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"Political Stability in the Eye of the Storm: An Institutional Analysis on the Social Effects of Water Management in Jordan"

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ABSTRACT

Water scarcity in Jordan has, for decades, been a serious source of political tension domestically and abroad. In this tumultuous region, political stability or lack thereof determines many aspects of social life. Jordan has been resilient in the face of wars and insurgencies, most recently the 2011 Arab Spring protests, which led to the toppling of authoritarian governments and the ongoing Syrian Civil War. The case study on the provision of water in Jordan is relevant due to its location in a region with an arid and semiarid climate, as well as its unstable geopolitical neighbors. Institutions have an effect on the social cohesion of countries and therefore are worthy indicators of the deeply rooted causes of political stability. In this paper, I argue that instead of aligning its interests with the elites as expected, the royal family of Jordan, and by extent its government, has managed the provision of water to balance the interests of the shadow state and the rest of the population. Therefore, Jordan's success in remaining stable lies in its institutional dynamics in which the provision of water has a significant impact. Understanding how some of the members of this increasingly volatile have managed to remain stable is crucial towards advancing civil peace.

1. **INTRODUCTION**

The lack of water in the Jordan basin has led to the perception that water is a source of conflict in the region. While no wars have been fought in the name of this non-renewable natural resource, domestically or abroad, this scarcity has been a serious source of political tension in both arenas. In Jordan, the provision of water is not simply a duty that the government must fulfill for its citizenry; it is a quintessential scenario where political power is wielded favoring the interests of the few, whilst keeping the many content. Social institutions affect the distribution of benefits from the numerous interactions that constitute social life (North 1996, 40). In this tumultuous region, political stability or lack thereof determines many aspects of social life. Therefore, it is important to understand the processes through which countries stabilize themselves within an institutional framework.

The Hashemite Kingdom of Jordan has remained a relatively stable constitutional monarchy ever since its establishment in 1921. Even though it has participated in various wars in the region, such as the 1989 riots, the citizenry has demanded changes in government, and internally it has been characterized by continuous support for the royal family. This support is partly responsible for the country's avoidance of a full revolution, unlike some of its neighbors; this has been a result of the trust shared by its citizenry that a higher power is working in the people's favor, which has rested with the monarch at all times. Most recently, the 2011 Arab Spring protests swept through Jordan's neighbors, a nightmare for authoritarian regimes. Scholars have provided various explanations as to why Jordan continues to enjoy stability. In this paper, I explain Jordan's stability using liberal institutionalist theory, which focuses on the impact of institutions for the provision of public goods on domestic political stability. Jordan is a "tough case," given

that it is located in an already politically unstable, conflict prone region, with an arid and semiarid climate (George and Bennett 2005).

An in-depth look into the structure of water provision in Jordan unveils prioritization of what relevant literature refers to as the "shadow state," understood as the elites and wealthy landowners exerting major political prowess in this area for their personal benefit, even if they are not politicians themselves. According to this framework, water-related needs of the general population should not be fulfilled due to the scarcity crisis in the country. However, the research shows otherwise, as 97% of the population in Jordan has access to safely managed and basic service sanitation (JMP, WHO and UNICEF). These facts make the central question of the debate circle back to the interests of the state and how those are reflected in the actions taken by its institutions. I will argue that instead of aligning its interests with the elites as is the case in other countries, the royal family of Jordan, has managed to balance the interests of the shadow state as well as the rest of the population, and in doing so, has removed this potential element of tension from the social sphere.

2. METHODS AND LIMITATIONS

My work uses the tools of liberal institutionalism relations liberal theories to examine an issue in the domestic politics of Jordan, which is the provision of public goods, specifically water. This paper works under the notion that liberal institutions always promote peace, but asks the deeper question of how public institutions contribute to political stability. The institutional analysis presented in this paper highlights work by relevant scholars published in books and peer-reviewed academic journals. Additionally, in the case study section, I have included independent research conducted by Non-Governmental Organizations (NGOs) and United Nations (UN) agencies

regarding the availability and access of the Jordanian population to life sustaining water resources in order to support my claims.

The predominant limitation of this paper is the lack of primary source material and an exclusive reliance on previously published works on this and related topics. Documents referenced include Jordanian national policy plans and water monitoring reports conducted by UN task forces are primary sources; additionally, the interpretations I provide are situated within the context of analysis found in the existing literature. Finally, some relevant Middle Easter sources produced in Arabic have not been taken into consideration due to the lack of their English translation.

3. LITERATURE REVIEW

In the last decade scholars, have researched various reasons to account for the political stability enjoyed by the Kingdom of Jordan vis-à-vis its more troubled neighbors. From celebrating King Abdullah II for successful political and constitutional reforms, to analyzing its regime type, and to state investment in public goods, social scientists have dwelled on the ethnic and social cleavages and instruments of political of support present in Jordanian society. In order to contribute to the literature, I seek to analyze the socio-political dynamics in place through an institutional approach. It is important to examine the various theories on Jordan's stability in order to understand the existing literature attempting to understand the causes behind the country's political status.

3.1 The Hashemite Lineage: Religious Legitimacy

Samuel and Tally Helfont (2012) attribute the relative internal stability enjoyed by Jordan over the past several decades to the heritage-based legitimacy of its monarchy. The royal family

traces their bloodline to the tribe of Quraysh, the same tribe to which the Prophet Muhammad, the seal of the Prophets and messenger of Truth for Muslim believers, was born into. The Hashemite royals, in fact, claim to be direct descendants of the Prophet. In a Muslim majority country like Jordan, this does not only provide legitimacy, but a meaningful connection between the citizens and their royals. The Hashemites believe to have been given the mandate to safeguard the people and the land historically known as Transjordan. Therefore, when discussing social unrest people might demand better distribution of power between the palace and parliament, or more efficient public institutions. Nonetheless, the common sentiment of the 2011-2012 protests, and previous incidents of social unrest, never included a desire to oust the monarchy in its entirety. This is reflected in a poll, which showed that 79% of Jordanians favored economic reforms before political and democratic reforms (Helfont and Helfont 2012, 91).

3.2 Regime type: Arab Spring-Resistant Monarchies

Wroblewski (2016) argues that the reason why Jordan was not hit during the 2011 Arab Spring movements was that monarchies performed better in that time period in terms of preserving order within their respective territories (7). He highlights Morocco, Saudi Arabia, Jordan, Oman, and Bahrain as his case studies, and finds that these monarchies presented durability, political stability, and greater economic dynamism than was the case with the republics. However, as explained by Fjelde and De Soysa (2009), using regime type to measure state capacity would mean that political institutions use two different notions of state capacity as proxies: "the ability to coerce the population at the authoritarian end of the scale, and the ability to accommodate the demands of the population, which is highest in fully democratic regimes" (6). While it is theoretically sane to utilize regime type as an indicator of civil peace this model disregards the veracity of the

grievances, which motivate social unrest; it is precisely this ambiguity that, renders regime type a poor indicator for state strength.

