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ABSTRACT

This thesis addresses the political use of water resources in hegemonic International Relations. Water is considered as one of the most crucial natural resources, without which communities and ecosystems cannot survive and thrive. However, and because of the important role water plays in life, it can be weaponized for the sake of political gains. This research is a showcase of how Saddam Hussein used scarce water resources to counter post-revolution Iran's potential for ideological hegemony in the Middle East and inside Iraq itself. Based on Neo-Realist theory of International Relations and an understanding of the concept of Hegemony, this research conducts a thorough review of historic, economic, geopolitical and social causes of conflicts between Iraq and Iran, focusing on how water has been exploited and weaponized to exert influence and suppress rival's agency. Hydrology of water resources and numerous water projects are described in detail to give a better picture of Iraq's fragility in face of water scarcity. In addition, drainage of unique Iraqi marshlands under order of Saddam Hussein is studied to show how water can become a tool in committing Ecocide. Two case studies, the Iran-Iraq war of 1980-88 and Shia uprising of 1991 in Southeastern Iraq are explored in-depth to examine the research hypothesis, whether or not Saddam Hussein used water as a political leverage internally and regionally. This research asserts that water was used as a pretext, as a fuel for Ba'athist propaganda, and as a weapon against Marsh Arab people. This research argues that all aforementioned three different dimensions of political use of water in Ba'ath Iraq were all tied together by Saddam Hussein's bitter rivalry with neighboring Iran, as reflected in dualities of Sunni/Shia, Arab/Persian, secular socialist Ba'ath/theocratic Vilayat-e Faqih, and Saddam/Khomeini.

Key Words: *water resources, scarcity, river, Saddam Hussein, political use of water, power hegemony, marsh areas, drainage projects, ecocide, Shia, Sunni, Iran, Iraq, Islamic Revolution 1979, war*

KURZFASSUNG

Diese Masterarbeit befasst sich mit der politischen Nutzung von Wasserressourcen in hegemonialen internationalen Beziehungen. Wasser gilt als eine der wichtigsten natürlichen Ressourcen, ohne die Gemeinschaften und Ökosysteme nicht überleben und gedeihen können. Wegen der wichtigen Rolle, die Wasser im Leben spielt, kann es jedoch für politische Errungenschaften bewaffnet werden. Werden. Diese Forschung zeigt, wie Saddam Hussein knappe Wasserressourcen verwendete, um dem Potenzial des iranischen Nachrevolutionals für ideologische Hegemonie im Nahen Osten und im Irak selbst entgegenzuwirken. Basierend auf der neorealistischen Theorie der internationalen Beziehungen und dem Verständnis des Konzepts der Hegemonie untersucht diese Forschung die historischen, wirtschaftlichen, geopolitischen und sozialen Ursachen von Konflikten zwischen dem Irak und dem Iran. Dabei wird untersucht, wie Wasser genutzt und bewaffnet wurde, um einen Einfluss ausüben und die Macht des Rivalen zu unterdrücken. Die Hydrologie der Wasserressourcen und zahlreiche Wasserprojekte werden detailliert beschrieben, um ein besseres Bild der Zerbrechlichkeit des Irak angesichts der Wasserknappheit zu vermitteln. Darüber hinaus wird die Entwässerung einzigartiger irakischer Marschländer im Auftrag von Saddam Hussein untersucht, um zu zeigen, wie Wasser zu einem Instrument des Ecocide werden kann. Zwei Fallstudien, der Iran-Irak-Krieg von 1980/88 und der Aufstand der Schiiten von 1991 im Südosten des Irak, werden eingehend untersucht, um die Forschungshypothese zu untersuchen, ob Saddam Hussein Wasser intern und regional als politischen Hebel verwendet hat oder nicht. Diese Forschung behauptet, dass Wasser als Vorwand benutzt wurde, als Treibstoff für die Propaganda der Ba'athist und als Waffe gegen die Marsh-Araber. Diese Forschung argumentiert, dass alle drei genannten Dimensionen der politischen Nutzung von Wasser in der Zeit des Ba'ath-Regimes im Irak durch Saddam Husseins erbitterte Rivalität mit dem benachbarten Iran miteinander verbunden waren, was sich in den Dualitäten des Araber/Perser, Sunniten / Schiiten, säkularer sozialistischer Ba'ath / theokratischer Velayat-e-Faghigh und Saddam / Khomeini widerspiegelt.

Schlüsselwörter: *Wasserressourcen, Knappheit, Flüsse, Saddam Hussein, politische Nutzung von Wasser, Machtherrschaft, Sumpfgebiete, Entwässerungsprojekte, Ecocide, Schia, Sunniten, Iran, Irak, islamische Revolution 1979,Krieg*

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1 INTRODUCTION

After the First Gulf War and the toppling of Ba'ath regime by coalition forces under the command of the United States, severe dust storms in Khuzestan, a province at south-western Iran, begun and since then they have disturbed the lives of those living in the province and in the whole region (Dyck, 2017). The coincidence of these two events, war and dust storms, brings to mind the likelihood that there is a correlation between them. After Iraq was defeated in the First Gulf War and pushed out of Kuwait, a failed adventure of Saddam Hussein two years after the end of the Iran-Iraq war, Iraqi's economy was put under the crushing pressure of international sanctions (Al-Nasrawi, 1994; Reisnner, 1989). In 1991 an uprising started among certain groups of dissatisfied Ba'athist soldiers and militias against Saddam's war policies, and while unfavourable economic conditions as a result of imposed sanction on the Iraqi oil industry only made the dissidents' resolve stronger, they found an unlikely alliance in groups traditionally opposing the Ba'ath regime, mainly Shia and Kurdish militants in south and north of the country (Goldstein, 1992). The Ba'ath regime, in an effort to crush the opposition, carried out massive arrests and numerous executions, forcing many dissidents to escape the cities and shelter in remote swampy areas of Iraq called marshlands (Adriansen, 2004; Goldstein, 1992). As the armed uprising in the south was mostly carried out by Shiite soldiers fighting against deep sectarian inequalities, it is no surprise that they took shelter in marshland areas, where their inhabitants, Marsh Arabs, are also Shia. This led to massive drainage projects and destruction of the settlements of Marsh Arabs by the Ba'ath army, an act of revenge against dissidents and their supporters. It is noteworthy that the drainage of the marshlands began in the early 1980s during the Iran-Iraq war when Saddam ordered to drain parts of Hawizeh Marsh (Adriansen, 2004). His excuse for such undertaking was the alleged cooperation of Shia Marsh Arabs with Iranian troops. Such efforts later were followed up by averting Tigris watershed from entering into the marshland under the pretext of reclaiming land necessary for the growth of the agricultural sector. It led to the desiccation of one-third of marshlands, a process that was pushed forward until 2000 (Adriansen, 2004; Al-Wash, Al-Wash, & Cattarossi, 2004; Partow, 2001).

Climatic changes in the Middle-East and particularly in Iraq, such as decreasing rainfall, increasing temperature and evaporation of surface waters has substantially limited the possibility of restoring dried marshlands in Iraq (Al-Ansari & Knutsson, 2011a). Also, drainage of Hawizeh Marsh, which is extended into Iranian territory as Hur Al-Azim, reduced part of the water resources of the latter, which in turn resulted in the gradual desiccation of Iranian

marshlands as well, although reckless management of water resources has also played a major devastating role in case of Iran. Widespread drainage of Iraqi marshlands in the 1990s caused huge human loss, and it is considered one of the greatest humanitarian disasters after World War II. Such calamitous destruction of intertwining social and ecological systems is referred to by most Western academia as ecocide (Ahmed, 2003; Dellapenna, 2007).

Ba'ath regime justified the widespread implementation of drainage programs with the decline of water levels in Tigris and Euphrates, the main source of agricultural water in southern Iraq, a decline mainly attributed to the construction of several dams in Turkey and Syria (Adriansen, 2004; Al-Ansari & Knutsson, 2011a; Goldstein, 1992). Therefore, while the official context for draining marshlands was declared as water scarcity and rejuvenation of agricultural economy, one can infer that Saddam had more sinister political agenda, like retaliating against Shia dissidents of 1991 uprising taking refuge in marshlands, and exerting control over Marsh Arabs by removing them from their natural shelters (Adriansen, 2004; Ahmed, 2003; Dellapenna, 2007; Kazmi, 2000). In a broader context, the 1991 uprising was a clear example of the political use of water in order to govern and control.

Based on aforementioned tales of drought and suppression, the purpose of this research is to examine the role of water in Saddam Hussein's political agenda, either as a political tool to govern Iraq, or as a political pretext for challenging Iraq’s neighbors, particularly fueling the long-standing conflict between Iran and Iraq over the designation of the border along Shatt al-Arab waterway, the main excuse for Iraq's invasion of Iran in 1980. For this reason, the study seeks to examine the impact of water resources as a potential source of political tension both in the region as well as within the country. Here the focus of the research is on geopolitical condition between Iran and Iraq with religious tension and power competition in the region, and it is based on two case studies: the Iran-Iraq war and the uprising of Shiite Muslims in 1991. Both cases are geopolitically and chronologically interrelated, and thus they will be studied under an interdisciplinary lens that is taking note of environmental disasters, water policies and political conflicts together. Using such a politically charged and environmentally distressed context, this thesis aims to study further the role that water plays in creating sectarian conflicts, oppressing certain social groups and leveraging power over regional enemies. One can argue that water is used as a political instrument in Iraq and it is in some manner even more important than oil, and although it was never directly considered as the subject or reason behind any armed conflict, it has given rise to a hidden civil war in Iraq. In other words, water is and has always been a key resource in governing the Iraqi state and controlling the region.

This thesis is constituted of six chapters. The first chapter includes an introduction to the subject, the motivation for doing the research, a literature review, methodology, hypothesis and research questions as well as the theoretical background concerning International Relations. The theoretical part also discusses political actions of Saddam Hussein in international relations and internal affairs concerning the significant role of water resources in this country based on the discourse of offensive realism in Neo-realist political theory (as discussed in section 1.5).

The second chapter is a brief note about the importance of water resources in the Middle East. This chapter debates about the potential of water resources for igniting political conflict, social unrest or even wars in the region. In this regard, three examples of political conflicts over water resources in the Middle East have been discussed: water conflict over Jordan River between Israel and Arab countries in the basin of this river, conflict over Euphrates and Tigris between Turkey, Syria and Iraq and political conflict over Nile River between Egypt and Ethiopia.

In the third chapter, the reader can find a study of Iraq and its reliance on water resources, the hydrology of trans-border Tigris and Euphrates, description of Iraqi marshlands and a chronology of water management projects in Iraq and immediate region. In this chapter, detailed information about drainage projects in marsh areas can be found. This part is a complementary information for better understanding of the role of water in political measures of Iraq.

The fourth chapter offers a psychological portrait of Saddam Hussein, how his mindset might have influenced his political agenda, and the role of Ba’ath party in reinforcing this psychological self-portrait.

The fifth chapter is a review and analysis of two case studies relevant to the theme of this thesis: the Iran-Iraq war and the drainage of Iraqi marshlands. This chapter includes a timeline of historical events during the presidency of Saddam Hussein from the beginning of the 1980s to the toppling of the Ba'ath government, during which water played a special role in Saddam Hussein's political actions, both at the regional level and in domestic politics. The sixth and final chapter is dedicated to analysis and conclusions made regarding the research hypothesis and research questions.

1.1 Motivation

The main motivation behind choosing this subject for a master thesis originates in the author’s firsthand experience of devastating effects that dust storms have had on daily life and long-

term prospects of those living in Khuzestan province. While occasional and seasonal small-scale dust storms are not a stranger to the region, it is the exacerbation of these local phenomena into regional environmental disaster since 2003 (end of the Second Gulf War and the end of Saddam Hussein's reign over Iraq) that requires utmost attention. These dust storms take from hours to days, forcing whole cities and metropolitan areas to shut down, and cause severe health damages to citizens. Khuzestan, a province of around 5 million people, rich in oil, history and agriculture, is experiencing mass exodus and recessing economy mainly due to these storms. A comprehensive effort to study this ecological phenomenon, its underlying geopolitical causes, and its transborder social implications, fits very well within the scope of master International Development. Moreover, such undertaking helps to shed a light on the complex relationship between development, ecology and politics, and how the political exploitation of natural resources can cause shuttering ecological and social catastrophes in a short timespan. While such relations have been studied in an academic capacity, a comprehensive study on the role of water in politics of Saddam Hussein is missing. Beside some sporadic mention of that theme in a few articles, the only publication specifically addressing the issue is almost two decades old (Partow, 2001), and it lacks a detailed analysis of both political ecology as the ground theory and relevant case studies, especially in regard to marshlands. This thesis strives to fill that academic gap by turning its attention to both theory and history, with a unique emphasis on Saddam's political ambitions and agenda, and its translation in terms of water policies.

A secondary motivation for this endeavour, again a personal experience of the author in her homeland, addresses the issue of ecological migration. Large presence of the Iraqi population in Ahvaz, capital of Khuzestan, who settled there right after the Iran-Iraq war, has always been a question mark for the author, especially because no one knew the exact reasons for their sudden appearance and people mainly assumed this as another case of economic migration. However, that is not the case, as these Iraqi immigrants are in fact Marsh Arabs, who settled in Iran and have not yet returned to Iraq despite all the difficulties of living in Khuzestan, because their ancestral habitat was destroyed by the Ba'ath regime. This research will try to offer a view on the mechanisms of compulsory immigration caused by politically motivated ecological interventions. This is an issue of utmost importance, as the region is predicted to experience more immigration because of multidimensional ecological disasters.

1.2 Hypothesis and research questions

This research addresses the crucial role water did play in political agenda of Saddam Hussein, and how water was used as both pretext and weapon in advancing his ambitions of becoming the most powerful man, first inside Iraq and then in the region. Therefore, the hypothesis of this research is formulated as follows:

"Water was used as a political leverage by Saddam Hussein for maintaining his power in Iraq and beyond."

