still counting.⁴ It is unambiguous that the flow of refugees plays the role of the exacerbating factor here, substantially worsening the already existing tensions within the population due to water scarcity.

This article focuses on this, so far uncommon phenomenon, when the possibility of water conflict is inherent but seemingly manageable in a society, but an external factor quickly worsens the situation to the critical level—bringing conflict within reachable distance. The aim of the article is to analyse the case of the Hashemite Kingdom of Jordan. First, it introduces the causes of water scarcity, then it describes the approach towards water management defined in the Water Strategy 2008–2022. After the summary of the initial problems and strategic challenges, the article studies the

effects of the Syrian refugee flow on the already fragile water situation on the example of the Mafraq governorate hosting the Zaatari refugee camp. Finally, it examines several proposed solutions by international organizations and NGOs.

WATER STRESS IN JORDAN

The Hashemite Kingdom of Jordan is one of the three most water scarce countries in the world according to the UN⁵ and is labelled as being in ‘extreme risk’ by the Water Stress Index of the leading global risk analyst company Maplecroft, measuring risk of water interruptions to supply chains, operations and investments.⁶ The water situation of Jordan has not always been such strained. In 1946, when the kingdom gained its independence, the amount of renewable freshwater supplies reached 3600 m³ per capita per year.⁷ This was high above the “international poverty line” of 500 m³,⁸ and exceeded the necessary amount of water to healthy growth (adequate for drinking, sanitation, industry and agriculture) based on World Bank figures, namely 1000 m³.⁹ By 2014, this number was reduced to 110 m³, and it continues to fall.¹⁰ According to some forecasts, it could even reach 90 m³ by the year 2025.¹¹ The roots of this perplexing decrease can be traced back to many factors.

First of all, Jordan has a harsh and dry climate. Deserts cover 92% of its area,¹² and the annual precipitation is estimated to 266 mm per year. Rain typically falls between November and April, and varies among the different parts of the kingdom. Northern areas are the most water-rich, receiving around 600 mm, while the southern and eastern deserts receive only 50 mm. Rainfall is the only source of groundwater aquifers, which are very important for the water supply of the country.¹³ As temperature is high, evaporation means a great risk for water supplies. According to most estimations, around 90% of the total rainfall is lost in this way, and only 5% of the remaining part reaches the aquifers.¹⁴ Shared rivers and groundwater basins also serve the needs of other water-scarce countries neighbouring Jordan. In order to meet the population’s water demand, Jordan has exceeded the limits of sustainable water use since the 1980s.¹⁵

Second, climate change has a negative effect on these already severe conditions, and it seems to be gaining speed in the Middle East. Between 2020 and 2030, temperatures in Jordan is predicted to rise by one to two C°, while the precipitation is anticipated to be 10 to 15 mm less (a decline

of 13 to 20 percent), and droughts will be more widespread and pronounced.¹⁶

Third, Jordan is one of the Arab countries with a quickly-growing population. Between 1990 and 2008, the population grew with 2.7 million (86%). According to data calculated before the Syrian refugee crisis, this population might be doubled in the next two decades.¹⁷ The Water Strategy for 2008–2022 estimated a constant population growth, from about 6 million to around 8 million by 2022.¹⁸

Fourth, not only the population is growing, but also the volume of agriculture and industry, which also contributes to the decline in water resources. Agriculture is the most significant user (64%). It has an important role in providing the country's food supplies and through this, it also has an influence on stability. In the meantime, this sector only adds around 3% to the GDP. Agricultural areas are expected to be exceeding to meet the needs of the growing population. 30% of the available water supply goes for municipal uses, 5% for industry, and 1% for tourism.¹⁹ Urbanization is a further source of growing water use.

Fifth, inefficient use of the available water resources also contribute significantly to water scarcity. The pipe system is old and in a sore need of maintenance.²⁰ Moreover, stealing water is also a common problem among people who cannot have access to water either for financial or for technical reasons. The amount of water which is lost to leakage and theft every year is 76 billion litres—it would make enough water for 2.6 million people.²¹ In the years of the global financial crisis, these problems have become even more serious.²²

Sixth, and related to the problem of inefficiency, contamination and the following groundwater depletion is also a significant challenge for the government of Jordan. Salinity belongs also to the aspect of decreasing quality, endangering the already declining waters of the kingdom.