3.3 Civil Institutions

Civil society institutions in Jordan are examined and classified more as an instrument of state social control than a mechanism of collective empowerment by Quintan Wiktorowicz (2000, 43). This control is exerted is through the practice of having all forms of group work and collective action in Jordan registered at one of their ministries. These ministries are charged with reporting, inspecting, observing, and counting collective activities within their administrative purview (Ibid., 49). This lead to the understanding that the Jordanian civil society is "never autonomous from the state; it has only varying degrees of independence" (Ibid., 57). Order and visibility of civil society institutions and NGOs have become instrumental for state control in Jordan, according to Wiktorowicz. Even though people have the right to protest, shown in the 1989 riots after the government removed subsidies on fuel prices, scholars continue to agree that the Hashemite monarchs have a tight control over civil institutions and society in general.

3.4 The Illusion of Political Reforms: A Jordanian Hail Mary

In a 2018 article Mitchell, Dinkha and Abdulhamid discuss the Kingdom of Jordan and claim the government managed to allay protests with a series of minor reforms (3). Cabinet replacements, including the prime minister, and promises to enact a law to make the government an elected body rather than an appointed one were all amongst the cited reforms King Abdullah II offered his citizens as a method of appeasement. Jordan does not enjoy the stability associated

with the Gulf Cooperation Council (GCC)[1] regional trading block, nor does it have the high production of oil and gas, which would provide the wealth enjoyed by some of its neighbors. The appearance of political reforms has, in fact, lead to the appeasement of the tension in society regarding Jordan's political state. Milton-Edwards (1993) claims that the same democratization process many claim to have been the saving grace of the country has actually been manipulated by the king and the rest of the ruling oligarchy to perpetuate their own rule. Finally, the methodology utilized by Mitchell et al. (2018) is useful in that it considers the way in which nations handle the provision of public goods as a determining factor in the chances for success that protests have in the region. Milton-Edwards (1993) argues that political reforms that have already been instituted in Jordan reflect some vague notion of increased popular sovereignty combined with an increased and strengthened structure of welfare provision (200).

3.5 Resource Allocation: Water Use Management

As a lower middle income country, Jordan must have a cautious attitude towards how resources are invested in society, which is an extremely important key to understanding the sustained political stability enjoyed by the monarchy (Sweidan 2016, 281). Mitchell et al. (2018) point to the allocation of public goods and restrictive policies as pivotal to inciting the protests of the 2011 Arab Spring movement that swept the MENA region. They present the generous welfare system and favorable economic policies in the GCC countries as the main contributing factors helping to avoid nationwide violent and protracted anti-governments protests (Mitchell et al 2018, 7). The authors argue "[the] welfare systems have worked effectively to preclude revolutionary

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[1] The Gulf Cooperation Council or GCC is a regional intergovernmental political and economic union. Its members are the Kingdom of Bahrain, Kuwait, Qatar, the United Arab Emirates, the Sultanate of Oman, and the Kingdom of Saudi Arabia.

activity, which could lead to regime change and to the weakening of the high standards of living to which GCC citizens have grown accustomed to" (Ibid.).

Additionally, Dolatayar and Gray (2000) found that water scarcity in this region has served more to reinforce peace than provoke war, and that it will likely continue do so in the future (65). Common thought might indicate that extreme water scarcity like the one present in Jordan, due to its location in one of the driest parts of the Middle East, would lead to conflicts amongst its citizens. Dolatayar and Gray's findings are relevant to this paper's case study considering water use management in Jordan has been the source of tension due to the disproportionate benefits this institution appears to give to some groups in society while seemingly leaving others at a social disadvantage. The provision of public goods in Jordan is one of the most crucial avenues through which the government has managed to both distribute water effectively and wield the power of influential members of society by balancing power exerted with the goal of water provision.

4. THEORETICAL FRAMEWORK

To understand an institutional approach one must begin with a common definition of the elusive concept found in the social sciences that is the institution as well as its functions, roles and meanings within society. As defined by Douglass North, recipient of the 1993 Nobel Memorial Prize in Economic Sciences, institutions are the "humanly devised constraints that shape human interaction" (North 1996, 3). These institutions can be codified (formal) or unwritten codes of conduct (informal). Furthermore, social theorists agree the nature of institutions present in a society influence economic and social life (Knight 2004).

4.1 The effects of institutions: collective benefits & disproportionate advantages

Knight (2004) describes two schools of thought characterized by their differing emphasis on the distinctive effects of social institutions. The first stresses the collective benefits of social institutions for the community as a whole, and the second, emphasizes the discriminating benefits of such institutions leading to disproportionate advantages for some segments of a community. In other words, institutions can serve as vehicles for an efficient distribution of resources and agency across societal groups that can benefit various strata and recognize everyone as valuable stakeholders. The latter approach explains that the way institutions are set up, and how the members of society they choose to benefit creates social disadvantages for those not part of the privileged groups. The second school of thought was mainly elaborated by Karl Marx and Max Weber. Collectively, they claim that most social outcomes (either positive or negative) are the product of conflict among actors with competing interests (Knight 2004, 14). Following Knight's explanation, rational-choice theory, as a subset of intentional explanations, provides a basis for understanding such conflict. This theory is sustained by the basic assumption that individuals act intentionally and optimally towards some specific goal or interest (Knight 2004, 17).

Social scientists classify the tangible benefits of institutions into the following categories: gains from trade, gains from cooperation and advantages of coordination. A distinguishing feature of the different forms that institutions take are their distributional consequences. The presence of social incentives for people to support the government and disavow alternative political figures and movements is then what sustains social/political stability. Thus, understanding how certain groups within society benefit from social institutions, and therefore have a vested interest in supporting the regime becomes crucial. If one is interested in the specific social goal of stability

that institutions might achieve, one might be compelled to ask the question: who does the institution systematically favor? The standard conclusion drawn from Douglass North's analysis is that the introduction of the state's interests increases the inefficiency of social institutions. However, in response, Knight presents two cases in which the state may prefer a more "socially efficient"[2] institution: firstly, if state actors[3] are directly affected by the consequences of the rule, and if they will benefit materially from a more socially efficient rule; secondly, if state actors are indirectly affected by the rule through its effect on their ability to stay in power and if they benefit politically from a more socially beneficial rule. Socially efficient institutions uphold those rules that produce the greatest collective gain (Knight 2004, 30).