This hypothesis leads to the following research questions:

1. *How important is the role of water resources in the political stance of Iraq in international relation?*
2. *Which role have water resources played in political decision-making in Iraq?*

In order to discuss the above hypothesis and relevant research questions, three main research stages have been conducted, each with a specific theme that overlaps and completes the other parts. The first theme is the hydrology of water resources in Iraq, a topic that is the key to understanding the importance of water resources, particularly Euphrates and Tigris, for the socio-political stability of Iraq. Chapter three is the result of this research phase, and it also includes a brief geopolitical study of Iraq. The second theme discusses the political psychology of Saddam Hussein, to give a picture of his character and the logic behind some of his political decisions that included water as a pretext or a means, such as the invasion of Iran in the 1980s or drainage projects of the 1990s. Due to the importance of the issue for understanding many events discussed as part of the two main case studies, the whole chapter three is dedicated to this theme, as well as discussing the formation of the Ba'ath Party and its role in the rise of Saddam Hussein and the consolidation of his power. The last part of the research, which constitutes chapter five, is a detailed analysis of the two case studies from historical as well as political perspective. Discussions and conclusions in chapter five, address all the causes and consequences of two interrelated case studies from political as well as ecological aspects and summarize this research stance concerning the aforementioned hypothesis and research questions.

1.3 Research methodology

Research methodology is based primarily on in-depth analysis of available resources online and offline (printed). The emphasize is intentionally put on three relevant subjects: the im-

portance of water for the Iraqi government, Saddam Hussein's personality and agenda as the autocratic leader of that government, and the dynamics of Saddam's Iraq relations with internal and regional entities in the context of water conflicts. Therefore, this research is highly dependent on library sources in the broadest sense. After setting a theoretical background based on exploiting water for hegemonic gains, an in-depth inventory of all available resources was carried out. This inventory included all materials related to the subject of water, water management policies and water projects, border disputes between Iran and Iraq (and its predecessor, the Ottoman Empire), sectarian conflicts between Sunni, und Shia Muslims in the region, historical developments and timelines concerning both case studies (the Iran-Iraq war and Shia 1991 uprising in Iraq), and Saddam Hussein's personal and political history. Hydrology of Tigris and Euphrates' basin was also studied in order to understand the interrelated dependencies between different natural and man-made factors influential in ecology of marshlands. Another point of interest in this research has been the reliance of Iraq on water resources, which has been analyzed through relevant researches such as studies by Gibson, Schnepf and others (Gibson, 2012; Jaradat, 2002; Lucani, 2012; Schnepf, 2004).

The analysis stage of this research involves a thorough effort at connecting various research inputs gathered during the literature review. Within the limits of two case studies, Saddam Hussein decisions which had water as a pretext or agenda were examined to identify deliberate use of water resources with a political agenda, and whether there was an emerging pattern or correlation among all identified instances of political use of water resources. The offered conclusion of this research is based on the aforementioned investigative analysis.

As it is usually the case with countries with a long history of civil and regional conflict, the researcher faced a considerable lack of local academic research, although the international academia has also not been particularly active in documenting the timeline and specifications of water-related projects implemented in Iraq since its independence after World War I. In the absence of reliable academic research and detailed historical documents pertinent to the scope of this research, and in order to make sense of the information found in available academic materials, a thorough review of all available sources on internet was carried out. Such resources include blogs, local news websites, digitized academic and governmental archives, and direct correspondence with certain scholars in the region. However, such information has been used with utmost caution, and usually as secondary supporting documents.

A substantial amount of historical information has been extracted from international news websites such as The Guardian, BBC, Washington Post, and the New York Times. The

Factbook of CIA has also been frequently consulted in both case studies of the research. In order to understand the hydrology of Euphrates and Tigris, information was gathered by contacting Dr Nadhir Al-Ansari, prominent Iraqi hydrologist and environmentalist expert, as well as his newly published articles. For studying drainage projects and their socio-ecological impacts, the reports of Human Rights watch, Amnesty International in the 1990s as well as the reports by AMAR International Charitable Foundation[1] (founded in 1991 for assisting Marsh Arabs refugees) were used. For better understanding the political psychology of Saddam Hussein, the collected confidential documentation of private meetings of Saddam with Ba'ath member parties and commanders of the army by the Hoover Institution at Stanford University named as Ba'ath Party Archives was consulted. Even though this valuable archive of more than 11 million digitized official Ba'ath regime documents is not directly accessible to public[2], the archive is extensively used by Joseph Sassoon in his book "Saddam Hussein's Ba'ath Party: Inside an Authoritarian Regime" published in 2011 and a book by Lisa Blaydes, "State of Repression: Iraq Under Saddam Hussein" published recently in January 2018 (Blaydes, 2018; Sassoon, 2012).

1.4 Literature review

Due to the arid and semi-arid climate of the Middle East, most of the region is covered with desert areas and most parts historically suffer from water shortage. This situation has been becoming worse since the Second World War, with the formation of new nation-states, the population boom in the region, and the desire of most countries for modernization and industrialization like Western Bloc. There are several important trans-border rivers in the region, such as Euphrates, Tigris, and Jordan, which have become a source of tension between riparian countries. Dr Peter H. Gleick is an American environmentalist, who has conducted several types of research about water conflicts in the Middle East and is one of the pioneers in this topic. In his researches, he addresses the most important reasons for targeting water as a cause of conflict between states in the region. He argues that water can contribute to political conflicts, whether as a military/political goal, as a weapon of war such as targeting the enemy's water resources and related systems, also as a source of local and regional tension due to unequal distribution of water resources. He asserts that water is a potential factor, and a strong drive for causing war either between countries or within a country (Gleick, 1993, 1998). Although most scholars agree that water scarcity in the Middle East was a factor for political

[1] https://www.amarfoundation.org/en-us/who-we-are-us/board/
[2] https://www.hoover.org/news/lisa-blaydes-speaks-about-her-research-hoovers-baath-party-archives

disputes in the Middle East, however, unlike Gleick, they do not reckon that water can cause wars between countries. According to this viewpoint, water can play a crucial role in bringing countries together under the pretext of cooperation to find a solution for water scarcity in their common water resources (Dolatyar & Gray, 2000; Lonergan, 2012; Selby, 2005).

Euphrates and Tigris are the main water resources in Iraq, which flow through Iraq and have important tributaries. Management of the two rivers is crucial for Iraq's social, political and economic development and most important cities of Iraq are located in the basin of these rivers. Dr Nadhir Al-Ansari is an Iraqi Hydrological Sciences expert and professor of the Lulea University of Technology in Sweden, who has published numerous articles about the hydrology of Euphrates and Tigris and their tributaries and distributaries within Iraq. He debates that water management in Iraq is prominently based on the hydrology of Euphrates and Tigris, and unsurprisingly, the very first water projects aimed at preventing the flooding of urban areas along the rivers, but due to poor drainage ability of soil in the centre and south of the country, it was crucial in later stages to focus on construction of drainage projects and irrigation canals for agricultural purposes. He has in several publications discussed that Iraq historically had access to an abundance of water resources and had not experienced any severe water shortage for ages before the upstream countries, Turkey and Syria, started they own water and dam construction projects. Since then, Iraq has confronted a severe water scarcity problem (Al-Ansari, Al-Jawad, et al., 2018). Due to the aspiration among most of the Middle Eastern countries to become self-sufficient in agricultural productions, agricultural development was broadcasted as one of the more important items on the Ba'ath regime's development agenda, despite the fact that natural settings of Iraq does not offer such capacities, especially in central and southern part of the country where most of the agricultural fields lay. Hence, construction of irrigation canals and proper drainage system became the main prerequisite of fulfilling the goal of agricultural self-sufficiency. Hassan Partow is a U.N Environmentalist with a focus on post-conflict and disaster-management, who wrote the first holistic reports regarding drainage projects by Saddam Hussein, mainly from a hydrological aspect and its environmental impacts (Partow, 2001). This research was a base for several later researches, which concerned themselves with both ecological as well as social aspects of drainage projects (Adriansen, 2004; Ahmed, 2003; Ellis & Arsel, 2010; Lonergan, 2012). Human Rights Watch, Amnesty International and United Nations General Assembly also give a comprehensive report about the consequences of drainage projects to Marsh Arabs (Amnesty International, 1991, 2003; Goldstein, 1992; Human Rights Watch, 2003). In addition, numerous scholars offer valuable researches regarding Marsh Arabs and the social aspect of drainage projects ordered by Sad-

dam Hussein (Adriansen, 2004; Ahram, 2015; Al-Wash et al., 2004; Cole, 2008; Dellapenna, 2007).

In his book "Saddam Hussein's Ba'ath Party: Inside an Authoritarian Regime", Joseph Sassoon addresses the political psychology of Saddam Hussein and the reason behind most of his decisions and behaviours during his presidency. In this book, Sassoon analyzes the structure of the Ba'ath party and the role of Saddam in the party as well as Iraqi society security. This book is a helpful book for comprehending the character of Saddam Hussein and his intentions in launching a military campaign against Iran in the 1980s by targeting Shatt al-Arabas an excuse (Sassoon, 2012).

Saddam's ambition to raise his profile to the most powerful man in the Middle East was confronted and repeatedly humiliated by the superior military and economic power of the former Iranian monarchy and the Shah, especially when it came to control the whole width of Shatt al-Arab waterway. The importance of Shatt al-Arabas the only way of access to the Persian Gulf for Iraq is undeniable due to the crucial need for using the waterway for exporting Iraq's oil productions. The Islamic Revolution in Iran gave Iraq the opportunity to abrogate the Algiers Agreement[3] between two countries and to use the waterway as justification for invading Iran. Dilip Hiro discusses the history behind the long war between the two countries in his book "The Longest War". In this book, a thorough analysis of the border issues between Iran and Iraq since the formation of Iraqi independent nation-state can be found. The book was written in 1990-1991, three years after the Iran-Iraq war had ended and thus some important information is missing or not updated (Hiro, 1991). Moreover, Rousu (2010), Tashnizi-Mirzaei (2002), Swearingen (1988), Abdulghani (2011), Amin (1982), Cordesman (2003), Biger (1989), Cusimano (1992), Woods (2011) and others address the border issues between Iran and Iraq over Shatt al-Arab and offer interesting arguments on the subject.

For Saddam, becoming the most powerful figure in the region, particularly among Arab countries, and replacing Egypt as the most influential Arab country, was the raison d'etre behind his political moves, and so that for such a dream of a hegemonic Iraq to come true, Saddam had to fight with the newly emerging Islamic government in Iran, who was a threat for Shia community in Iraq and for other mainly Sunni Arab countries, which also claimed their own rights to hegemony. Therefore, war with Iran was the only way for Iraq and for Saddam personally, to achieve and maintain this desired hegemony in the region. Dirzauskaite & Ilinca

[3] The Algiers agreement was signed between Iran and Iraq in 1975 for the sole purpose of ending the long standing border dispute between two countries over Shatt al-Arab and Khuzestan province, more details in chapter four.

(2017), Mearsheimer (2009), Wagner (2007) and Waltz (2010) explain in detail about what hegemony means in international relations and why countries go as far as getting into wars for the very sake of consolidating their regional power (Dirzauskaite & Ilinca, 2017; Mearsheimer, 2009; Wagner, 2007; Waltz, 2010).

1.5 Theoretical background

The subject matter of this research revolves around the political use of water by Saddam Hussein for the sake of tightening his grip on power in both national and regional scale. One can assert that Saddam was trying to achieve regional hegemony by confronting Ayatollah Khomeini's Iran with both military (the Iran-Iraq war) and environmental policies (drainage of Iraqi marshlands). The political context that is partly responsible for encouraging Ba'athist Iraq under Saddam and almost any other nation-state after WWII, for gaining more regional and global hegemony is discussed by Neorealist Theory of International Relations. However, as the term hegemony is frequently used in this research, it is only appropriate to address its scope and implications first, especially as the term has been stretched to conceptual exhaustion in academic circles.

The rise of hegemonic powers after World War II could be constituted as a continuation of old imperialism after the demise of colonization resulted in the formation of new nation-states, a process that was strengthened by extreme polarization of power in the hands of rival Eastern and Western Blocs. Another determinant to the rise of hegemonic powers was anarchical political status quo of international affairs, in which each state sought for its own national security by maintaining and dictating its values. An implication of this approach was an ever-growing tendency among world powers for intervention in internal affairs of their neighbouring countries for the sake of maintaining their hegemonic power (Dirzauskaite & Ilinca, 2017; Mearsheimer, 2009; Waltz, 2010).

Luis Schenoni, through a detailed literature review of International Relations studies, has identified six dimensions intrinsic to hegemony: "*It is a situation of (i) great material asymmetry in favour of one state - the hegemon - who has (ii) enough military power to systematically defeat any potential con-tester in the system, (iii) controls the access to raw materials, natural resources, capital and markets, (iv) has competitive advantages in the production of value-added goods, (v) generates an accepted ideology reflecting this status quo; and (vi) is functionally differentiated from other states in the system, being expected to provide certain public goods such as security, or commercial and financial stability …* " (Schenoni, 2017, p.

208). Two of these dimensions are attended more thoroughly in association with the subject and case studies of this research: Militaristic Hegemony and Ideological Hegemony. However, other dimensions often overlap with them as well or precede them as conditions.

Militaristic Hegemony has been an important factor in the emergence of conflicts and wars since Antiquity, and in its simplest form, it indicates using the military to ensure direct socio-political dominance. Ideological Hegemony gained importance during the 19th century, and it describes the geopolitical dominance of a country over other countries through ideological means (Mouffe, 1979). However, Ideological Hegemony must not be confused with Antonio Gramsci's Cultural Hegemony, despite many similarities in content. The hegemonic power maintains its political, economic as well as cultural dominance through its success in the dissemination of its ideology in local and international affairs, as it has been the case with the hegemony of the United States in all aspects of international relations after the cold war (Cox, 1983). Nation states, as the main power superstructures, are the key actors in the expansion of cultural hegemony. However, it is important to note that hegemony is not only achieved through soft power, but also by coercion and use of force and violence (Meyer, 2007).

The latter is the basis of this research. In order to expand his ideology, reflected in Ba'athist political doctrine, Saddam Hussein used war and violence extensively, and often unapologetically. In the case of the Iran-Iraq war, we see an ideological encounter between two neighbouring countries, with historical tension playing an important part in the background, in which each country wanted to impose its own ideology in the region (Amin, 1982; Hiro, 1991; Reisnner, 1989; Sassoon, 2012). Unlike Saddam, the new Islamic government of Iran, who received its values from the people's revolution and support from mass population, was not willing to use coercive action for expanding its ideology (forming an Islamic government based on jurisprudence, Vilayat-e Faqih) but rather by creating a cultural hegemony in the region with promoting Shia Islam in the region, as the main vehicle for expanding revolutionary ideas (Dehshiri & Majidi, 2008). Here, the hegemonic encounter was the rivalries between the ideology of secular Pan-Arabism and domination of Arab cultural hegemony, as promoted by Saddam, against the theocratic ideology of Vilayat-e Faqih as rendered by Ayatollah Khomeini, the leader of Iranian Islamic Revolution (Dehshiri & Majidi, 2008).