Despite all these difficulties and problems, the government of Jordan was ready to accept the challenge in the past decades. In 1983, the Water Authority of Jordan (WAJ) was established to control water management issues. The WAJ published Jordan's Water Strategy in 2009 in order to accelerate and organize sustainable water use developments. The document identified seven core principles:

1. 'Jordanians must recognize that there are limits to the available water supply.
2. Citizens, Private and Public Sectors must share responsibility for water management and protection in Jordan and work together to improve conditions within their local watershed.
3. A deeper knowledge of the available amounts, actual quality and natural protection of Jordan's water resources is the foundation for effective decision making.
4. Jordanians must use water more effectively and efficiently and will use and reuse water wisely and responsibly.
5. Healthy aquatic ecosystems are vital to a high quality of life for Jordanians and must be preserved.
6. Groundwater and surface water quality must be preserved in pursuing economic and community development.
7. Jordan will take care of the drinking water quality and standards to ensure that Jordanians have safe and secure drinking water.'²³

In line with these theoretical principles, many micro-reform policies were introduced on current practices, and a considerable progress was made. In 2014, 98 per cent of households are connected to the water network and 68 per cent are connected to the sewage network, while 98 per cent of the collected wastewater is treated.²⁴ The government has also worked on the planning and implementation of megaprojects like desalination and water treatment plants. Although the most well-known megaproject of the Red Sea-Dead Sea canal has still remained a dream, desalination and water treatment projects were carried out successfully.²⁵ The currently ongoing Disi aquifer project is one of the most significant megaprojects. When it is finished, the installed facilities will provide 100 million m³ water per year.²⁶

JORDAN: AN OLD-NEW TARGET FOR REFUGEES

Under the above-described circumstances, in spite of the government's efforts, Jordanian water supplies were predicted to become exhausted even as early as 2060.²⁷ Then the Syrian refugee crisis hit the kingdom, and overwrote all calculations concerning water.

Jordan has been a traditional haven for refugees, being an island of stability among many instable countries such as Israel, Palestine, Iraq and recently, Syria. The second half of the 20th century brought an almost constant flow of refugees to Jordan. The first major group arrived during the first Arab-Israeli war, and received citizenship under eased conditions. These Palestinians and their descendants make up almost half of the Jordanian society currently.²⁸ The Six-Day War of 1967 and the Palestinian Intifada of 1987 brought new flows of Palestinians to Jordan, while after 1991 and 2003 Iraqis also arrived in a great number.

Jordan is not a party of the 1951 Geneva Convention relating to the Status of Refugees and its 1967 Protocol. However, Memoranda of Understanding establish a link between the kingdom and the UNHCR, and, since 1997, an UNHCR Office is working in Amman. The Memorandum of Understanding of 1998 accepts many parts of the Convention, including the definition of refugees. This document also describes the rights and obligations of refugees in Jordan, providing a maximum stay of six months after recognition for them, during which a durable solution must be found for their residence, that is, return or resettlement.²⁹ According to UNHCR reports, authorities are “lenient” in this question in practice—the reason for which is the extremely increased pressure on them.³⁰

In March 2013, nearly 30 000 Iraqi refugees ‘enjoyed’ the hospitality of Jordan, while in the last years, around 1700 Sudanis and other nationalities arrived to the kingdom as refugees and asylum-seekers.³¹ With the 600 000 officially registered and the presumably more than 750.000 unregistered Syrian refugees, the estimations of the Mercy Corps³² and the CIA³³ are in line with each other: the population of Jordan has already (or almost already) approached 8 million—exactly the number which was proposed by the Water Strategy for 2022, causing a huge strain on the already fragile water supplies.