4.2 Institutions and civil peace

Fjelde and De Soysa (2009) find that there is a correlation between institutions and civil peace. Their research results suggest that civil peace is co-produced by social and state forces, where quasi-voluntary cooperation from society increases state capacity for maintaining peace (5). Furthermore, high levels of government spending on public goods and trustworthy institutions are more significant predictors of civil peace than are states' coercive capacities.

According to North, Summerhill, and Weingast (2000), "the sources of political order involve state capacity concerning the creation of credible commitments" (17). The provision of public goods is one of the main ways for states to create credible commitments, and that way garner the trust of their citizens. Finally, Levi (1998) explains that governments can create compliance by co-opting political opposition and retaining loyalty from key segments of society

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[2] When discussing socially efficient institutions, Knight refers to Coleman's definition as allocative efficiency: the maximum productive use of resources.
[3] Here on forward 'state actors' refer to both monarchy representatives and appointed government officials.

through spending on political goods. Therefore, redistributing government spending on political goods such as health, education, and development not only has the potential to enhance the situation of marginalized groups but to serve governments' interests. Thus, "increasing the state's bargaining power vis-à-vis potential challengers, by addressing grievances that motivate individuals to join a rebellion," as elaborated by Azam (1995) and quoted by Fjelde and De Soysa (2009).

4.3 The institution of public goods provision

In countries with constitutional monarchies, institutions prioritize the direct benefits for the royal family, by default, as is the case with the Hashemite royals. In so doing they render regime type as a weak explanation to understand their desire of socially efficient institutions, as explained in the literature review. In this paper, I seek to understand the institutional dynamics surrounding the provision of public goods in Jordan through the lens of the second case presented by Knight (2004).

5. HISTORICAL CONTEXT: POLITICS AND POWER

Ever since its formal establishment as a country in 1921, the Hashemite Kingdom of Jordan has conducted politics in a scenario heavily influenced by the tribal relationships that predate and aided the creation of the state. The state-building process that occurred during the British mandate period interlaced the interests of tribal leaders and the emerging ruling family. By the end of the mandate in 1946, the tribes were fully integrated into the state and played an indispensable role in it. Sparked by continuous unrest amongst the citizenry regarding corruption and the rise in prices of commodities, 1989 marked the beginning of a reform campaign by King Hussein. Following

his predecessor's death, King Abdullah II continued in the footsteps of his father and has continuously favored national reform plans. Finally, in the last twelve years there have been various cabinet reshuffling, seven prime ministers and an unending appearance of political and social reforms. These reforms have not been fully supported by the elites due to the fear of the potential loss of power; however, the government continues to move forward with them in their effort to support the king's vision. Public demonstrations against corruption allegations and the rising prices of commodities indicate a lack of trust in public institutions. The decade-long reform process, initiated by King Abdullah II, has been "largely ignored by an ossified layer of elites seeking to protect their own interests;" Marwan Muasher, blames the failure of reform on the ruling elites (Barari & Satkowski 2012, 48).

5.1 Transjordan Tribes and Nation-building

The myth of Jordan's creation dates back to the 1916 Arab Revolt that was supported by a coalition of Arab tribes initiated by Sharif Faysal bin Husayn, who committed his men to the revolt in exchange for the British promise to create an Arab state once the war ended. The Sharifian Army was led by Husseinn bin Talal, who continuously stressed his descendency from the Quraysh tribe. This army successfully battled and pushed back Ottoman forces from the majority of the Hejaz and Transjordan region. The centrality of Bedouin tribes to the state-building process in Jordan came from the key military roles they occupied during British rule. Consequently, tribal identities form an essential part of the Arab collective memory and history. Furthermore, the tribes are an "integral part of the Jordanian national identity, and they remain a central issue in contemporary Jordan" (Alon 2009, 2). Tribes and sheikhs remained formidable actors on the Transjordanian political scene and were able to "exert considerable leverage vis-a-vis the state authorities" (Ibid.,

1). The British mandate over the Emirate of Transjordan was created as a result of the capitulation and subsequent demise of the Ottoman Empire in October 1918, marking the end of WWI. The leader of the 1916 Arab Revolt against the Ottomans, Sharif Faysal bin Husayn, committed his men to the revolt in exchange for the British promise of the creation of an Arab state once the war ended. Under the 1921-1946 British mandate of Jordan, a common notion was that Bedouins tribes were loyal supporters of the Hashemite ruling family (Ibid., 1).

Some scholars argue that political power relies heavily on the support of the tribes for historical reasons, and this is evidenced through the electoral system, the *wasta* (personal networks) system, and in civil rights privileges granted to East Bankers.[4] However, others argue that since not all tribes supported the Hashemites at the establishment of the Emirate in the early 1920s, not all tribes have equal weight and influence (Hussein 2018b, 171). With the passing of time, the garnering of influence has shifted to having more to do with the groups and individual relationships with the ruling class rather than their representational value within Jordanian society. For example, the Bedouins, who are thought to be the most truly representative group of Jordanian history and culture, have been discriminated against by law and by the state. Within a tribe, only those economically or politically important are influential and can resist change and shape policies; these people are part of what scholars have labeled the shadow state. On the other hand, poor and non-influential families perhaps with the same origins, marginalized individuals within the influential families, and/or those politically aligned against the status quo like members of opposition parties like the Muslim Brotherhood, cannot influence or resist change, policies, and decisions in the water sector (Ibid., 172).

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[4] "…those with historical roots on the East Bank of the Jordan River" (Helfont and Helfont 2012, 86).

Tribes have and still do form an integral part of the regime's backbone of support. Nonetheless, as Joav Alon (2009) points out, this support is not intrinsic nor is there anything quintessentially 'Bedouin' or 'tribal' about this political behavior. The process that allowed for the integration of Bedouin tribes into the political life of the modern state also helped them carve out a political role for themselves in this new framework. Contrary to how this process developed in other nations in the region, in Jordan these tribes were not coerced into supporting the new political order and ruling family. Rather, they developed a genuine stake in the survival of the Jordanian state as any other citizen did. Therefore, Jordan consciously incorporated tribalism in their state-building project making it a part of the political power and "built on it for its own legitimacy and survival from the outset" (Alon 2009, 2).