Vilayat-e Faqih discourse emphasized the key role of Shia clerics for establishing and controlling Islamic governments in the region (Dehshiri & Majidi, 2008). With such opposing theoretical foundations, each country tried to maintain its own ideologies, however with different approaches.

According to the political theory of realism, the nature of international relations is formed on an anarchic system and states as the main actors in international relations are more under influence of external environment than their own culture and ideology (Milner, 1991). In this anarchic system, each state tries to advance its own national interests, leading to a zero-sum game and increasing struggle over power, either in the form of wars or political tensions (Dirzauskaite & Ilinca, 2017). In Neo-Realism political theory, power is the main instrument of international relations and the main concern of states. Therefore, nation-states try to ensure their political survival by increasing their power and by preventing the emergence of other powers within their sphere of influence (Dirzauskaite & Ilinca, 2017; Waltz, 2010). Such preventive effort is many times more important when the rival powers promote a contrasting ideology. In this regard, states try to increase the influence of their ideology by intervening into "*each other's economic and military power in a relative manner and compete for power …*" (Dirzauskaite & Ilinca, 2017, p. 20). Realism was the main political theory used in describing the political grounds behind the World War II in academia (Wagner, 2007). Survival is the main goal of each state and in struggle for survival, each state increases its military power and capacities, and thus puts the political stance of other states in risk, which in turn enforces other states to take mutual actions, resulting in a tense atmosphere filled with political crisis (Dirzauskaite & Ilinca, 2017; Wagner, 2007; Waltz, 2010).

To address this forthcoming global crisis of power, classic Realist political theory introduced the concept of "balance of power" for regulating the power asymmetry in international order, in which either power is distributed among powerful states or only one country possesses the real power (Nabers, 2010). During the cold war period, power was balanced between the Eastern and Western Blocs and each Bloc tried to increase its hegemony by absorbing more states into its domination.

During the Cold War, Iran and Iraq joined opposite Blocs, Iraq (the Ba'ath regime) joined the Eastern and Iran (under the rule of Pahlavi Monarchy) the Western Bloc. Following balance of power, the international order either inclines towards keeping the balance, or jumps into disequilibrium, as one power succeeds in increasing its ideological hegemony, a situation that was experienced after the collapse of the Soviet Union and cultural dominance of the United States, with infamous McDonaldization as one its symptoms (Ritzer, 2008). Power hegemony gained in such way is temporary, since it constantly encourages the emergence of new world powers through forming new alliances, thus changing the balance of powers again (Dirzauskaite & Ilinca, 2017; Wagner, 2007). Neo-Realist political theory criticized that ar-

gument by arguing that anarchy is not the main reason for the occurrence of disequilibrium or equilibrium within international relations, as even though anarchy is an essential factor that indicates the power of states for regulating the global order, but it is the lack of a world government that is the main reason for occurrence of disorder in international relations (Dirzauskaite & Ilinca, 2017; Mearsheimer, 2009; Wagner, 2007; Waltz, 2010). In this regard, for Neo-Realism, domestic politics is based on power hierarchy, while international politics has an anarchic base, in which states compete for their survival and security (Dirzauskaite & Ilinca, 2017). Neo-Realism or structural Realism was developed by Kenneth Waltz in his book "Theory of International Politics" in 1979, as an alternative for classical realism in international relation studies. This theory was further divided into two concepts of offensive and defensive realism. Both branches emphasized the disorder in international relations caused by lack of a global governance, and structural disorder in the distribution of capabilities of actors in the international relations as its consequences. In Neo-Realist theory, the lack of world government can cause the tendency among nation-states to intervene in each other's affairs (Waltz, 2010).

According to Mearsheimer and his concept of Offensive Realism, international relations are based on five factors: Existence or absence of world governments, that all states are capable of using violent action against each other, that no single state can eternally avoid conflict in the face of constant threat of other nations, that all states prioritize their own national security and territorial autonomy, and finally, that states are assumed to function as rational actors (Mearsheimer, 2009). Richard Wagner argues, "*None of these assumptions alone dictates that great powers as a general rule should behave aggressively toward each other. There is surely the possibility that some state might have hostile intentions, but the only assumption dealing with a specific motive that is common to all states says that their principal objective is to survive, which by itself is a harmless goal ...* " (Wagner, 2007, p. 14). He argues that the anarchic nature of international politics gives states no choice other than struggling for survive, in which each state has to increase its military power for raising their name ahead of others or at least save its power position among other powerful states. Defensive realism, on the other hand, argues that due to the anarchic principle of the structure of international relation, states prefer to carry out moderate policies toward each other in order to maintain their political stance and not getting involved in power competitions (Waltz, 2010).

In case of this research, the Offensive Realism, as postulated by Mearsheimer, applies to the context, as Saddam Hussein was not shy in expressing his expansive ambitions and using

force to achieve them. According to this theory, it is the power asymmetry in international politics that motivates nation states to increase their economic and military powers, as to claim a bigger share of power and expand their sphere of influence. The theory assumes that the international political structure functions in the same way for all states regardless of their political status or cultural differences. Here, if the financial power of the states boost along with their military power, it would prompt them for expansion of their power hegemony, as Neo-Liberalist political theory argues that power is the main tool for achieving the ultimate goal of States, assuring their survival. The power itself is the main proponent of Offensive Realism claim, not harmful as long as it does not turn into an unwarranted appetite for regional and global domination (Mearsheimer, 2009).

Iraq experienced a significant increase in its budget during the oil crisis in the 1970s (Al-Nasrawi, 1994). This sharp improvement in monetary conditions prompted several socio-economic development initiatives, as well as huge military expenditure (Al-Marashi, 2013). While the former helped the Ba'ath regime in consolidating its power inside the country, the latter provided the regime with an opportunity for implementing their long-standing vision of leading the Arab world towards a unified nation under the helm of the Iraqi Ba'ath regime (Post, 1991). However, during the 1970s, superior military of Imperial Iran under Shah Reza Pahlavi was still a formidable obstacle in impeding Iraq for any claim of hegemony in the region, but the political instability after the collapse of Iranian monarchy gave Iraq the green light for asserting itself as the most powerful country in the region (Hiro, 1991) According to offensive theory, the reality of the political relationship between Iran and Iraq was based on the power rivalries and consolidating ideological hegemony as major factors.

Mearsheimer argues for three factors, fear of losing the power and political stability, survival (self-help) and increasing power (self-interests) to be influential for states to act offensively toward other states in the anarchic structure of international relation (Mearsheimer, 2009). The anarchic principle increases the fear and mistrust of states toward each other, which in turn leads to a desire for enhancing their power, and the resulting power disequilibrium spreads fear and reactions in terms of even more focus on military reinforcements (Nabers, 2010; Wagner, 2007). Here, states are thinking only of their own survival, be it political, ideological as well as economic, and in more advanced stages, helping their own prosperity by enhancing the capacity of their resources. The self-help factor turns their focus on their interest outside of their territory more and more, and they try to ensure their survival by increasing

their power (through military or ideological hegemony) over other states (Dirzauskaite & Ilinca, 2017).

In the offensive theory, power hegemony is the ultimate goal of states, but it does not mean that all states have the same capabilities and capitals in this regard. States which are in clash with a more powerful rival prefer to take a defensive measure for saving their current position and avoid disturbing power balance since a more powerful rival state might take aggressive measures due to the better military resources (Mearsheimer, 2009; Toft, 2005). Mearsheimer discusses that it is the rational behavior of states or lack of it, that determines the occurrence and extent of the probable political conflict, and whether to carry out coercive actions toward other states could assure the material survival and ideological hegemony of the state, or whether it could destroy the political credibility of those states (Mearsheimer, 2009). To put it simply, states must weigh the cost of any action toward other states versus of the benefits they might gain.

For Mearsheimer, the effort of states for increasing their power is not limited only to military power, rather all sorts of capital, such as national resources, and in particular natural resources, could affect the power superiority of one state in its region, as it was and is the condition in the Middle East among predominantly oil-based economies (Mearsheimer, 2009). Competition over the biggest oil productions and export has been the historically main political agenda in the region, to the extent that it has even caused wars among nation-states, as it was partially the case for the Iran-Iraq war, and later the first Persian Gulf War with Kuwait invasion by Iraq at the beginning of 1990.

However, as this thesis argues, it was water, and not oil, whose scarcity was the main factor in driving the Ba'ath regime to implement harsh social and environmental measures against the dominantly Shia parts of southern Iraq. While the pretext for drainage projects implemented in the 1990s was water shortage and water management for the benefit of Iraq's agricultural sector, and thus a showcase for self-interest action for maximizing the state's chances of survival, but it was also a deliberate sectarian act with a clear political agenda of resisting the ideological hegemony of revolutionary Shia Iran, by oppressing Iraq's Shia majority through environmental destruction, and thus preventing them to become Ayatollah Khomeini's agents within the Ba'ath Iraq.

2 POLITICAL USE OF WATER IN THE MIDDLE EAST

In recent years, there has been an increase in local and regional violence over the role that water and water scarcity play in most developing and under developed countries (Gleick, 1993; Kliot, 1993; Lonergan, 1997). In the 1980s, the world experienced rapid environmental changes, a situation that is predicted to get worse in next decades: increasing average air temperature accompanied by industrialization and over-utilization of natural resources has reduced rainfall and caused fast evaporation of usable freshwater resources (Gleick, 1994; Wolf, 1996).

In the 1970s, due to an increasing number of water-related projects being constructed in the basin of the Euphrates and Tigris by all riparian countries (Turkey, Syria and Iraq) the water level of these rivers decreased significantly (Altinbilek, 2004; Beaumont, 1998) Consequently, population growth in most developing countries became a burden on limited natural resources such as water (Gleick, 1993). It has since caused political tension not only within the countries but also among countries over trans-border rivers (Zeitoun, 2008). In some cases, such as water scarcity in the Euphrates and Tigris basins, or water conflict over Jordan trans-border river, such tensions have even led to military actions between countries, though other factors, such as territorial and ethnic disputes were also effective in escalating the situation (Kibaroğlu, 2007; Kliot, 1993; Morris, 1997). However, water scarcity is increasingly seen as an important factor in triggering military confrontations among countries. Water is a vital element of human life, and since the formation of first human civilizations along the rivers, water has always played a most important role in shaping societies and their course of development. Agriculture, a practice highly dependent on water, has been considered as one of the greatest human achievements, not just as a provider of nutrition necessary for survival, but also as the first factor in the formation of trade between societies (Al-Ansari & Knutsson, 2011b). The importance of water resources for the development of agriculture (Figure 1) from the beginning of human history has led to the management of water resources and the establishment of water projects such as bands and dykes for directing water to the farms (Al-Ansari & Knutsson, 2011b).

Figure 1: A clay map of canals and irrigation systems from ancient Mesopotamia. Retrieved from https://www.schoyencollection.com/24-smaller-collections/maps/map-irrigation-ms-3196 (10.10.2018)

The geographic conditions of countries and their unequal access to water resources can play an important role in creating political tension. Here, water resources could be either a pretext for political tensions or the main target of political tensions (Gleick, 1993). Also, the environmental degradation due to water scarcity, soil erosion, salinization as a result of low precipitation and irrigation possibility, desiccation of vegetation in the areas along river's basin, increasing temperature, low precipitation and high evaporation of surface water resources, all cause an increase in dust and sand storms, which in turn destroy more agricultural lands either directly or by forcing farmers to abandon their farms due to unbearable life conditions (Al-Ansari, Sissakian, & Knutsson, 2013).

Beside modernization and industrialization factors, the political stability (or lack of it) in the developing countries and their water management policies, both at the local as well as regional level, play a crucial role in increasing the political tension over water scarcity. For example, political instability in Iraq and ethnic and sectarian problems put the country in a weaker position for negotiating against the increasing number of dam construction projects in upstream countries, and Turkey has used Iraq's unstable political situation for its own benefit by increasing its water utilization particularly on the Euphrates River (Al-Ansari, 2016b).

There is an ongoing debate among scholars on whether scarcity of natural resources can lead to political tension or, even more particularly, military confrontation between countries. The legal ownership over trans-border rivers and the lack of consensus and common treaties for proper usage of these rivers are central subjects of the water disputes in the Middle East

(Gleick, 1993). The desire for modernization and industrialization, climate change, population growth, food shortage, unequal access to natural resources, social exclusion and civil conflicts have been influential causes of emerging political tensions over water resources in the Middle East (Gleick, 1993).

There were numerous reactions at the international level in the 1980s to the possibility of emergence of water-based political tensions between countries, an indication of the importance of natural resources in relations between countries. Mikhail Gorbachev, the General Secretary of the Soviet Union told in one of his speeches in 1987, that *"The world is not secure in the direct meaning of the word when currents of poison flow along river channels, when poisonous rains pour down from the sky, when an atmosphere polluted with industrial and transport waste chokes cities and whole regions, when the development of atomic engineering is justified by unacceptable risks. The relationship between man and the environment has become menacing. Problems of ecological security affect all - the rich and the poor. What is required is a global strategy for environmental protection and the rational use of resources ..."* (Gorbachev, as cited in Gleick, 1998, p. 330). Ismail Serageldin, vice president of World Bank in 1995 went as saying *"the wars of the next century will be about water..."* (Serageldin, as cited in Wolf, Kramer, Carius, & Dabelko, 2005, p. 83). Boutros Boutros-Ghali, former U.N Secretary General, in one of his speeches in 1985 claimed too *"the next war in the Near East would not be about politics but about water"* (Boutrous-Ghali, as cited in Al-Ansari, 2016a, p. 140).

According to Gleick, water can contribute to political conflict whether as a military and political goal, as a weapon of war itself, or as a target for military attacks (such as bombing the water resources systems such as dams, dykes, irrigation and drainage canals) (Gleick, 1993). Moreover, water policies at the local and regional level promote unequal distribution of water resources and access to them. Such water management policies can lead to political tension and dispute among countries, and within a single country as well (Gleick, 1993, 1998; Lorenz, 2008). After the Cold War, with the rising attention to environmental issues, natural resources became important players in sovereignty right and national security of nation states (Kibaroğlu & Scheumann, 2013). Trans-border rivers in areas with water scarcity and difficulty for accessing water resources may provide a rationalization for countries getting into military confrontation or war. The same logic applies to unequal distribution of water resources. Implicit in this argument is the notion that local or regional instability, arising from a

combination of environmental, resource, and political factors, may escalate to the international level and may become violent (Gleick, 1993).