ESCALATING HOST-REFUGEE TENSIONS OVER WATER

Regarding water, “the refugee crisis ruined the old strategy,” claimed Saeed Hamed, a UNICEF specialist. “There is not enough time to close the gap” and finish megaprojects which would provide water for the increased population, he continued.³⁴ Originally, a Jordanian’s water needs were estimated to 80 litres per day due to the rationed water use practices being

already widespread since the 1980s. With the arrival of Syrian refugees (who have not been adapted to water scarcity in this extent), the communities in the hardest situation can only be provided with 30 (!) or even less litres a day.³⁵

The most problematic areas are the northern governorates of Jordan: Mafraq, Jarash, Irbid, Ajlun, Amman and Zarqa. The majority of refugees arrive here and live in cities and towns. The city of Mafraq, for example, had an original population of 70 000 people. After the outburst of the Syrian civil war, 90 000 refugees decided to reside here. According to the Mercy Corps, “some families rent rooftops and chicken coops,”³⁶ while the water deficit has already quadrupled.³⁷ Mafraq was one of the water-richest governorates in Jordan, gaining more than 100 m³ water per capita per year. The governorate disposes over many of the kingdom’s main water reservoirs, including the Sumaya artesian wells supplying Amman, Irbid, Jerash and Zarqa with water.³⁸

The present state of the Sumaya pump station indicates well the hardships in the region. It served 80 000 people before the crisis, but now it has to fulfil the needs of over 200 000 people. The station is deteriorated and out-of-date. It used to pump 650–700 m³ a day according to Jordanian authorities, but now it is capable to provide only 250 m³. They claim that “the productivity is dropping because pumps and equipment have deteriorated and the aquifer is suffering from over-extraction.”³⁹ The water network is not in a better state either; it also suffers from over-exploitation, especially under the pressure of the refugee flow. According to Mercy Corps, 75% of the water pumped from the Sumaya station goes to waste.⁴⁰ Moreover, the quality of water is deteriorating as well. “Only four wells are currently operational because some need maintenance while water in the rest reached high salinity levels,” told the authorities.⁴¹

Oxfam reported of host communities where before the Syrian crisis, water was delivered twice a week, but now it is only possible to do it once a week. Several families need to buy extra water sources from tankers. Already in 2008, a tank of 2000 litres of water cost around 100 JD (around 90 Euros)—only 10 JD less, than a monthly average wage.⁴² In the meantime, the quality of tap water has decreased and the costs of water (both tap and filtered) have been growing. Among those who cannot afford purchasing water, diarrhoeal diseases are observed, especially in the case of children.⁴³

Mafraq governorate hosts the Zaatari refugee camp with more than 100 000 inhabitants (a year ago this figure was around 200 000), one of the world's largest refugee camps, which was first opened on July 28, 2012. The camp, which is the fourth biggest settlement in Jordan, is under the joint administration of the Jordanian government and UNHCR.⁴⁴ The governorate pays a high toll for its hospitality. Its population has more than doubled since 2011, and the Zaatari camp consumes 3000–4000 m³ water a day. Water problems, such as delays, disruptions, limited amounts of water service, faster deteriorating water systems, inoperable or too saline wells, over-extraction of sources and high pressure on sewage systems all hit the region in a much greater extent than it was experienced before.⁴⁵

Meanwhile, the Zaatari is running out of space and resources. UNHCR admitted in its last yearly report that new funding is needed for the Zaatari, unless it will be “simply impossible to provide food, clean water, schooling, shelter and healthcare for new refugees who keep streaming in.”⁴⁶ The situation in the camp is very tense, even smaller events like detentions can lead to violent incidents with injured and dead victims.⁴⁷ The government of Jordan, UNHCR and its partners have opened a new refugee camp, Azraq, in the Zarqa governorate on April 30, 2014 in order to give relief to the Zaatari. According to the UNHCR website, the camp is not yet fully operational, but it is reported to already have inhabitants. Azraq currently disposes over 5000 shelters, adequate to the housing of 25 000 refugees. The camp site overall is capable to host even 130 000 residents.⁴⁸

Refugee camps and the related data of water consumption indicate the tremendously increasing water stress in Jordan. However, it is only the smaller part of the problem, as almost four in every five Syrian refugees live outside these camps.⁴⁹ Jordanian citizens are aware of the link between the flow of refugees and the decline in the quality and quantity of their water resources. “It is our moral responsibility to host our Syrian brothers and sisters, but the crisis in Syria is taking its toll on our daily life and our most basic human right, which is water,”⁵⁰ said a school principal in Mafraq.