In 1921 began a six-month trial period of indirect British rule exerted by one ruler, instead of being devolved into local units, was awarded to Sharif Abdullah bin Husayn, who, under the Mandate of Transjordan, eventually led the permanent establishment of the Hashemite Kingdom of Jordan. After several severe confrontations between Abdullah and the British government in 1924, the British changed their attitude towards administering the country and began to "develop it slowly, restricted by an extremely tight budget" (Ibid., 61). Nomadic tribes enjoyed only limited government control as well as complete freedom in the desert until the early 1930s. Within a few years the balance of power between the tribes and the central authority has been entirely transformed; the tribes were weakened and their need for assistance "rendered them more amenable to the central government" than otherwise (Ibid., 84). By the end of the mandate in 1946, tribes had become indispensable for political rule and some tribal sheikhs became officials of the state. Rich and influential, sheikhs belonged to a state elite "cultivated and organized" by Abdullah. As Alon (2009) explains it, "Britain's laissez-faire approach in Transjordan favored

more independent local development, allowing the tribes to be gradually enmeshed into the state through ties of mutual interest" (149).

5.2 1989 Riots and the Illusion of Political Reforms

In the Spring of 1989 people took to the streets in several cities to protest King Husein's decision to remove subsidies on fuel prices that lead to an increase in the prices of commodities. Some scholars, such as Barari and Satkowski (2012), claim that the nature of Jordan's economy and the sources of state revenue helped create a network of "patron-client relationships that made it easy to put political reform on the back burner" (44). Protests by the population during the riots has been as much about court corruption as a lack of political participation. Therefore, it is not surprising that various authors point to pre-1989 Jordan as a sham democratic system. The riots marked the opening up of the political system, an effort led by the monarch who supported political reforms. As it is documented by scholars such as Milton-Edwards (1993), the "ruling oligarchy" also moved to support the process seen as encouraging full liberal-democracy (191). However, Milton-Edwards also claims that while appearing to embrace liberal-democratic principles such as contestation, popular sovereignty, electoral representation, and majoritarianism, the political system remained under the control of an "all-powerful oligarchy." Democratic symbols such as elections have been adopted without the principles that validate them. These principles can be understood as the "'procedures and habits of mind which ensure the elimination of grievances and the humanization of viewpoints before voting itself begins'" (Ibid., 191). However, despite the optimism surrounding the elections of 1989, Jordan has failed to develop a democratic system based on rotation of power through a ballot box.

The National Charter of 1991 outlined a new framework for political participation in the kingdom (Barari & Satkowski 2012, 44). Since the reforms proposed were instituted as a plan set forth by the King, the process was characterized as a 'top-down reform' that many claim was precipitated by a severe economic crisis. These efforts continued until the rise to power of King Abdullah II, who took over after the passing of King Husein in 1999. The 1993 Electoral Law reform included a provision of "one person, one vote" which, "given the arrangement of Jordan's voting districts, has favored the rural areas and the tribal groups over the kingdom's urban population" (Ibid., 47). In 1993, the people of Jordan were able to participate in the first multi-party elections since 1956 (Ibid., 202). However, one of Milton-Edwards' (1993) final assertions is that the democratization process in Jordan has been "manipulated by the king and the rest of the ruling oligarchy to perpetuate their own rule and that the process is not sufficiently close to the democratic ideals of freedom, equality, devolved political power and liberty" (201). Finally, electoral reforms over the past two decades sought to marginalize the Muslim Brotherhood and its Palestinian base, which has made the Brotherhood one of the most forceful proponents of political reform (Helfont and Helfont 2012, 87).

5.3 2011 Uprisings: The Attempt for a Jordanian Spring

In similar fashion to the 1989 riots, in 2011 Jordanians took to the streets inspired by similar protests in Oman, Yemen, Egypt, Syria, and Morocco demanding a real constitutional monarchy, including a reduction of the king's powers and further electoral reforms. The abolition of fuel subsidies continued to be major grievance of the population. The International Monetary Fund (IMF) had demanded the end of the subsidies in return for a loan to bail out Jordan's debt-saddled economy (BBC 2013). The sources of tension in Jordanian society were mainly the unemployment

rates, which according to the ILOSTAT database was at 12.9% in 2011, as well as low salaries, inflation, and corruption, amongst other socio-economic grievances.

This followed an unfortunate rise in the rates of youth unemployment in the MENA countries. According to the IMF in 2012, unemployment in the MENA region was "the highest in the world and largely a youth phenomenon" (Ahmed 2012). While in various countries of the region the rates approached almost 30% in Jordan it was less than half, but a grievance nonetheless. The unemployment rate has since peaked at 15.2% in 2016 (the highest since 1993 when it stood at an all-time high of 19.7); the ILO reports unemployment in Jordan at 14.9% for 2019 (World Bank).

Protests were not only attended by liberal youth activists but also tribal leaders and political opposition groups. The Muslim Brotherhood, for example, was at the center of the Arab Spring-inspired protests due to their systematic marginalization through the electoral reforms previously mentioned. On the other hand, deeply conservative tribal elements rooted in East Bank politics feared that political reform would come at their expense and in so thinking remained removed from the protest spotlight (Helfont and Helfont 2012, 88). At the heart of these protests lie the unconformities of the citizenry regarding public policies and goods.

6. CASE STUDY: The Hydropolitics of Jordan's Aquifers

Resource allocation and management are a veritable source of social tension amongst the various groups that make up Jordanian society. Water distribution issues are particularly tense because of Jordan's geographical position and arid climate. Water and the politics behind its management provide an opportunity to understand the relationship between the institutional that is the provision of public goods and its impact on political stability.

This case study can be classified as a hard one, as it is particularly arid country in very arid region of the world. Additionally, while other countries in the region have also felt the strain of arriving Syrian refugees, Jordan is the second largest refugee host country per capita (following Lebanon), hosting refugee populations from Palestine, Iraq, Lebanon, and Syria (among others). These refugees have come in distinct waves over many decades. For these reasons, one might expect Jordan to be particularly conflict-prone. If institutions can explain civil peace in Jordan, the theory is likely to apply to other cases where the conflict producing factors are less intense (i.e. less resource scarcity, less strained social contexts). Through the evidence presented, I seek to explain the institutional dynamics that ultimately determine who benefits and who is left at a disadvantage when it comes to the provision of water. This includes both for personal and private business purposes, and how it relates to the monarchy's objective of staying in power, hence explaining the stability of the kingdom.