Gleick argued that the severity of water scarcity, the level of dependency of the countries on trans-border rivers, the political situation in each country, power asymmetry in the region and the existence of alternative water resources determine whether it is worth for countries to exploit water scarcity either as a pretext or as the main target for political dispute with other states in the region (Gleick, 1993, 1998). Water scarcity in trans-border rivers for the countries, which have no other water resources alternative for compensating the shortages, can cause social unrest and insurgencies, which in turn put the country under pressure for negotiating with other states (Gleick, 1993; Zeitoun, 2008). The political condition in the region and power asymmetry between countries make the emergence of political tension and even military confrontation likely but it can also lead to cooperation for resolving the water scarcity and establishing compromise and water law among countries (Dolatyar & Gray, 2000; Gleick, 1993; Selby, 2005; Wolf, 1996; Wolf et al., 2005). Therefore, water scarcity does not necessarily lead to political tension and it can on the contrary provide an opportunity for cooperation among countries.

In the context of transborder water disputes in Middle East, Gleick asserts that water can be seen as a common good, which with the increasing power disparities among the countries, may also increase the desire of the powerful country to expand its power hegemony by ignoring and overruling achievements of common policies and agreements on the use of trans-border rivers and other common water sources: *"Water used as a private good or economic commodity; it is not only a necessity for life but also a recreational resource; it is imbued with cultural values and plays a part in the social life of our communities…"* (Gleick, 1998, p. 527). This allows nation-states to weaken their regional rivals by implementing unilateral and exclusive use of shared water resources and rivers, causing water scarcity in the basin of these rivers and thus inducing social instability (Allan, 2002a; Gleick, 1993; Lorenz, 2008; Morris, 1997).

Here the military strength of the country plays a determinative factor for their claim over water resources (Gleick, 1993). In case of water dispute over Euphrates and Tigris, the more powerful military stance of Turkey in regard to Syria and Iraq, coupled with the geographical advantages of the country (both rivers stemming in Turkey and higher average precipitation than in downstream countries) gave Turkey a strong incentive for boosting its claim over the rivers as its sovereign right (Beaumont, 1998). Turkey defends its water project by claiming

both rivers as its sovereign right, the same way oil is the sovereign right of Iraq, and Turkey cannot have any claim over oil resources in Iraq (Allan, 2002b; Soffer, 1999). Therefore, it is legitimate to say that water plays a crucial role in the political relation of states in the basin of these rivers. Unlike Turkey, both Syria and Iraq are completely dependent on these rivers for development of their agricultural productions and the supply of food needs (Al-Ansari, 2016b). After the decrease in the level of watershed in the Euphrates River in the 1970s, Iraq had to import part of its basic agricultural needs such as corn and wheats, putting much burden on its already exhausted public budget (Al-Ansari, 2016b). Food security is an integral part of national security and when people are hungry, the possibility of war is much higher (Al-Ansari, 2016b; Gibson, 2012; Wolf et al., 2005). Turkey used both rivers as leverage to put downstream countries under pressure for its political aims (Al-Ansari, 2016b; Soffer, 1999). Turkish government took advantage of being able to control the water flowing into Syria to pressure Syrian Ba'ath regime to stop supporting the Kurdish militants who used Syrian territories for their logistics (Dolatyar & Gray, 2000). Turkey, as a remedy for tense political relations, instructed Iraq on several occasions on considering the possibility of transferring parts of Tigris water to Euphrates for solving the probable water shortage in the latter, but Iraq refused this request and accused Turkey of unfairly excluding Iraq from its legal right over both rivers (Al-Ansari, 2016b; Beaumont, 1998; Kibaroğlu & Scheumann, 2013).

Also, during the First Gulf War, the coalition forces[4] requested Turkey to close Euphrates stream into Iraq at Ataturk Dam, and although the measure was never carried out by Turkey, it still contributed to an increased wariness among downstream countries over the unchecked control of Turkey over headwater of both rivers, and thus Turkey's ability to put their national security in danger at will (Gleick, 1998). Another example for using water as a weapon has happened again during the First Gulf War when Iraq destroyed desalination water facilities of Kuwait deliberately and had to suffer from damages imposed by coalition forces on her own water infrastructure in southern cities in return (Gleick, 1998). These examples indicate that not only the water resources, but also water infrastructures can be used as a tool in political relations among countries or as a tool of oppressing the opponents within the country, the latter is studied thoroughly in the second case study of this thesis.

Conflict between countries happens and escalates for many reasons, such as religious and ideological differences, sectarianism, border tension and economic competition (Gleick, 1993, 1998; Wolf et al., 2005). While all these factors can be identified in abundance in Middle

[4] Coalition forces of the first Gulf War were comprised of 35 countries led by United States in the mission for liberating Kuwait from Iraqi Ba'ath invasion.

East, it was mainly the water that was exploited by Iraqi Ba'ath regime (embodied by Saddam Hussein) as a political pretext for triggering the war with Iran in the 1980s by targeting the Shatt al-Arab water way and bringing up the old border dispute between the two countries, despite the fact that the main reason for the war was the perceived threat against the political stability of Iraq and the Ba'athist power hegemony in the region by emergence of a Shia government in Iran, which could become a strong motivation for mobilizing the Shia community in Iraq against the Ba'ath regime. In regard of the second case study, addressing the drainage projects in Iraqi marshlands and desiccation of marsh areas, water was used as a military tool for suppressing the Shia uprising and teaching army deserters, who sheltered in the marshlands, events which in turn led to the insurgence of Marsh Arabs as well, who were considered by the Ba'ath regime as the Iranian agents and conspirators to Iraqi nation (Amnesty International, 1991; Goldstein, 1992).

Political tensions between Israel and Jordan over Jordan River are another example of how a water-related dispute over a trans-border river can contribute to broader tension among neighbor countries. Since formation of the Israeli nation-state in 1948, even though the border of the new formed country with three other Arab states (Jordan, Occupied Palestine and Syria) was clear from the start (from southeast of Sea Galilee eastward to Yarmouk river), water entry from Yarmouk and Jordan rivers in the common borders of Israel with these Arab states, which are crucial for the socio-economic suitability of four countries, raised to a long water conflict between them (Kliot, 1993; Soffer, 1999; Zeitoun, 2008). Israel's life depends on the water resources of the border regions, including the Lake Tiberias, the Jordan River, Yarmouk, Baniyas, the occupied territories of the West Bank and southern Lebanon, and Israel is basically unable to survive without some degree of control over water sources in the aforementioned areas. From the beginning of the formation of the country, Israel has implemented several water projects for maximizing use of these water resources despite the complaints and objection of Arab states, which was followed mostly by military confrontations (Kliot, 1993; Soffer, 1999; Zeitoun, 2008). However, the weak position of Arab states against Israel, who enjoyed the support of Western countries, gave Israel the power for constructing numerous dams and implementing various water projects, which inevitably decreased the watershed of those rivers for the other three countries but also faced Israel itself with water shortage (Kliot, 1993; Soffer, 1999; Zeitoun, 2008). The efforts of Israel regarding implementing hydraulic projects also led to an increase in withdrawal of underground water, which has a common aquarium with Jordan and occupied Palestine, but the powerful military stance of Israel and territorial dispute between them were in favor of Israel, and allowed her to over-utilize the

region's water resources, while for Syria, Jordan, and occupied Palestine, the issue of their occupied areas by Israel and security issues were for a long time considered as more a priority than water security (Kliot, 1993; Soffer, 1999; Zeitoun, 2008).

In recent civil unrest in Syria, water infrastructures of Aleppo were targeted, which damaged the major water pipeline of city and deprived the whole city of domestic water. Tishrin hydro-electric dam on the Euphrates River was also attacked by the anti-Assad Syrian rebels. This dam supplied the electricity for many important cities under the control of Bashar Al-Assad's regime[5]. Targeting dams in Syria during the ongoing civil war indicates the strategic importance of water as a threat for national security, due to the importance of dams for supplying water for irrigation, domestic and industrial requirements and indeed generation of electricity (Gleick, 1998).

Jan Selby, Professor of International Relations at University of Sussex, has conducted numerous researches about the socio-political impacts of water scarcity and water wars in the Middle East. In contrary to Gleick, he downplays the role of water in social conflicts and tensions at both international and regional levels. He renders his statement with criticizing the current argument of water wars in the Middle East and the impacts of water scarcity causing tension in the region. He, on the other hand, emphasizes the importance of water as a matter of life or death in the Middle East (Selby, 2005). Selby argues that Middle Eastern countries despite their richness in oil resources are located in the periphery of capitalist relations in the world economy with an unstable economy dependent on their oil export and the import of basic needs, therefore, conflicts and tension by water scarcity and unequal distribution of water resources seems to emerge within, rather than between states and social formations (Selby, 2005). He raised the question of imbalance between supply and demands of water resources based on the Malthusian discourse, emphasizing water scarcity and its environmental impacts due to limited capacities of water resources as a finite natural resource with increasing population levels, caused ecological, economic and political disorder. He argued that it was the inability of the states to solve their economic and social problems, including their water problems, caused further social tensions in their countries, and not the scarcity of their water resources. Selby points out the irreplaceable value of oil in providing economic development necessary for surviving in the capitalistic global economy, and the economic dependency among most of Middle Eastern countries on this precious resource, and thus he argues that the political and economic role of water must be deemed as less important within these countries

[5] https://en.wikipedia.org/wiki/Tishrin_Dam

(Selby, 2005). In his article, however, he nevertheless reiterates the political role of water in creating social tensions and as a political tool in hand of some states in the region. Selby regards water as a source of endless political controversy in the Middle East, which can contribute to political disputes but less to military actions and wars (Selby, 2005). Like Gleick, he addresses the possibility of using water resources as a political tool for pressuring the countries or showing power among states in the regional relations, strategies that are best reflected in negotiations and co-operations for establishing common water policies, whereas water has a significant potential for emerging social unrest and insurgencies in the societies already suffering from sectarian and ethnic tensions or significant economic gaps between rural and urban sectors and among different social groups (Selby, 2005).

There is a view, somehow complementary to Selby's arguments, that water is a precious natural resource and its shortage can lead to more and better cooperation among the countries in the region in order to achieve a proper solution over utilization of trans-border rivers (Zeitoun, 2008). Based on this argument, any political tension between countries in the Middle East is due to other factors such as historical ideological dispute, religious tension and economic interests of states in the region. Self-sufficiency in agricultural production was one of the most important reasons for dedicating most part of water resources to agricultural sectors by inappropriate irrigation actions, which has harmed the underground water resources tremendously(Lorenz, 2008). In Iraq and Syria, privatization of the agricultural sector and land reforms and lack of oversight of unauthorized digging of wells by private farms have deteriorated water shortage and increased local tensions (Jaradat, 2002; Schnepf, 2004)

The water shortage in the Middle East made this natural resource more precious than abundant oil resources (Morris, 1997). Therefore, water is a strategic resource for social, political and economic sustainability of countries in the region. Water shortage along with droughts and food shortage cause instability and civil tensions and unrest within the countries. This situation raises the importance of water security as a priority of national security and high politics in most countries with trans-border rivers (Allan, 2002a; Soffer, 1999).The lack of consensus over the utilization of shared water resources among countries in the Middle East and their unilateral exploitation of water resources regardless of the capacity of water resources have enormous environmental impacts, which along with increasing religious tension and social unrest have further destabilized the political condition in the Middle East. Mark Zeitoun argued in his book "Power and Water in the Middle East: The Hidden Politics of the Palestinian-Israeli Water Conflict" that although water cannot singlehandedly cause wars,

water resources and infrastructures can be a target, victim or even a weapon for exacerbating the flames of wars and tensions in the region (Zeitoun, 2008).

Sherman also discussed in his book “The Politics of the Water in the Middle East: An Israeli Perspective on the Hydro-Political Aspects of the Conflict”, that the water tensions in the Middle East have mainly originated from the interrelated hydro-policies and technical and economic relations on the one hand, and the policy imperatives they imposed on the other (Sherman, 1999).

3 IRAQ: COUNTRY PROFILE

In this chapter, Iraq's geopolitical and socio-economic reliance on water resources is discussed in length. In addition to an introduction into the country and immediate region, the following chapter helps fostering a deeper understanding of the fragility of Iraq regarding water, and what efforts have been made to manage and sustain scarce water resources. An introduction into Iraqi marshlands is also included to pave way for detailed analysis of drainage projects discusses in chapter five.