Mafraq authorities expressed their concern about protests of Jordanians because of the scarce water and supply disruptions. Summer is a particularly stressful period of time regarding water-related tensions. During the summer of 2012, more than 30 demonstrations and water riots took place, protesters blocked several streets to express their dissatisfaction

and to prevent water delivery to the Zaatari camp. In some cases, they even called for the refugees to be deported.⁵¹ Mafrqa authorities afraid that through such incidents, increasing water scarcity may undermine the security of the governorate: “We are bracing ourselves for a tough summer because of the inevitable water cuts and the demonstrations that will follow,” the governor said.⁵² Several current interviews contain references to the increasing hostility against Syrians, such as the one conducted with Brigadier Waddah al-Hmoud, a Jordanian responsible for security at the refugee camps by the Guardian. He said: “Tensions between Jordanians and Syrians are rising. (...) It is not too bad now but we are afraid it [the conflict] will come, due to pressure on services.”⁵³ Syrians are also frustrated concerning water. On the one hand, they have not got used to rationing water, so they find it very difficult to cope with scarcity. On the other hand, several refugees feel discriminated. “Syrians renting apartments from Jordanian landlords don’t get access to the building’s water supply. (...) We have to buy water from private wells. It isn’t right. But we’re desperate, so what else can we do?” says a Syrian refugee woman, and other interviewees also report being “very afraid and worried” because of the tense water situation.⁵⁴ A poll conducted by the University of Jordan’s Centre for Strategic Studies in 2013 showed that over 70% of Jordanians believe the government should stop the flow of Syrian refugees to the kingdom. 58% claimed that the presence of refugees in their neighbourhood caused a decline in the public services provided to citizens.⁵⁵ Under these circumstances, Jordan has to prepare for new demonstrations, especially during the approaching summertime.

PROPOSED SOLUTIONS—NO QUICK REMEDIES FOR JORDAN

In order to avoid escalating tensions between Jordanians and refugees because of the decreasing water supplies, the government of Jordan and its international partners need to take steps in the field of water management as soon as possible. Many suggestions and proposed solutions are circulating nowadays, published by a range of actors from the Jordanian government to international organizations.

The government conceptualized Response Plans in 2013 in order to cope with the increasing flow of refugees from Syria. Concerning water, the Response Plan of April highlights the need for the rehabilitation and

expansion of the existing infrastructure, especially in the northern governorates of Zarqa, Irbid and Mafraq. Avoiding pollution coming from refugee camps to water sources is also an important issue. The government plans to finance and implement certain projects in order to fulfil these aims and to guarantee a sustainable availability of water, allocating around 100 million USD for these reasons.⁵⁶ In an earlier Response Plan, which was published in January, this number was only 18.6 USD.⁵⁷ The increase of the necessary allocated funding indicates the serious deterioration of water stress due to the flow of refugees. On the other hand, it is questionable if the government has the necessary resources to implement the Response Plan, even if it only concentrates on the physical development of the infrastructure, ignoring wider and deeper water-scarcity-related issues.

In 2014, UNHCR also issued a response plan: the Syria Regional Response Plan of Jordan. This document analyses the impacts of refugees in Jordan in a detailed way, and then describes objectives to deal with them. UNHCR also lists the lead and participating agencies and the necessary requirements for fulfilling its main aims. As for water, these objectives are the following:

1. “Affected populations are ensured with safe, equitable and sustainable access to sufficient quantity of water for drinking, cooking and personal and domestic hygiene.
2. Affected populations have access to safe and appropriate sanitation facilities.
3. Affected populations have reduced risk of WASH-related [Water, Sanitation and Hygiene] diseases through access to improved hygienic practices, hygiene promotion and delivery of hygiene products and services on a sustainable and equitable basis.
4. Establish and maintain effective mechanisms for WASH coordination at national and sub-national levels.”⁵⁸

Besides, the water-related problems occurring in refugee camps are addressed widely in the Response Plan.⁵⁹ UNHCR analyses the potential outputs of its activities concerning the set objectives and the necessary requirements as well. The plan is very detailed and practical, contains a wide range of data, and the tasks and the financial requirements are carefully divided among the participating agencies and organizations. Although UNHCR concentrates mainly on the role of these agencies and

organizations, it takes into consideration the role of the society and sub-national elements as well. It is sensitive to the present tensions—in the Response Plan it demonstrates that developments aiming to provide better shelter and services for Syrian refugees may benefit Jordanians as well, in order to cushion the tensions between refugees and host communities.⁶⁰ However, the proposed solutions can be criticised as being way too practical and short-term, ignoring the deeper roots of tensions and water scarcity.