6.1 Fresh Water: "Jordan has less water than oil— and it does not have oil"

The title of this subsection alludes to a local saying, which mocks the serious water scarcity issues faced by Jordan for decades due to its geographical location and rapid population growth. The naturally arid country is known as one of the driest in the mainly desert region of the Middle East; it has one of the lowest levels of water availability per capita in the world (USAID 2019). The provision of water has been a source of political tension both at the domestic and international levels, the latter due to the issues between the states and territories located within and bordering the Jordan River basin— Israel, the West Bank, Lebanon, Syria and Jordan —which will be discussed in an upcoming subsection (see Appendix B). The Jordan River is the country's most important source of water, followed by the Yarmouk River and the Zarqa River, the largest

tributaries of the Jordan. Jordan has limited renewable water resources, and groundwater for irrigation and drinking water is being drawn down at twice the rate of recharge for the aquifers, which furthers reduces the availability and quality of water (GlobalWaters 2019).

According to the Joint Monitoring Program (JMP) for Water Supply and Sanitation of UNICEF and the World Health Organization (WHO) in 2019, 97% of the population in Jordan has access to safely managed and basic service sanitation[5] and 99% has access to safely managed and basic service drinking water.[6] As reported by the World Bank, some of Jordan's praiseworthy innovations in the water sector include efforts to harness private sector innovation, financing for recycling wastewater, and desalination to enhance supply (World Bank 2017). While water management appears to be yielding positive results, the threat of a water scarcity crisis continues to pose serious complications for Jordan if other influential factors such as consumption, population growth, and unsustainable groundwater extraction are taken into account. The region has the greatest expected economic losses from climate-related water scarcity, estimated at 6–14 percent of GDP by 2050 (Ibid.).

6.2 Authorities regulating water management and social dynamics

Water management in Jordan is officially controlled by the Ministry of Water and Irrigation (MWI), which was established in the spring of 1988 and is aligned with the Ministry of Finance. The Ministry of Water and Irrigation is the most influential institution in the water sector, which,

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[5] Basic sanitation service is defined by UNICEF and WHO as the use of improved sanitation facilities that are not shared with other households.

[6] As defined by UNICEF and WHO this is defined as the drinking water coming from an improved source, and provided the collection time is not more than 30 minutes for a round trip. A lower level of service is now called "limited water service" which is the same as basic service but the collection time is longer than 30 minutes.

amongst other infrastructural responsibilities, has full control over the management of the King Abdallah Canal that, runs along the Jordan River Valley through the Ministry's sub-authority, the Jordan Valley Authority (Zeitoun et al. 2012, 59). Additionally, the Royal Commission oversees the Higher Agricultural Council jointly with the Ministry of Agriculture. The Ministry of Agriculture has the authority to drill wells required for livestock production, to build dams for animal feed production, and to assist farmers with improved field-level water management practice (Ibid.). However, all policies must be condoned and aligned with the objectives set by the monarchy (Al-saidi and Dehnavi 2019). Mustafa, Altz-Stamm and Scott (2016) argue that political stability is the main objective of water management in Jordan. In theory, it is the responsibility of the government through, the establishment of national policies, to set standards and mechanisms for efficient and sustainable water use and to protect the highly vulnerable water resources. However, in a poignant yet accurate statement, the authors assert "water is not just politicized in Jordan — it is politics" (Ibid., 168). Meaning, water is a complex yet quintessential component of the Jordanian political sphere.

Until 1970, the Palestinian population of the country had dominated the political sphere, represented by various Palestinian insurgent groups, including the Palestinian Liberation Organization (PLO). Under the rule of King Hussein, Jordan sought to reclaim control of the country and its politics after the brutal Black September[7] conflict against the PLO. Since then, "Jordanian society has settled into an unofficial truce of sorts in which indigenous Jordanians populate the state institutions and the Palestinian populace dominates the business and commercial

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[7] Black September refers to "a month of bloody fighting in Jordan between the forces of Jordanian King Hussein bin Talal and Palestinian separatists groups such as the Fatah and the Popular Front for the Liberation of Palestine," as described by the Association for Diplomatic Studies & Training.

life of the country" (Mustafa et al. 2016, 168). The government has long blamed the influx of refugees for the problem of water poverty. However, centralized planning of water services, along with government subsidies and loans, were at the heart of securing state access to rural, arid, and unsettled areas, and expanding commercial agriculture from the Jordan Valley to the highlands; and therefore, should be further blamed for the water issues instead of refugees. Groundwater resources from Jordan's major rivers (Jordan, Yarmouk, and Zarqa) are the most important sources of water supply, and these are currently over-exploited (Hussein 2018b, 171).

6.3 Influence over water use policy and decision making

In traditional government theory, the state should hold the interests of all sectors of its society as its own. However, in order to understand where the real interests of the Jordanian state lie, one must recall one of Knight's scenarios, which points to state actors preferring socially efficient institutions, given that they affect their ability to stay in power. According to Al Saidi and Dehnavi, the national policy of Jordan remains oriented towards affordability of services, agricultural subsidies, and maintaining a strong public role in supply and control of water services (2019, 16). Jordan's water demand management is formally incorporated into several national water plans: the 2008-2022 Water Strategy of Jordan, for instance, clearly states as one of its goals that "water tariffs within and outside the water sector should support water demand management" (Hashemite Kingdom of Jordan, 9). Zeitoun et al. present a stakeholder analysis that positions elites and large landowners as the main influential actors in these power relations. These exert their influence in order to achieve the implementation of water use policies that are favorable for their businesses and, essentially, blocking those policies they perceive as unfavorable. While the resultant over-exploitation of water resources certainly affects groups in unequal measures,

statistics show that the vast majority of Jordanian citizens do, in fact, have access to water. Established water use patterns are maintained by the interests of, and power asymmetry between, stakeholder groups; the most powerful generally oppose changes to the status quo, while those seeking to change it are generally weaker.

Another element that heavily influences water use policy and decision making is the international donors involved in water projects such was the Japanese International Cooperation Agency (JICA), US Agency for International Development (USAID), and the German Development Agency (GIZ), who all work toward the improvement of Jordan's pipeline system. For example, as a result of a 2011 report USAID pushed for the MWI to tackle the issue of illegal wells as a priority, "although closing the illegal wells would increase Jordan's water sustainability by decreasing non-revenue water, government of Jordan officials could not achieve the condition precedent because of political pressure from influential agribusiness owners" (5-6). Facing pressure from donors and increasing shortages, Jordan was able to initiate reforms to increase participation and financial viability of utilities (Al Saidi and Dehnavi 2019, 16). Nonetheless, big farmers and tribal leaders are continuously cited as the main sources of pushback against changes in the water policy status quo.