3.1 Geography

Iraq, with an area of 438,320 km^2 and a population of 37,202,572 (Al-Ansari, 2016b), is a country in the southwest of Asia, neighboring Turkey in the north, Islamic Republic of Iran to the east, Syria and Saudi Arabia in the west, and Kuwait and the Persian Gulf in its south. Topography of Iraq has made it a basin for two rivers, Euphrates and Tigris (Figure 2). Large swaths of Iraq are comprised of the alluvial plain of these rivers, historically referred as Mesopotamia (a land between two rivers). The Iraqi plain is surrounded by mountain ranges in the

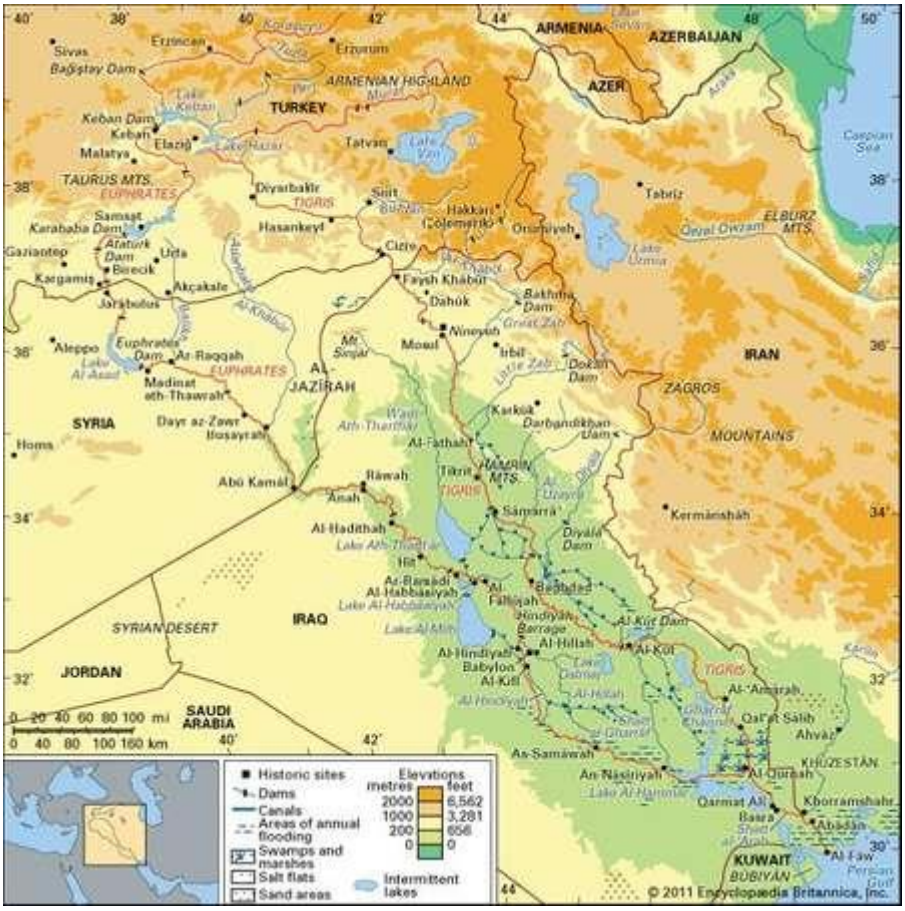

Figure 2: Euphrates and Tigris Rivers-system within Iraq. Retrieved from https://www.britannica.com/place/Tigris-Euphrates-river-system/media/595616/546 (12.10.2018)

north and east and with desert areas in the south and west of the country (FAO, 2008). For governmental administration, Iraq is divided into eighteen provinces. Three Kurdish provinces in north and northeast of the country, Arbil, Dahuk, and Sulaymaniyah, have a single semi-autonomous government and the rest are under the control of the central government. These divisions are the basis for all administration issues, even a de-facto division of the agricultural sector in Iraq between rainy northern areas and irrigation-based agriculture in central and southern areas (FAO, 2008).

Geographically speaking, the country is divided into four major areas: Upper Mesopotamia, Highlands, Lower Mesopotamia, and Deserts (Figure 3). Upper Mesopotamia is situated in the upstream basin of Euphrates and Tigris, near the Syrian border, which is part of the Syrian Desert and includes a flat sandy plain (Al-Ansari & Knutsson, 2011b; FAO, 2008). This area is also known as the plateau of Al-Jazirah. Highland areas are near the border with Iran and Turkey in the north and northeast of the country, and they include most of rainfed agricultural fields of the country concentrated north of Baghdad and including all Kurdish-speaking parts of Iraq. This region includes the Taurus Mountains near the border with Turkey in the north and the westernmost part of Zagros Mountains extending into Iran as well as deep valleys with rivers flowing within them (FAO, 2008). The central part of Iraq until the edge of Persian Gulf is surrounded by alluvial delta formed by Euphrates and Tigris and it is known as Lower Mesopotamia, which is the largest irrigation-based agricultural part of the country (Al-Ansari, 2016b). This area is the focus of the current research and has three large marshlands, natural and artificial lakes and irrigation canals. Alluvial lands of Euphrates and Tigris and other small tributaries have been deposited in this area and made a huge delta, which extends to southeast near the border with Iran (Al-Ansari, Issa, Sherwany, & Knutsson, 2013). The total area of marshes varied before drainage projects started, and in the flooding season of Euphrates and Tigris, their area increased significantly with the discharge of flooding water in the marsh areas, but during the summer, their area decreased due to their discharge into other bodies of. Today, these water bodies cover much less area as they used to water (Al-Ansari & Knutsson, 2011a).

The fourth area includes the large Western Desert in the west of the country at the left bank of Euphrates, which is going as far as the common border with Saudi Arabia and Jordan. This area is more commonly called Wadiyah, and has a stony plain as well as sandy areas with numerous Wadies (dry rivers, which are fed by flooding water of the Euphrates river in rainy season and discharge back during the summer into Euphrates river) and artificial lakes. The

desert area includes the al-Hijarah desert in the west area and al-Dibdibah in the eastern part (Library of Congress, 2006).

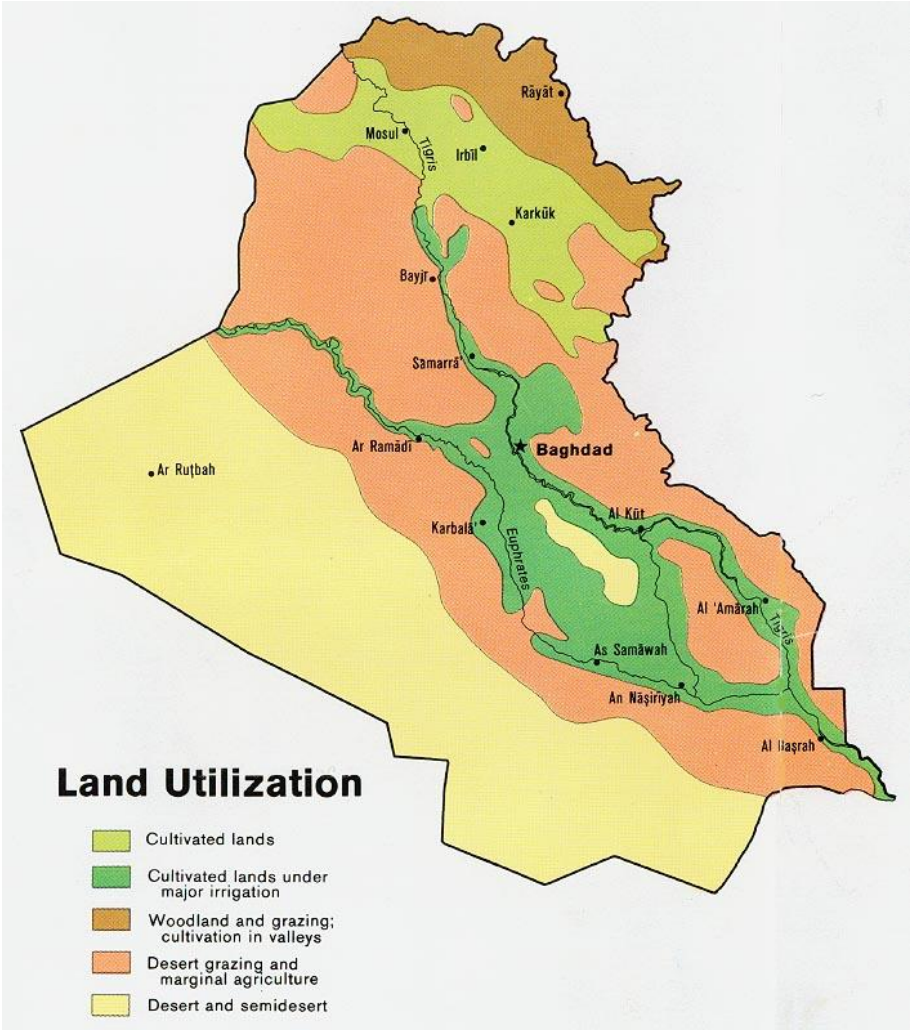

Figure 3: Geographical divisions of Iraq based on agricultural methods. Retrieved from https://legacy.lib.utexas.edu/maps/middle_east_and_asia/iraq_land_1978.jpg (12.10.2018)

3.2 Climate

Climate condition in Iraq is different in each of the aforementioned areas, but generally, Iraq has moderate winters with cool nights and very hot summers. Iraq climate condition varies from subtropical aridity of the Arabian Desert in the west and south-west of the country to the subtropical humidity of the Persian Gulf in the central and southern part of the country (FAO, 2008).

Iraqi highland has a Mediterranean temperate climate condition. This area has the most precipitation in Iraq. The rainy season in Iraqi highlands is usually from November to April (FAO, 2008). Although rain seasons are different in each part of the country, most precipitation occurs between November to March, and the rain discharges followed by water coming

from melting snow in Turkish highlands cause flooding in the Euphrates and Tigris basin. Average annual rainfall in Iraq varies from 1200 mm in Iraqi highlands to less than 100 mm in the central and southern area (Al-Ansari, Adamo, Sissakian, Knutsson, & Laue, 2018; Al-Ansari & Knutsson, 2011b; FAO, 2008).

The climate condition in the Euphrates-Tigris basin is characterized by hot-dry summer and cold-rainy winter with snowfall in mountains regions. Most of the rainfall happens from December to February. Snow melting in Turkish highlands begins in February, which causes spring floods in lower parts of the basin of both rivers from March to May. Both rivers experience low-level water during the hot and dry season in summer, from July to October, when the evaporation is at its highest. Mean evaporation is about 800 to over 1400 mm each year. During these months, both rivers feed from their tributaries and from groundwater runoffs. During these times, both rivers have a fluctuated water flow. The temperature in Iraq is between 6 ºC in January to 48 ºC in July and August. Iraq has a six-month dry and hot season in a year. In the southern part of the country, particularly near the edge of Persian Gulf, the weather has high humidity (Al-Ansari & Knutsson, 2011b; FAO, 2008).

Iraq, like many other countries in the Middle East, suffers from severe drought periods, mainly due to high temperature, high evaporation of surface water and low precipitation. Although droughts are a recurring climatic phenomenon in Iraq, human factors have been more and more an important factor in exacerbating them. Droughts in Iraq also affect the hydrology of Euphrates and Tigris and decrease the amount of their watershed. Flooding of Euphrates and Tigris as well as their tributaries was and is one of major climatic features in Iraq, and it has led to the establishment of first water regulation programs for protecting major cities from the threat of flooding (Al-Ansari, Ali, & Knutsson, 2015; Al-Ansari, Issa, et al., 2013; FAO, 2008).

Massive droughts in the early 1990s after the First Gulf War, destruction of water infrastructures in the First Gulf War, and water shortage in the country, which were followed by Shia uprising and drainage projects in the 1990s, have led to massive soil erosion and an abandonment of agricultural farms in southern Iraq. Sand and dust storms are another natural climatic feature in Iraq, which occur mostly in southern and western part of the country, where the soil is characterized by poor drainage and lack of vegetation (Al-Ansari, 2016b; Al-Ansari, Sissakian, et al., 2013). Also because of several irrigation canals and agricultural farms, central and southern areas of Iraq suffer from high salinization of soil and lack of prop-

er drainage process. Furthermore, drainage projects of Iraqi marshlands in 1991 have provided huge sources of flowing sand for powerful sand storms (Al-Ansari, Sissakian, et al., 2013).

Two major winds in Iraq are responsible for sand storms. The north and northwesterly summer wind, called Shimāli (which means from the north in Arabic) covers almost the whole country and it brings dry and hot weather during June and July (Figure 4). Sharqi or easterly wind is another wind in Iraq, which blows in the south and southeast of Iraq mostly during April to June as well as September and November. This wind is also responsible for massive dust storms, and it rises clouds of sand to a very high elevation. Since the implementation of drainage projects in the 1990s, Sharqi wind has replaced the Shimāli wind as the main air flow causing the dust storms, and it affects not only the most southern part of Iraq, but also countries such as Iran and Kuwait (Al-Ansari, Sissakian, et al., 2013).

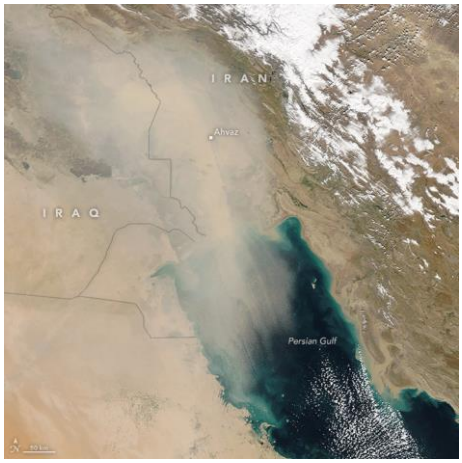

Figure 4: The direction of the Iraqi winds that bring massive Dust Storm into Iran, Retrieved from https://earthobservatory.nasa.gov/images/89705/dust-over-the-persian-gulf (12.10.2018)

3.3 Cultural geography of Iraq

Islam is the main religion in Iraq, comprising 97% of the population. Muslim majority in Iraq is divided into two major sects: Shia and Sunni (Figure 5). Both sects have their own divisions, but generally, Shia Muslims constitute 55%-60% and Sunni Muslims 40% of the population. Beside the Arab majority, Kurds, Turkmen, Yezidis, Shabak, Kaka'i, Bedouins, Assyrians, Sabaean-Mandaean and Persians also live in the country. Arabs include more than 75% of the population and after them, Kurds (19%) are the most populous ethnicity. While diverse ranges of languages are spoken, Arabic is the official and the most widely used language in the country. Shia Muslims live mostly in southern and eastern parts of the country and Sunni Muslim in central and northern part. Despite a Shia majority, the political administration of the country was dominantly Sunni until the overthrow of Ba'ath (Marr & Al-Marashi, 2017;

Tejel, Sluglett, Bocco, & Bozarslan, 2012). The alluvial Mesopotamian plains and northern part of the country have the highest population density, mainly due to suitable conditions for agriculture. During the Ba'ath regime, particularly after oil revenues increased in the 1970s, major population migration took place from rural areas to urban centers, such that the urban population increased from 5,452,000 in 1970 to 7,646,054 in 1977, and to 11,078,000 in 1987 (68% of the whole population)[6]. It was indeed more significant for Shia Muslims in the southern part of the country, who lived mainly in their clans-system in rural areas and suffered from fewer educational and health facilities as well as job opportunities. After the Iran-Iraq war intensified, recruiting Shia Muslims in the higher ranks within the army structure became more common, as a strategy for integrating them into the Ba'ath regime (Hiro, 1991).