Mercy Corps, which works in the Jordanian water sector since 2006, proposes a three-part solution concentrating on long-term developments:

1. “International actors must increase investments in long-term development. Given the prolonged nature of the refugee crisis and its devastating impact on host community water resources, assistance must be provided to upgrade and properly maintain existing Jordanian infrastructure and services. This is particularly important in rural areas, where the poor often have limited access to the water network and few opportunities to peacefully voice frustrations.
2. International actors must work to bridge the governance gap. While responding to the immediate needs of the crisis, we must also build the capacity of Jordanian government actors working on the front lines. Investments in equipment, spare parts, and training for local utility personnel could improve response times in fixing network failures. In addition, key local stakeholders—municipal governments, civil society, tribes—should be actively engaged in managing communal water resources and outlining development priorities. By decentralizing the response, responsibility can be shared and local people empowered.
3. International actors should work to address both conflict and conservation. Mercy Corps’ programs provide models for how to target interventions, easing tensions while strategically improving sustainable practices around water use. Local investments in water-saving technology—such as rainwater catchments, cisterns, and household greywater treatment systems—can diversify supply; successful conservation programs can reduce demand; and conflict mitigation programs, which train Jordanian and Syrian community leaders in interest-based negotiation, can nip tensions in the bud.”⁶¹

The approach of Mercy Corps unites several aspects to deal with the tensions between refugees and host communities. It starts from the

practical issue of the modernisation and maintenance of the existing water and sanitation infrastructure, but incorporates the social dimension in this question as well. Then it goes further, highlighting the role of the government of Jordan and its need for contribution in form of capacity-building from international organizations. The idea of engaging and empowering local actors and communities is distinctively present in the Mercy Corps approach. The third part of the proposed solution is rather technical, dealing with a wide range of issues again, from water saving technologies to negotiation techniques. It is overall an integrated and holistic list of recommendations, which takes a wide range of relevant aspects, both theoretical and practical, into consideration. However, it is rather a list of recommendations than a real plan, as it lacks the elements which were mentioned before as the strengths of the UNHCR Response Plan: carefully collected data, the amount of the necessary costs of implementation, and the division of certain tasks among actors.

One of the most recent developments in Jordan was the visit of Catarina de Albuquerque, the UN Special Rapporteur on the human right to safe drinking water and sanitation in March 2014. She formulated her claim to the government to “accord clear priority to water for human consumption over other uses and to explicitly recognize the human rights to water and sanitation in the law.”⁶² Her further suggestions contained the followings:

1. the need for a holistic approach
2. the need for a long-term, comprehensive development strategy that ensures access to water and sanitation for all people in Jordan
3. the need for ‘a new tariff system that requires better-off households to pay higher tariffs, while poorer households would be guaranteed a lower, subsidized price. The revision must extend to non-domestic water tariffs. The tariff system should aim at balancing water savings and adequate provision.’⁶³

This rights-based approach reflects yet another attitude towards the intertwined water and refugee issues in Jordan. The visit of the UN Special Rapporteur on the human right to safe drinking water and sanitation is certainly an important symbolic act which draws attention to the seriousness of the problem. However, the recommendations of Ms Albuquerque can be criticised as too theoretical and lacking practical

considerations. The formal report on the visit, which will be published in September, will include more detailed recommendations for Jordan.

After the overview of the solutions proposed by several different actors, the conclusion can be drawn that many different and colliding approaches are present, and none of them can offer a direct and viable remedy for the complex and intertwined problems of Jordan. The government sees the question as a mere financial and investment problem of the water and sanitation infrastructure, while UNHCR focuses on the division of short-term practical tasks among agencies with carefully calculated data. Mercy Corps offers a holistic approach covering a wide range of issues and long-term developments without practical calculations, and the UN represents a rights-based approach, while the implementations of any plans are hindered by the lack of the necessary resources. In the meantime, summer is coming, and before any of the recommendations and plans could become realized, Jordan has to face another hot season of escalating host-refugee tensions over scarce water.

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