6.4 The shadow state and challenges against socially efficient water provision

Zeitoun et al. (2012) explain that water resource policymakers face resistance in their attempts to reduce water use to environmentally sustainable levels through the implementation of water demand management (WDM) activities (54). The authors position water use policy as set in a shadow state, where "decision makers respond to the pressures from influential industrial agricultural interests and other politically influential water-users benefitting from agricultural

water subsidies" (Ibid., 55). In line with Knight's thinking, they explain that implementing policy to better manage water demand in these circumstances is "politically suicidal" (Ibid.). The bargaining power of the less powerful groups is compromised by their lack of access to the decision-making organs of the shadow state.

Hussam Hussein takes the study of the shadow state in Jordan one step forward and describes it as a "neo-patrimonial regime" that can also have a facade of laws, procedures, and government institutions (Hussein 2018b, 170). In support of Knight's institutional explanation, Hussein explains "the official ruler maintains the support of key actors, who are linked to him through tribal or regional affiliation, and through privileged access to economic assets (Ibid.).

6.5 Water scarcity between Jordan and Israel: tension and cooperation

As previously mentioned, water scarcity in Jordan has been a source of political tension both domestically and abroad. Throughout the years Jordan's state behavior regarding water scarcity has not only affected politics at home but also with neighboring countries, specifically with Israel, due to the location of the Jordan River basin shared by both. As many aspects of Arab-Israeli politics, this particular relationship has been tainted by interests that are frequently at odds and in conflict. Even in times of political conflict leaders are under pressure to provide daily necessities, such as water, for the citizens. Water has been a key issue and a source of political tension that cannot be resolved through established norms. Thus, both countries have continuously found unconventional methods for cooperation. As Sosland explains, state preferences become the basis for rational, value-maximizing calculations of government leadership in domestic and international affairs (Sosland 2007, 6).

The case of Jordan and Israel is relevant because it involves two states that have been at odds due to ideological and geo-political interests but have had to find venues of cooperation for water use and management. Scholars agree that without the establishment of rules and the means to reciprocate, evidence shows that coordination would have been short-lived (Ibid., 201). The main avenue of cooperation has been Tactical Functional Cooperation (TFC) because it facilitates the exchange of information, lengthens the shadow of the future and provides an avenue to continue issue linkage (Ibid., 201).[8] This cooperation took the shape of various joint water system development and management projects. Additionally, another focal point has been third party action, in this case from the United States, as a means to judge whether the participating parties are playing within the established coordinating venues. The United States had a unique and legitimate function as it served as an ally of both countries, provided financial assistance to important Jordanian and Israeli water projects and offered important technical and political support (Ibid., 205). "For forty-five years King Hussein and his water technocrats saw water cooperation with Israel as a political gamble, but also showed reluctance to ignore Israel in this potentially explosive issue" (Ibid., 203). While TFC did not resolve the Arab-Israeli conflict, as predicted by some scholars, it did move the parties in that direction.

Finally, there have been a few major incidents that led to acute conflict including limited military mobilizations (e.g., on the banks of the Yarmouk River in the 1980s), violent conflict concerning the demilitarized zones in the 1950s related in part to the water issue, Israel's initiation of the National Water Carrier in the 1960s, and the ensuing Arab diversion of the upper Jordan. Unfortunately, in the last two decades the relationship between the two governments has

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[8] "In sum, tactical functional cooperation is an effective means of maintaining cooperation between states in a protracted conflict; it also has long-term conflict resolution value" (Sosland 10).

deteriorated due to diplomatic mishaps that have greatly affected water relations. Most recently, this led to the suspension of a regional water-sharing project known as the Red Sea-Dead Sea Canal (RSDSC) in 2018 (Hussein 2018a). Scholars have interested themselves in the relationship between scarce renewable natural resources and the outbreak of acute conflict. The case of Jordan and Israel evidences the volatile nature of life-sustaining resources such as water.

6.6 The Strain of Refugees

Water use and management is an intrinsically political activity in Jordan that has only been exacerbated by the presence of refugees from the 1948 Arab-Israeli War, the 1967 Six-Day War, 1990 Gulf War, 2003 Iraq War, and 2011 Syrian Civil War, as well as those who fled their countries for other reasons. Most recently, Jordan became the second highest host country of Syrian refugees per capita with 654,266 registered with UNHCR as of November 2019 (UNHCR 2019). Approximately 83% of Syrian refugees live in cities and towns, further straining the limited water supply (Proctor 2018). According to USAID, with this rapid influx in population, the gap between the available water and demand, particularly in the north, has widened significantly (USAID 2019). The refugee influx has been a continuous reason given by government officials for the water poverty. While the amount of refugees the country is hosting certainly adds to the straining of resources the nature of this particular institution and its patterns of advantages and disadvantages are worth taking a closer look at. The nexus between water, climate, and migration as well as the impact the waves of refugees have had on water management is ever important. They acknowledge that migration into Jordan has added significant stress on local resources and has led to some domestic social conflict.

7. ANALYSIS

Scholars like Emmanuel Comolet (2014) assert that Jordan's relative stability in the past decade mirrors its historic ability to "resist and adapt to shocks." Protests in the country have even been called a "ritual" rather than a revolution reflective of "trading geopolitical importance for aid and showing restraint when unrest erupts" (Yom 2018). Understanding how the country became the "eye of the Arab cyclone" and how this might be an effect of its water management technical and political strategies is the central question of this thesis.

If one applies the aforementioned definition of "institution" provided by North, "humanly devised constraints that shape human interaction," to the provision of water, the connection does not become evident. However, in the specific case of this naturally arid country, the uses and elements of society benefited by the provision of this life-sustaining resource has a direct effect on social dynamics, and as such classifies as a social institution. Through the evidence presented in the "Case Study" section, the importance of the collaborative relationship between the monarchy and the "shadow state" becomes clear. Contrary to initial expectations for this paper the monarchy has, in fact, aligned its interests to those of the members of the shadow state and vice versa. However, both groups have done so for one core reason—to maintain their share of power in the politics of the country.

What motivates people to go out on the streets and sometimes risk their lives protesting against a regime and demanding changes in different social and governmental institutions are typically tangible grievances. Therefore, claiming that an affinity and connection to the ruling family will overrule those grievances and deter people from demanding changes when they are needed seems out of touch with reality. Scholars like Wrobleski cite monarchies in the MENA region as uprising resistant institutions. He argues these states have been held together by

monarchic legalism rather than popular sovereignty. In the case of Jordan this monarchic idea is bolstered with the strength of modern institutions such as the army, police, and secret service. However, in attempting to further understand how Jordan survived the wave of Arab Spring protests sweeping its neighbors into anarchy (i.e., Iraq and Syria), one can turn to evidence of the melding of monarchic legalism[9] and popular sovereignty. In resource-challenged countries, such as the naturally arid lands of Jordan, the provision of water plays a protagonic role in securing the rule of those either appointed or anointed. But the question remains, what makes the bond created between this monarchy and those they rule more stable than the one created by dictators and their people around the region?