[6] http://countrystudies.us/iraq/42.htm

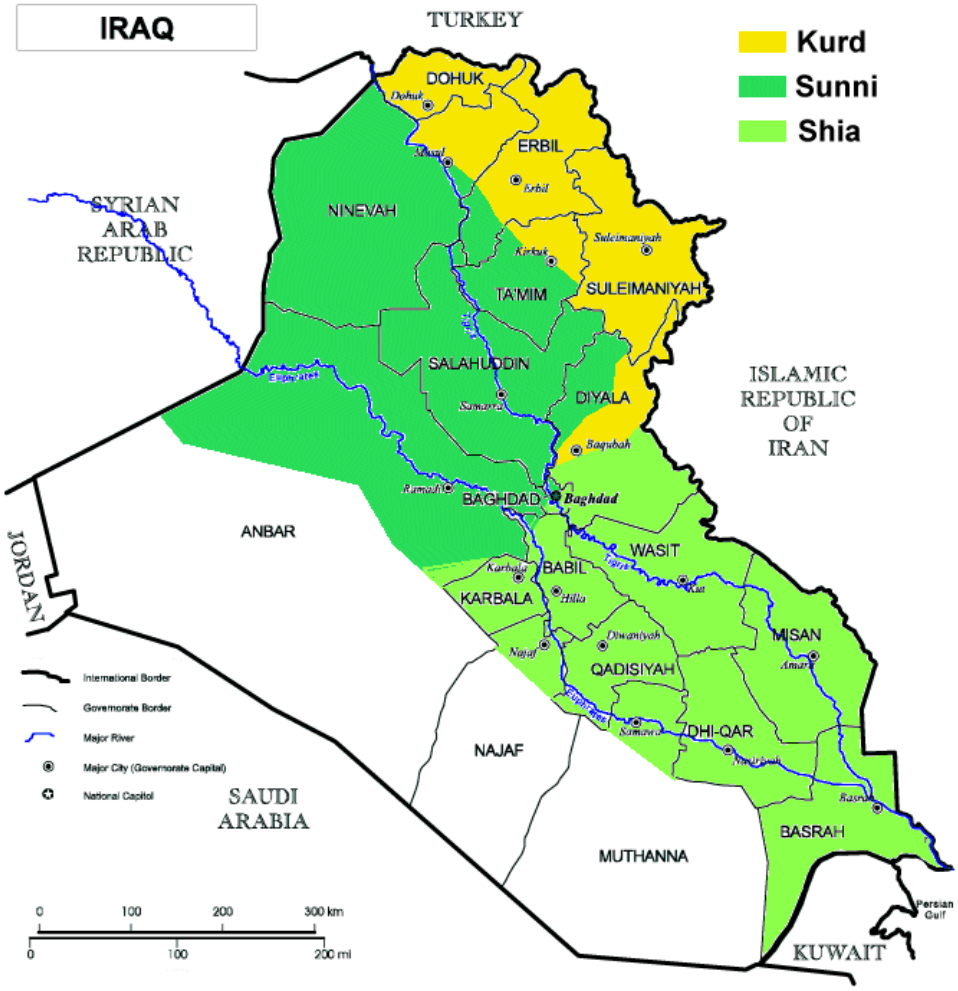

Figure 5: Geographical dispersion of Iraqi Kurds, Sunni and Shiites. Retrieved from https://www.globalsecurity.org/military/world/iraq/images/iraq-map-group1.gif (12.10.2018)

3.4 Political geography of Iraq

Iraq was for a long period the battleground between The Ottoman Empire and successive Persian Empires (Safavids, Afshars, Zands and Qajars). The Ottomans consolidated their control over Iraq in 1831 and ruled the country until the collapse of The Ottoman Empire in 1918 (Marr & Al-Marashi, 2017; Tripp, 2013). After the Ottoman, Iraq came under the mandate of the British Empire. Iraq gained independence from the British mandate in 1932. However, under the rule of Hashemite kings, the country remained firmly under the influence of the British Empire. In the late 1940s, with Gamal Abdel-Nasser promoting Pan-Arabism in the region, the presence of Britain in Iraq was not tolerated anymore. British policies in Palestine against Arabs only fueled more anti-imperialist stance among Arab nations (Marr & Al-Marashi, 2017; Tripp, 2013).

In 1958, Abd al-Karim Qasim, an Iraqi army brigadier, launched a coup d'état against the Hashemite Kingdom and seized power. Although most other Iraqi nationalist movements were inclined toward Egypt and its version of Pan-Arabism, Qasim was more interested to get closer to the Soviet Union than to Abdel-Nasser, who was strongly against any western influence and sought for forming a unified Arab government(Marr & Al-Marashi, 2017; Tripp, 2013).

Qasim declared the exit of Iraq from the Baghdad Pact in 1955, which was supposed to counteract the threat of communism in the Middle East. The Ba'ath party, who saw themselves more in line with Pan-Arabism of Nasser, did not favor Qasim's inclination towards the Soviet Union (Marr & Al-Marashi, 2017; Tripp, 2013). Ba'athism was a mixture of Arab nationalism, pan-Arabism, and socialism. Ba'athism called for the resurrection and the unification of the Arab world. The motto of the party was Unity, Freedom, Socialism (Cabana, 1993) in Arabic, and freedom from the control and interference of non-Arabs. Finally, Qasim was overthrown and killed in another coup d'état by General Abdul Salam Arif, who formed a military government during 1963-1966, followed later by his brother's rule, Abdul Rahman Arif. The new government took a middle political path in foreign political relations and sought to maintain relations with both Blocs of East and West They also both incorporated Ba'ath party members in their political administration (Marr & Al-Marashi, 2017; Tripp, 2013).

However, their government was terminated with the provocation of the Iraqi army's generals and another coup by Ba'ath Party. In 1968, Ba'ath party consolidated the power and General Ahmed Hasan al-Bakr took over the post of prime minister and presidency, and Saddam Hus-

sein was appointed as deputy secretary-general of the Ba'ath Party, the second to Hasan al-Bakr's position (Marr & Al-Marashi, 2017; Tripp, 2013). The Ba'ath regime was a secular government with a socialist tendency in political and economic aspects (Looney, 2006). A sharp increase in oil revenue in the 1970s allowed the Ba'ath regime to implement several developmental programs in Iraq, thus making Iraq one of the most prosperous countries in the Middle East (Looney, 2006). However, the prosperity did not last long, as Saddam forced Bakr to resign and he declared himself the new president of Iraq in 1979, a rule he kept to himself for more than two decades. His political ideology and psychological profile have been discussed in detail in chapter three. His regime finally collapsed at the hands of U.N coalition forces under the command of United States in 2003 (Marr & Al-Marashi, 2017; Tripp, 2013).

A thorough study of the formation of Iraqi state after the collapse of the Ottoman Empire reveals that the sectarian and ethnic frictions have been an inseparable part of the history of modern nation state. Foreign intervention, especially by British Empire, had also played an important role in igniting such sectarian tensions and discriminations, which in turn led to the emergence of authoritarian rule of Saddam Hussein and its repression of non-Sunni sects and minorities (Haddad, 2011).

3.5 Economy of Iraq

The Iraqi economy is heavily dependent on oil (Figure 6). About 95% of Iraq's total revenue comes from oil sales (as in 2017)[7]. The growth of oil revenues in the 1970s made the rapid economic development of the country possible, especially in the agricultural sector, and the Ba'ath regime declared agriculture as the second most important economy sector in the country (Looney, 2006). A huge improvement of irrigation and drainage systems in central and southern Iraq was undertaken. However, after the war with Iran, Iraq suffered from heavy damages in its lifeline of oil pipelines in Shatt al-Arab and in Basra port (FAO, 2008). A deep recession plagued Iraq after the war. Based on the socialist ideology of the Ba'ath regime advocating for abolishing private ownership of the means of production and the establishment of social ownership, the economy was in the hands of the government and the government was solely responsible for setting the laws of market (Al-Nasrawi, 1994; Looney, 2006). Therefore, all the means of production, such as natural resources, were controlled by the Ba'ath regime. Collectivization of the agricultural sector was increased in the 1980s. In the 1970s, Iraq had been able to revitalize the water supply and construction of new drainage systems with

[7] https://www.indexmundi.com/iraq/economy_profile.html

the help of the World Bank (World Bank, 1972). However, in the 1980s, due to the war with Iran and the damages inflicted on the Iraqi water infrastructures, they were unable to rebuild them, and except drainage projects in the early 1990s, no other significant water projects for the benefit of agricultural expansion was conducted by Ba'ath regime (Al-Ansari, 2016b). As discussed in the next section, and as mentioned before, the climatic geography of Iraq, and decades of investment in the agricultural sector, make the country highly dependent on its water sources.

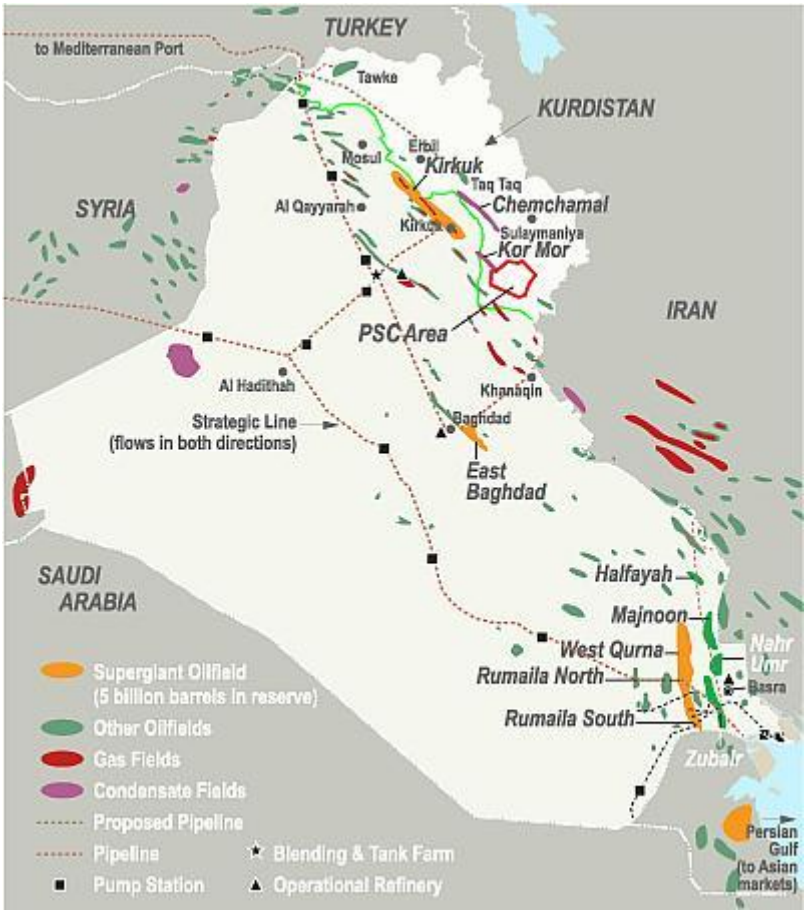

Figure 6: Iraq's oil reserves and infrastructures. Retrieved from https://www.energy-pedia.com/news/iraq/exxonmobil-and-shell-sign-agreement-with-iraq-to-redevelop-and-expand-west-qurna-1-field (12.10.2018)

3.6 Importance of water resources in Iraq

The Middle East and North Africa region is the most sensitive area in the world in terms of water resources and the potential for emergence of water-related conflicts (Dolatyar & Gray, 2000). Water scarcity has a substantial negative impact on the development of countries in the region (Akanda, Freeman, & Placht, 2007). The two rivers Tigris and Euphrates, originating

from the Turkish highlands, are the main water resource of Iraq, which supply the water requirements for urban, industrial and agricultural needs (FAO, 2008). The total catchment area of both rivers is 879,790 km^2. The catchment area of Euphrates is shared among Turkey (125,000 km^2), Syria (76,000 km^2), Iraq (177,000 km^2), Saudi Arabia (66,000 km^2), and the catchment area of Tigris is shared between Turkey (57,614 km^2), Syria (834 km^2), Iraq (253,000 km^2) and Iran (140,180 km^2) (FAO, 2008).

Around 42% of Euphrates's basin and 59% of Tigris's basin are located within Iraq borders. In this regard, 90% of the water flow of Euphrates comes from upstream countries within Iraq, whereas 50% of water flow of Tigris is supplied from within Iraq (FAO, 2008).

Euphrates and Tigris, along with their tributaries, are among the most important water sources in Western Asia. They form a complex trans-border water system. Different tributaries and canals contribute to each river separately before their confluence with each other at Shatt al-Arab waterway. Beside the natural conjunction of the two rivers in the south of Iraq, the two rivers have many connections with each other through a variety of water projects implemented in Iraq, such as Taksim Tharthar Canal, which connects Euphrates and Tigris through the artificial Tharthar Lake. Nevertheless, the main sources of water for both rivers are located outside of Iraq, and thus out of its control (Al-Ansari, 2016b, 2016a; Al-Ansari, Issa, et al., 2013).

The Euphrates is the longest river in West Asia. Its total length is around 2,700 km. This river arises from the eastern Highland of Turkey, known as Armenian Highlands, between the Lake Van and the Black Sea, and streams southeastward within Turkey. The Taurus Mountains are also located in the south of the area. Melted snow provided by this mountain range is one of the major sources of feeding the Euphrates in spring. Kara Sue and Murat Sue are two important rivers in creating the catchment of Euphrates River (FAO, 2008). Kara Sue or the western Euphrates is a long river, which rises from Erzurum Province in eastern Turkey and drains the plains around the city of Erzurum. It joins the Serçeme River, then flows west through Erzincan Province. Kara Sue pours into Keban Lake in the north of Elazig, which forms the beginning of Euphrates River. Murat Sue originates from the Armenian highlands in the east of Turkey. This river flows from an area near Mount Ararat north of Van Lake through Lake Hazar. Murat Sue joins Kara Sue in the north of Keban, where they form Euphrates River. Euphrates flows through Karkamış Province in southeastern Turkey, and Jarabulus in eastern Syria. The Euphrates has three important tributaries in Syria: Balikh, Al-Khabour and Sajur rivers (Al-ansari, Adamo, Sissakian, Knutsson, & Laue, 2018). All three

rivers originate from the southeastern region of Turkey. Balikh River is a perennial river, which joins the Euphrates near the city of Raqqa downstream Tabaka dam, at the northeast bank of Euphrates. Al-Khabur River is the name used for two different tributaries in both Iraqi and Syrian territory. The western Al-Khabur is also a perennial tributary of the Euphrates, which joins it near the town of Busayrah in eastern Syria. Sajur too originates from eastern Turkey and it joins the Euphrates on its right bank. The catchment area of the Euphrates in Syria is 76,000 km^2 that is 17.1% of its whole catchment area. The Euphrates enters Iraq near the city of Abu Kamal in eastern Syria. In Iraq, no other tributaries contribute to the Euphrates, however, the river has small tributaries in the south and central the part of Iraq built for irrigation purposes (Al-Ansari, Issa, et al., 2013; FAO, 2008).