This balancing act entails accommodating the interests of the many, and aligning interests with the few, the former being the Jordanian citizenry and the latter the elites and members of the shadow state. On one hand, the country has, against all odds, reached record water access, considering its scarcity situation and the waves of incoming refugees it has absorbed in comparison to its neighbors. However, the 2011-12 protests certainly rendered this balancing of power in conflict with popular sovereignty. This is the reason the government can also be commended for discerning between its alliances to the shadow state, and the role the citizenry plays in their stay in power, even if it was a flawed constitutional monarchy at the time. The thousands protesting demanded changes in government and King Abdullah II wasted no time in showing support for the movement.

For the past decade the desire for reforms had been thwarted and delayed by the pushback from the elites who believed reforms would come at their expense. Conversely, the monarchy allowed itself to not prioritize these efforts mainly because the support of these elites and tribal

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[9] Monarchic legalism is defined as "traditional justification for the ruling family hold the reins of power."

leaders is essential for the survival of their rule. This paper, like many others cited, explicitly points at members of the shadow state as the main sources of resistance against water policy changes suggested by international actors that might alleviate the scarcity situation. However, while power seems to be wielded mainly by the shadow state and its interests, access to safely managed sanitation and basic service drinking water is at an all-time high regardless of the political affiliation or social group to which beneficiaries belong. In this case, the institution of the provision of water embodies the two distinctive effects of social institutions, the ability to discriminately benefit certain groups (i.e., the political clout and policy priority enjoyed by elites and landowners), and the ability to provide collective benefits (i.e., national access to water rates). The institution favors the elites and general population by entering into social contracts specific to the interests of each group, while ensuring all key elements of society are deterred from disavowing the monarchy.

North explains that the introduction of the state's interests increases the inefficiency of social institutions. Until 2011, this has been the case with water management in Jordan considering the critiques received from USAID. This balancing act allowed political reforms to be put on the back-burner but had to be reassessed after the 2011-2012 popular protests. The protests, nonetheless, appear to have thrown the government into yet another balancing act between its own interests, which until now had been identified as staying in power and water management as an instrument towards attaining their interest; with the citizenry demanding changes, these became more pressing interests, which in turn trumped those of the elites.

8. CONCLUSIONS

The rise of leftist movements across Europe cries out for stricter border control due to a lack of resources but most importantly because "refugees" and "undeserving migrants" pose a threat to the national identities of these reluctant European Union (EU) host countries (Holmes and Castaneda). In the United States lawmakers claim only "legal immigration" should be allowed because "illegal migrants" seek to take advantage of the declining welfare system. These rhetorics are translated into systematic state-sanctioned human rights violations at these borders. Additionally, foreign aid to major host countries such as Jordan, Turkey, and Lebanon is increased with the goal of containing these perceived threats in their original regions. However, host countries in the MENA region are already at a disadvantage because of their geographical location in a semi-arid area making the proper management of non-renewable natural resources, such as water, a matter of life or death for its own citizens; they are further jeopardized by the thousandths of refugees in camps and communities. In this paper, I analyzed the socio-political dynamics regarding the interests of the state and how those are reflected in the actions taken by its institutions.

Understanding how these states choose to prioritize their interests and express it in their national policies becomes crucial then to point at key elements that might tip the scales towards more stable countries in this volatile region, avoiding more civil wars, and keeping people safe. This paper focuses on the impact of state preferences and behavior to better understand water scarcity and conflict prevention. I found that instead of aligning its interests with the elites as is expected, the royal family of Jordan and by extent its government has managed to balance its catering to the interests of the shadow state as well as the rest of the population. Jordan's success in remaining stable lies in its institutional dynamics in which the provision of water has a

significant impact despite regional challenges. It does not matter whether good water management measures are taken to support of the citizenry or not, the case of Jordan suggests that management is an avenue through which to create trust between the government (in this case the monarchy) and the general population, regardless of elements of society such as the shadow state that might be slightly benefitted over others. Finally, one crucial takeaway from this research is that the specific combination of this semiarid situation and the vital characteristic of the nature of the institution of water use and management in Jordan has provided a stabilizing effect that prevents conflict.

9. APPENDICES

<u>9.1 Appendix A: List of Abbreviations</u>

UN   United Nations

NGO   Non-Governmental Organizations

GCC   Gulf Cooperation Council

IMF   International Monetary Fund

MENA   Middle East & North Africa

JMP   Joint Monitoring Program

UNICEF   United Nations International Children's Emergency Fund

WHO   World Health Organization

USAID   United States Agency for International Aid

MWI   Ministry of Water and Irrigation

PLO   Palestinian Liberation Organization

WDM   Water Demand Management

JICA   Japanese International Cooperation Agency

GIZ   German Development Agency

TFC   Tactical Functional Cooperation

RSDSC   Red Sea-Dead Sea Canal

UNHCR   United Nations High Commissioner for Refugees

BBC   British Broadcasting Company

ILOSTAT   International Labour Organization Statistics

EU   European Union

9.2 Appendix B: Map of the Jordan River Basin

Sullivan, Caroline, Mike Acreman, Patricia Wouters, and E. Castro, Facilitating adaptive management in large river basins: using the transboundary analytical framework. School of Environmental Science and Management Papers, 2007.

WORKS CITED

Ahmed, Masood, et al. "Youth Unemployment in the MENA Region: Determinants and Challenges." International Monetary Fund, 13 June 2012, www.imf.org/en/News/Articles/2015/09/28/04/54/vc061312.

Alon, Yoav. Making of Jordan: Tribes, Colonialism and the Modern State. I.B. Tauris, 2009.

Al-Saidi, Mohammad and Sudeh Dehnavi. "Comparative Scorecard Assessment of Urban Water Pricing Policies—The Case of Jordan and Iran." Water, vol. 11, no. 4, 2019, pp. 1-20, doi: 10.3390/w11040704.

"Arab Uprising: Country by Country - Jordan." BBC News, BBC, 16 Dec. 2013, www.bbc.com/news/world-12482679.

Azam, J. P. "How to pay for the peace? A theoretical framework with references to African countries." Public Choice, vol. 83, no. 1-2, 1995, pp. 173–184.

Barari, Hassan A. and Christina A. Satkowski. "The Arab Spring: The Case of Jordan." Ortadoğu Etütleri, vol. 3, no. 2, 2012, pp. 41-57.