The catchment area of the Euphrates in Iraq is about 177,000 km^2, which comprise 39.9% of the whole catchment area. The annual flow of the Euphrates at the Turkey-Syrian border is 28.1 km^3, and 30.0 km^3 from the Syria to Iraq, which means that about 88% of the total flow of Euphrates is coming from tributaries and snow melting within Turkey. The maximum flow of Euphrates occurs in April and May and discharge of these two months accounts for 42% of annual flow. Minimum discharge flows occur during August to October and contribute only 8% of total annual discharge (Al-Ansari, Issa, et al., 2013; FAO, 2008).

Tigris River originates from Lake Hazar in the Armenian highlands, which in turn is shaped by water flows coming from the Taurus Mountains. Tigris streams around 450 km through eastern highlands and valleys of Turkey to the border city of Cizere between Syria and Turkey. In Turkey, the river receives a number of tributaries. Tigris then forms the de facto border between Syria and Turkey without entering Syrian territory. The total length of Tigris is 1,850 km and the total area of its basin is 387,000 km^2 (Al-Ansari, Issa, et al., 2013; FAO, 2008).

Butman Su, Karzan and Razuk are three small rivers, which contribute to Tigris in Turkey before its entering to Iraq close to the city of Faysh Khabur. Here the west Khabur River, which again originates from Turkey, joins Tigris. There are also numerous other tributaries originating from both Turkey and Zagros mountains. The Great Zab comes from Turkey and stream into Iraq before joining Tigris south of the city of Mosul. The Lesser Zab is the other tributary, which originates from the Zagros Mountains in the west of Iran and streams through Iranian Kurdistan to the south of Al Zab in Iraqi Kurdistan. The Al-Adhaim or Nahr Al Uzaym is located completely within Iraq and it joins Tigris in the northeast of Baghdad. This river is an intermittent river created by flooding water mainly active from January to March.

The river dries up from June until November. Diyala River also originates from the Zagros Mountains in Iran and enters Iraq at Sulaymaniyah province. This river is formed by the conjunction of two other rivers in Iran, Sirwan and Tangero. Diyala joins Tigris in the south of Baghdad. From south of Baghdad southwards until Shatt al-Arab, there are no other tributaries of Tigris. The Euphrates and Tigris basin in Iraq involves a complex water network, including a broad range of water infrastructures such as bands, dykes, canals and artificial lakes for directing water of these rivers towards agricultural farms across Iraq. However, not all of these water infrastructures are active (Al-Ansari, Issa, et al., 2013; FAO, 2008).

The detailed picture drawn in this section emphasizes the fragility of water resources for Iraq, as a substantial portion of water brought into the Iraqi plain originates in neighbouring countries. This fragility applies most importantly to Tigris and Euphrates, the main sources of water for agriculture in Iraq. This situation makes Iraq vulnerable to any change in the water flow of both rivers, whether it is natural or manmade (Beaumont, 1994, 1998).

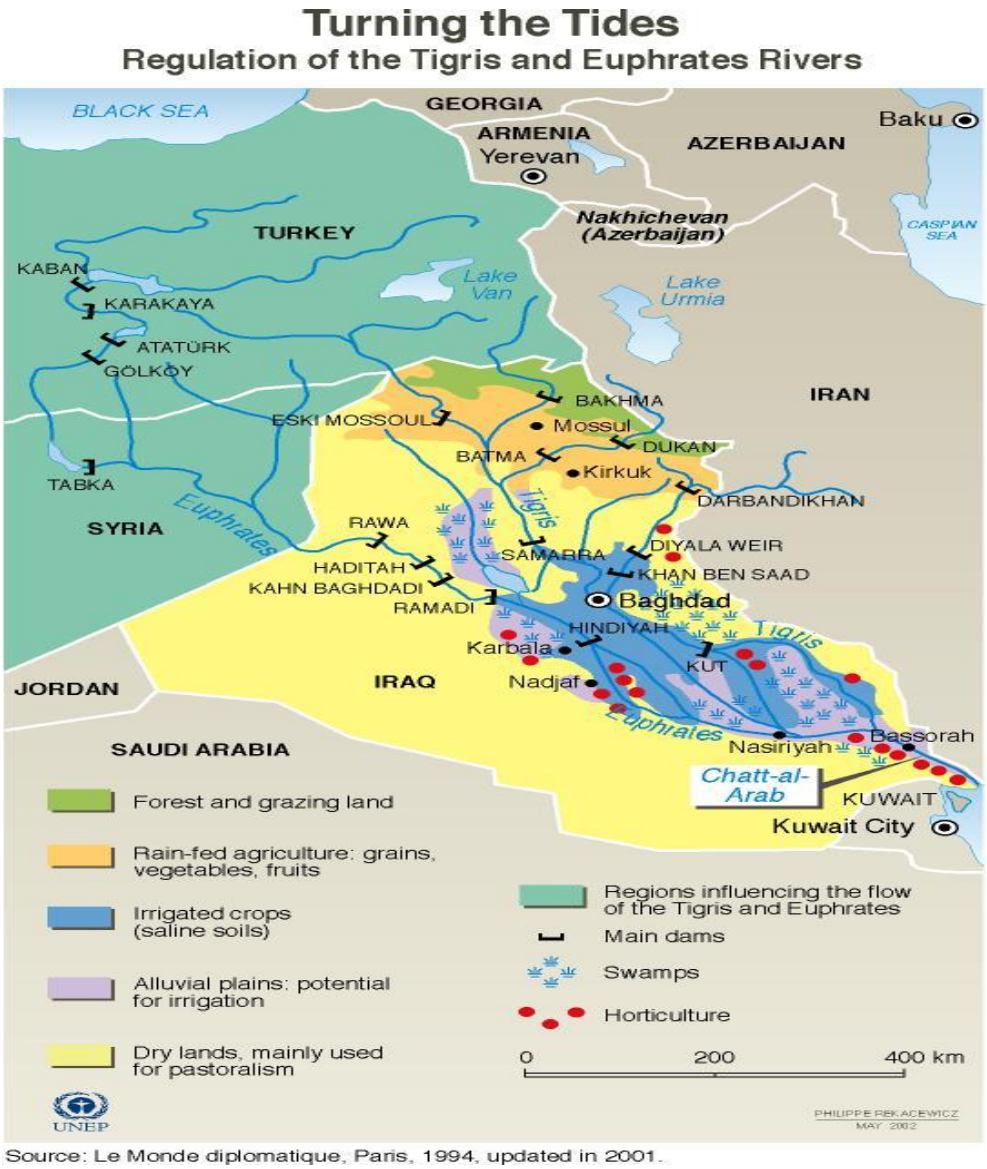

Figure 7: Agricultural divisions in Iraq. Retrieved from https://farm1.staticflickr.com/734/31985707950_79a7f856ff_o.jpg (12.10.2018)

3.7 Iraqi marshlands

Iraqi marshlands are located in Lower Mesopotamia and lower basin of Euphrates and Tigris, roughly overlapping the three provinces of Basra, Missan and Thi-Qar (Partow, 2001). Iraqi marshlands are not only the largest ones in the Middle East, but they also support unique eco-systems with their own indigenous flora and fauna (Partow, 2001). These alluvial plains were formed by gradual deposition of sedimentations from Euphrates and Tigris. Frequent flooding of both rivers in Lower Mesopotamia is the main factor contributing to the unique ecology of Iraqi Mesopotamian marshlands (Lonergan, 2012; Partow, 2001). These regions are known as the Garden of Eden and they have been the cradle of first Mesopotamian civilizations. Iraqi

Mesopotamian marshlands are comprised of three separate but ecologically dependent areas: Central (Amareh) that is situated between Euphrates and Tigris basins, Hammar in south of Euphrates near Kuwait, and Hawizeh Marsh, straddling near the Iranian border in the south-east of the country. These three marshes (Figure 8) were once merged together and covered an area of around 20,000 km^2 (Al-Wash et al., 2004; Partow, 2001; Walther, 2011). Iraqi marshlands are vulnerable to any changes in water flow of Euphrates and Tigris. Therefore, it is not surprising that the increasing number of water projects implemented along those rivers during the 1970s has greatly affected their geography and hydrology (Kazmi, 2000; Partow, 2001).

As both Euphrates and Tigris lose their velocity in Lower Mesopotamia, they meander and give birth to many small branches. This slowing owes itself to various reasons. For example, there is no contribution to the Euphrates from tributaries south of Nasiriyah. In case of Tigris, even though it enjoys a more stable course in its path southwards, a significant number of water canals and branches south of Baghdad, some as old as the ancient history of Mesopotamia, reduce water velocity in the main river channel (Al-Ansari, Issa, et al., 2013; FAO, 2008). Nevertheless, slower velocity means a faster rate of depositing sediments into a large swath of flat muddy area in southeastern parts of Iraq. This gradual mechanism has created vast amounts of wetlands, or Iraqi marshlands (Al-Ansari & Knutsson, 2011a; Partow, 2001).

Therefore, the Mesopotamian marshes are considered as parts of the hydrology of Euphrates and Tigris. At the peak of the flooding season, most parts of marsh areas are sunk under water, to the extent that all major marshes join and form a large area of wetlands. However, each marsh area includes permanent and seasonal marshes with deep lakes and muddy areas, created by inundating flooding water, residing there since spring flood season (Al-Ansari & Knutsson, 2011a; Lonergan, 2012). Because Iraqi marshlands are located in a very hot and mostly dry climate, they suffer a substantial loss of water, and hence coverage, due to evaporation. Therefore, their existence is very much dependent on water level and flooding of Tigris and Euphrates for natural replenishment (Lonergan, 2012; Partow, 2001; Walther, 2011).

3.7.1 Hammar Marsh

Hammar is located on the southeastern bank of Euphrates, near the city of Nasiriyah, extending to the east to the vicinity of Shatt al-Arab in Basra province. In the southwest of this marsh, the large Western Desert is located. The total area of the marsh before drainage projects was around 2,800 km^2, including permanent Hammar Marsh and Hammar Lake and it expands to around 4,500 km^2 during flooding season. Hammar Lake, which drains into the marsh during flooding time, is the only large water body in the lower Euphrates' River Basin.

The Hammar Marsh is fed by flooding from tributaries of the Euphrates River. A considerable amount of water from the Tigris River, overflowing from the Central Marsh, also directly nourishes the Hammar Marsh (Al-Wash et al., 2004; Partow, 2001). During summer, large sections of the coastal line of the marsh dry up, which causes the formation of islands in some parts of it. The Marsh discharges into Shatt al-Arab near Qurmat-Ali city in Basra province. These marsh areas are home to several migratory birds and more importantly, Marsh Arab people or Ma'adan as the traditional inhabitants of marsh areas (Bedaira, Al-Saad, & Salman, 2006).

3.7.2 Central Marsh (Amarah)

Central Marsh is located between Euphrates and Tigris and almost encircles the towns of Nasiriyah and Qalat Saleh, and then extends to Al-Qurnah in the south of the country. Its total area is around 3,000 km^2. The marshes receive water influx mainly from Tigris distributaries branching southward from Amarah, including Shatt al-Muminah and Majar-al-Kabir. During wet season and flooding time, the total area of marshes reaches up to 4,000 km^2. The marsh complex is densely covered with tall reed beds, interspersed with several large open-water bodies. Al-Zikri and Hawr Umm Al-Binni and Al-Gharraf are main lakes in the Al-Amarah marshes. Al-Amarah has tall reed beds as well as large water areas without vegetation. Al-Amarah is the largest marsh area in Iraq, boosting as the natural habitat to indigenous fisheries, Buffalo livestock as well as migratory birds (Bedaira et al., 2006; Lonergan, 2012; Partow, 2001).

3.7.3 Hawizeh Marsh

The Hawizeh Marsh is situated on the east bank of Tigris, extending into Iranian territory. The Iranian part of this marshland is called as Hur-al Azim. Beside Tigris, Karoun and Karkhe (two major rivers in the province of Khuzestan, Iran) are also providing water to this marsh. In Iraq, Al-Musharah and Al-Zahla, branches of Tigris discharge into Hawizeh Marsh. In addition, during flooding season, Tigris has discharge direct into this marsh. The total area of the marshland is around 3,000 km^2. Hawizeh includes both permanent and temporary marsh areas. Permanent marsh areas are located in the northern and central areas, and southern part dries up during summer. Dense vegetation of the permanent part of Hawizeh is covered almost completely by water during flooding season. Hawizeh Marsh too discharges into Shatt al-Arab in the south of Al-Qurnah by Al-Swaib River, a small river within Iraq (Al-Ansari & Knutsson, 2011b; Bedaira et al., 2006; Partow, 2001).