"Beyond Scarcity: Water Security in the Middle East and North Africa." World Bank, 23 Aug. 2017, www.worldbank.org/en/topic/water/publication/beyond-scarcity-water-security-in-the-middle-east-and-north-africa.

Bueno de Mesquita, B., J.D. Morrow, R. M. Siverson, and A. Smith. "Political institutions, political survival, and policy success" in Governing for Prospeity, ed. B. Bueno de Mesquita and H.L. Root, pp. 59-84. Yale University Press, 2000.

Comolet, Emmanuel. "Jordan: The Geopolitical Service Provider." *Brookings*, The Brookings Institution, 10 Feb. 2014, www.brookings.edu/research/jordan-the-geopolitical-service-provider/.

Dolatyar, Mostafa, and Tim S. Gray. "The Politics of Water Scarcity in the Middle East." Environmental Politics, vol. 9, no. 3, 2000, pp. 65–88., doi:10.1080/09644010008414538.

Fjelde, Hanne, and Indra De Soysa. "Coercion, Co-Optation, or Cooperation?" Conflict Management and Peace Science, vol. 26, no. 1, 2009, pp. 5–25., doi:10.1177/0738894208097664.

George, Alexander L., and Andrew Bennett. 2005. Case Studies and Theory Development in the Social Sciences. Cambridge, MA: MIT Press.

Hashemite Kingdom of Jordan, "Water for life: Jordan's Water Strategy 2008-2022." 2009. Royal Commission for Water, Hashemite Kingdom of Jordan, Amman.

Helfont, Samuel and Tally Helfont. "Jordan: Between the Arab Spring and the Gulf Cooperation Council." Orbis, vol. 56, no. 1, 2012, pp. 82-95.

Holmes, Seth M. and Heide Castaneda. "Representing the 'European refugee crisis' in Germany and beyond." American Ethnologist, vol. 43, no. 1, 2016, pp. 12-24, doi: 10.1111/amet.12259.

Hussein, Hussam. "Jordan-Israel Tensions Threaten to Derail Water-Sharing Project." IAI Istituto Affari Internazionali, 11 Jan. 2018, www.iai.it/en/pubblicazioni/jordan-israel-tensions-threaten-derail-water-sharing-project.

Hussein, Hussam. "Tomatoes, tribes, bananas, and businessmen: An analysis of the shadow state and of the politics of water in Jordan." Environmental Science and Policy, vol. 84, 2018, pp. 170-176, doi: 10.1016/j.envsci.2018.03.018.

"Jordan's Black September, 1970." *Association for Diplomatic Studies & Training*, 16 Mar. 2018, adst.org/2015/07/jordans-black-september-1970/.

"Jordan." Globalwaters.org, 23 Oct. 2019, www.globalwaters.org/WhereWeWork/MiddleEast/Jordan.

Kadri, Ranya, and Ethan Bronner. "King of Jordan Dismisses His Cabinet." The New York Times, The New York Times, 1 Feb. 2011, www.nytimes.com/2011/02/02/world/middleeast/02jordan.html.

Knight, Jack. 2004. Institutions and Social Conflict. New York: Cambridge University Press.

Levi, M. 1988. Of rule and revenue. Berkley: University of California Press.

Milton-Edwards, Beverly. "Facade Democracy and Jordan." British Journal of Middle Eastern Studies, vol. 20, no. 2, 1993, pp. 191-203.

Mitchell, Charles, et al. "The Silent Spring: Why Pro-Democracy Activity Was Avoided in Gulf Nations during the Arab Spring." Contention: The Multidisciplinary Journal of Social Protest, vol. 6, no. 1, 22 June 2018, doi:10.3167/cont.2018.060105.

Mustafa, Daanish, Amelia Altz-Stamm, and Laura Mapstone Scott. "Water User Associations and the Politics of Water in Jordan." World Development, vol. 79, 2016, pp. 164-176.

North, Douglass C. Institutions, Institutional Change and Economic Performance. Cambridge University Press, 1996.

North, D. C., W. Summerhill, and B. R. Weingast. (2000). Order, disorder, and economic change: Latin America versus North America. In Governing for Prosperity, eds Bruce Bueno de Mesquita and Hilton Root. Yale University Press.

Proctor, Keith. "Tapped Out: Water Scarcity and Refugee Pressures in Jordan." Mercy Corps, 17 Apr. 2018, www.mercycorps.org/research/tapped-out-water-scarcity-and-refugee-pressures-jordan.

"Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines." Joint Monitoring Programme for Water Supply and Sanitation (JMP), Geneva: the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF)., 2017.

Sosland, Jeffrey K. Cooperating Rivals The Riparian Politics of the Jordan River Basin. State University of New York Press, 2007.

Sullivan, Caroline, Mike Acreman, Patricia Wouters, and E. Castro, Facilitating adaptive management in large river basins: using the transboundary analytical framework. School of Environmental Science and Management Papers, 2007.

Sweidan, Osama D. "Political Instability and Economic Growth: Evidence from Jordan." Review of Middle East Economics and Finance, vol. 12, no. 3, 2016, p. 279-300.

"Unemployment, Total (% of Total Labor Force) (Modeled ILO Estimate) - Jordan." Data, data.worldbank.org/indicator/SL.UEM.TOTL.ZS?end=2019&locations=JO&name_desc=false&start=1991&view=chart.

UNHCR. "Operational Portal." Situation Syria Regional Refugee Response, 5 Nov. 2019, data2.unhcr.org/en/situations/syria/location/36.

"Water Resources Resources & Environment: Jordan." U.S. Agency for International Development, 12 Nov. 2019, www.usaid.gov/jordan/water-and-wastewater-infrastructure.

Wiktorowicz, Quintan. "Civil Society as Social Control: State Power in Jordan." Comparative Politics, vol. 33, no. 1, 2000, pp. 43–61., doi:10.2307/422423.

Wroblewski, Bartosz. "The Mystery of Political Stability in the Hashemite Kingdom of Jordan: Monarchy and the Crisis of State Governance in the Arab World." Polish Quarterly of International Affairs, vol. 25, no. 4, 2016, p. 7-29. HeinOnline.

Yom, Sean. "Jordan's Protests Are a Ritual, Not a Revolution." *Foreign Policy*, 11 June 2018, foreignpolicy.com/2018/06/11/jordans-protests-are-a-ritual-not-a-revolution/.

Zeitoun, Mark, Tony Allan, Nasser Al Aulaqi, Amer Jabarin, and Hammou Laamrani. "Water demand management in Yemen and Jordan: addressing power and interest." The Geographical Journal, vol. 178, no. 1, 2012, pp.54-66, doi: 10.1111/j.1475-4959.2011.00420.x