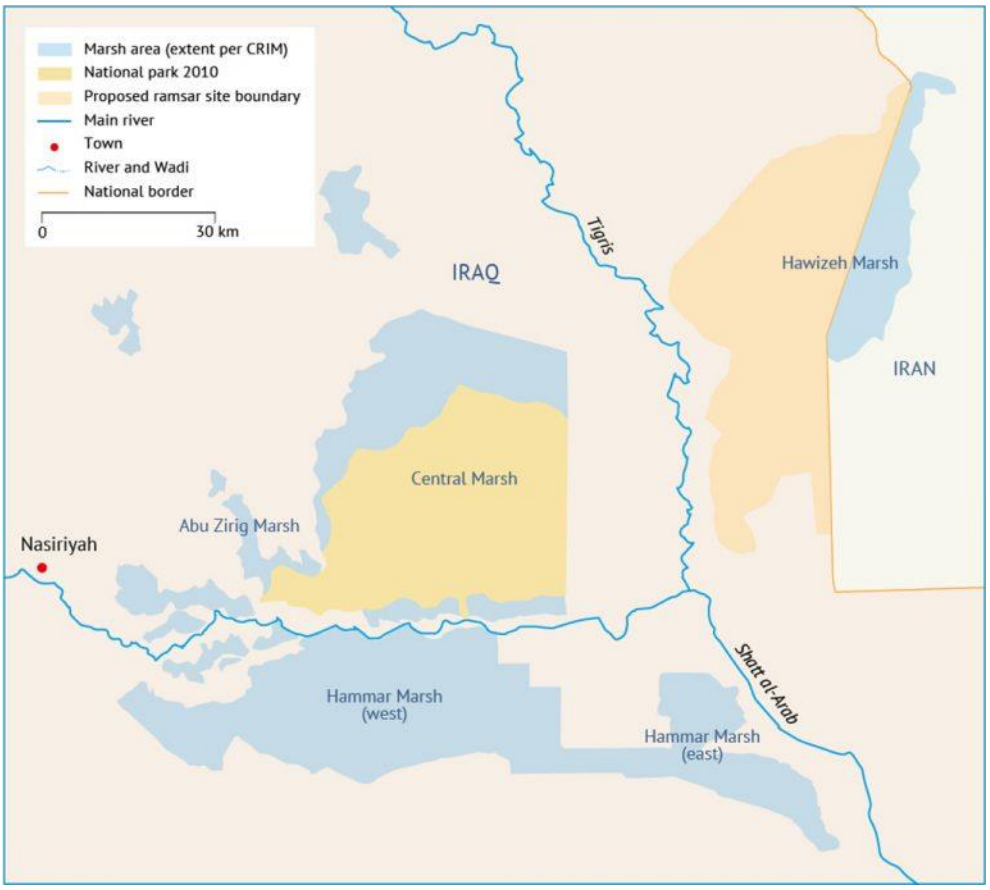

Figure 8: Geographical map of marsh areas in Iraq. Retrieved from https://water.fanack.com/specials/iraqi-marshes/outlook/ (12.10.2018)

3.8 Shatt al-Arab waterway

Shatt al-Arab waterway is a narrow river at the southern end of the Euphrates and Tigris, formed by their conjunction southeastward until it discharges into the Persian. This waterway is practically the final part of both Euphrates and Tigris. The total basin of this waterway is around 80,800 km^2 and its total length 182 km. Three rivers join Shatt al-Arab before its discharge into the Persian Gulf, Suwaib and Kassara from the Iraqi side, and Karun from Iranian side (Abdullah et al., 2015; Partow, 2001). Shatt al-Arab (Arvand Roud in Persian) forms part of the southern border between Iran and Iraq. This waterway flows within the Basra province of Iraq and along Khuzestan province of Iran and streams through Al-Faw wetlands into the Persian Gulf. Shatt al-Arab has a strategic importance for both countries as an oil and cargo transfer waterway (Akhtar, 1969; Biger, 1989). Shatt al-Arab carries a high amount of silt deposited by the Karun into it, which limits the possibility of using the waterway for fishing and oil extraction and demands constant dredging (Abdullah et al., 2015). Concerning oil transport, Shatt al-Arab provides access to free water for oil facilities far from the Persian Gulf. However, this access is far more crucial for Iraq, since this country has limited access to

free waters, and the small strip of land adjacent to the Persian Gulf is a large muddy peninsula not suitable for ground transportation and logistics (Cordesman, 2003; Hiro, 1991). Nevertheless, two major oil refineries of both countries are located near this waterway, the port of Abadan and the port of Basra. Most of the Iraqi oil reserves are also concentrated along the Shatt al-Arab waterway. Furthermore, two main oil tanker stations of Iraq, Khawr Al-Amīyah Oil Terminal (KAAOT) and Mina Al-Bakr with numerous oil installations are located in the Al-Faw wetlands, in the south of the waterway, which control the access to this waterway[8].

As marshes and algae prevent the construction of oil piers at the edge of the Persian Gulf, Iraq needs to use Shatt al-Arab for transferring oil, therefore, a continuous access to this waterway is a matter of national security for a country like Iraq with an oil-based economy (Figure 9). Control over Shatt al-Arab has been a source of tension between the two countries, from Safavid-Ottoman wars till the end of the Iran-Iraq War in 1988 (Al-Nasrawi, 1994; Biger, 1989; Hiro, 1991). The borderline agreement between the two countries was determined in the Al-Jazeera Treaty of 1937 based on thalweg, the deepest line of water, but with the collapse of Pahlavi monarchy in 1979, the question of the right and equal determination of this water border was again raised by Saddam Hussein as a pretext for starting hostilities (Biger, 1989; Cordesman, 2003; Hiro, 1991; Swearingen, 1988). Shatt al-Arab was used during the Iran-Iraq war as a strategic military path for the troops of both countries as well as a way for sheltering Shia opponents of Saddam Hussein (Cusimano, 1992; Hiro, 1991; Tripp, 1987). The role of Shatt al-Arab for the oil industry of Iraq is so significant that Emile Siman in an article in Washington Post in 1989 claimed that Saddam Hussein has plans for constructing a parallel waterway near Kuwait in Umm Qasr port. According to Siman, this project was at one hand because of the unnavigable condition of Shatt al-Arab after too many ships were drowned in it during the war, and at the other hand for building an alternative way after Iraq had lost its alleged right over Shatt al-Arab after the war[9].

[8] https://web.archive.org/web/20120414083508/http://www.defense.gov//News/NewsArticle.aspx?ID=55782
[9] https://www.wrmea.org/1989-april/the-shatt-al-arab-obstacle-to-iran-iraq-peace.html

Figure 9: Iraq's limited coastline with the Persian Gulf and Al-Faw Peninsula. Based on UNEP satellite imagery

3.9 Drainage projects in Lower Mesopotamia

Irrigation projects are not complete without proper drainage. Drainage projects fulfil the double functions that are draining water to irrigation canals and draining back the water salinated through irrigation and preventing it from getting back to natural water flow (Jaradat, 2002; Partow, 2001). Both functions are crucial in agricultural management in Lower Mesopotamia, due to the flat topography of the Mesopotamia delta and its poor drainage capabilities (Figure 10).

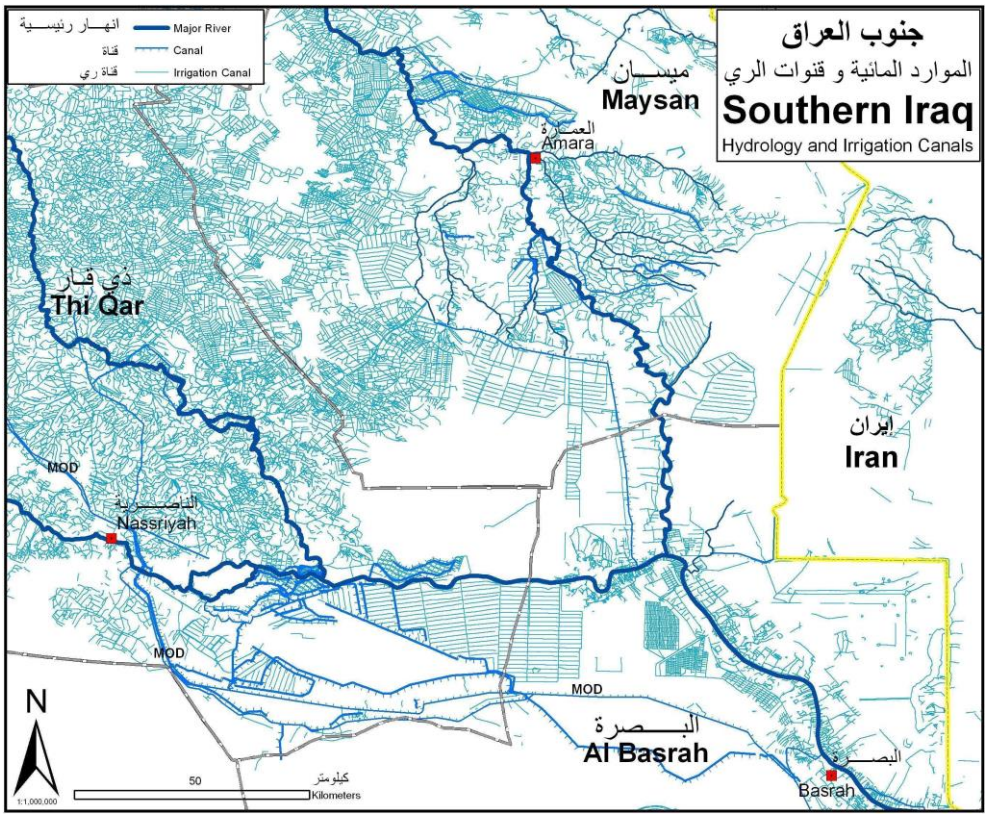

Figure 10: Map of complex irrigation system in south-eastern Iraq. Retrieved from https://dspace.library.uvic.ca/bitstream/handle/1828/2441/C_6.jpg?sequence=1&isAllowed=y (12.10.2018)

Most of the agricultural farms in this area are facing salination and soil erosion. According to the FAO report, the quality of water in central and southern Iraq has steadily degraded because of the salinity of both soil and water resources. Water logging is another problem resulting from improper drainage, further increasing the salinity of soil and decreasing the agricultural potentials (FAO, 2008). Therefore, draining irrigation water has always been a challenge for farmers in the southern part of Iraq (Republic of Iraq, 2010). First drainage projects started at the time of Ottoman Empire with help of British consultants (Partow, 2001). In 1951, the first drainage project in the marshlands was designed by a British hydrology engineer, Fred Haigh, with the aim of reclaiming agricultural areas. His plan, however, was not draining the

marsh areas and it was more about constructing surface and sub-surface drainage systems for discharging salinated water into "*interfluve areas*" as Partow calls it (Partow, 2001, p. 24). Nevertheless, there was also some consideration for diverting water from both Central and Hammar Marshes by using regulators and diversion at the edge of marshlands to agricultural farms, in order to use the wastewater being discharged to Shatt al-Arab. Therefore, the first drainage project was not drying up the marsh areas, rather it led to the degradation of water quality and changes in the ecosystem (Partow, 2001). Main drainage projects, known as Main Outfall Drainage (MOD), which was later called Third River or Saddam River (since it streams parallel to the Euphrates and Tigris), started also on the basis of Haigh's plan for reclaiming agricultural land in 1953. During the British mandate and even after the independence of Iraq, with the expansion of irrigation canals and rising importance of agriculture, limited drainage projects have been implemented in the margins of marshes used for rice cultivation (Al-Ansari & Knutsson, 2011a; Partow, 2001). In later years, a higher number of surface drainage projects using pumps were implemented. With the rise of the Ba'ath regime and its emphasis on agricultural development, drainage got more attention in the National Development Plan (NDP) of 1970-1974, under the supervision and financial support of the World Bank (World Bank, 1972).

At this time MOD continued by diverting the Euphrates, feeding Hammar Marsh and Lake by discharging directly to Shatt al-Arab and then to the Persian Gulf. In addition, the entry of Tigris to both Al-Amarah and Hawizeh Marshes was hampered by the construction of embankments and diversion canals (Al-Ansari & Knutsson, 2011a; Partow, 2001). However, these projects did not inflict as massive damage as the counterparts done in the early 1980s. At the outset of the Iran-Iraq war, Hawizeh Marsh suffered from a twofold drainage plan under the command of Saddam Hussein, first for replenishment of parts of the marshlands with flooding water into them, in order to prevent the march of Iranian troops, and the second part of the Hawizeh Marsh was drained for facilitating the Iraqi army reaching frontline through a dry area (Adriansen, 2004; Ahram, 2015). The latter was a political pretext, legitimizing the need for drainage for the sake of war logistics, but as this thesis asserts, it was more for controlling Marsh Arab people. In chapter four, this subject will be discussed in detail. In the 1990s, after the First Gulf War, as social unrest and massive protests among Shia spread out to southern parts of Iraq, massive drainage projects were conducted in Iraqi marshlands destroying the natural habitat of Marsh Arabs, who gave shelter to army deserters and other opponents after the uprising (Ahram, 2015; Amnesty International, 1991; Goldstein, 1992).

With the completion of MOD in 1953, all small drainage canals discharge into the main drainage stream. The Third River project (MOD) has been implemented during different phases including hydraulic and topographical studies of previous major drainage canals, and it was a multinational project, conducted with the participation of different Western companies. American consultancy firm Tippetts, Abbet, McCarthy and Stratton started the first phase of construction of MOD with building two conduits from the Mussayib irrigation project in 1954. In 1959, with the help of the Dutch company Zanen Verstoep NV a new conduit from the Al-Shatrah in the north of Shatt-al Gharraf was implemented in order to drain the saline irrigation water from Al-Gharraf irrigation project into the Hammar Marsh (Merry, 1992). During 1973 to 1977, new conduits were built by the Iraqi Irrigation Ministry with help of Soviet engineers for draining the irrigation water between Hawr al-Dalmaj near Kifil town and the western Al-Shatrah in the north of Nasiriyah (Merry, 1992). This expansion was based on the design of the British engineer Sir M. MacDonald. During 1982-1986, the German company Philipp Holzmann AG continued the Soviet engineer works by connecting the MOD to Nasiriyah Pump Station and then to the Persian Gulf (Merry, 1992; Partow, 2001). This pump station was built by the Brazilian company Mendes Junior Co in 1984, although the completion of the Nasiriyah drain station took till 1992 due to sanctions imposed against Iraqi industries introduced in 1990 (Merry, 1992; Partow, 2001; Pearce, 1993). The project starts from Main North Musayab and continues to West Shatra Drain in the north of the city of Nasiriyah with a length of 156 km. The later stages were conducted by connecting the Third River to the drainage canal, Al-Ishaqi on the right side of Dalmaj Lake and down the right bank of the Shatt-al Gharraf, and then it crosses the Euphrates with a huge siphon beneath the basin of the river east of Nasiriyah (Merry, 1992; Partow, 2001). The river streams southwest of Hur Al-Dalmaj, drains the Al-Saqlawiya drainage canal and at the end connects to the Shatt-al Basra Canal by draining the Khor. The Third River (Figure 11) streams along the southern coastline of Hammar Marsh with an extension of about 215 km and connects as a separated branch on the east side of Shatt al-Arab waterway through Shatt-al Basra Canal to Persian Gulf (Al-Ansari & Knutsson, 2011b; Partow, 2001). The Third River (MOD) is 565 km long with the capacity of reclaiming around 1.5 million hectares of irrigated land through a holistic network of sub-surface and surface drainage channels and pumping stations (Merry, 1992). Nasiriyah drainage pump station is another important drainage system, which functions as displacement station, receiving the saline water collected by the Third River from Dhi Qar and Muthanna provinces and transfers them through the siphon beneath the watershed of Euphrates River into the Third River for discharging into the Persian Gulf through the Shatt-al

Basra canal, which flows parallel to the Shatt al-Arab waterway in north of Basra and it discharges through Umm Qasr near the Kuwait border into Persian Gulf. This new canal was built in 1979 and it was considered as an alternative for Shatt al-Arab waterway inside Iraqi territory (Merry, 1992).

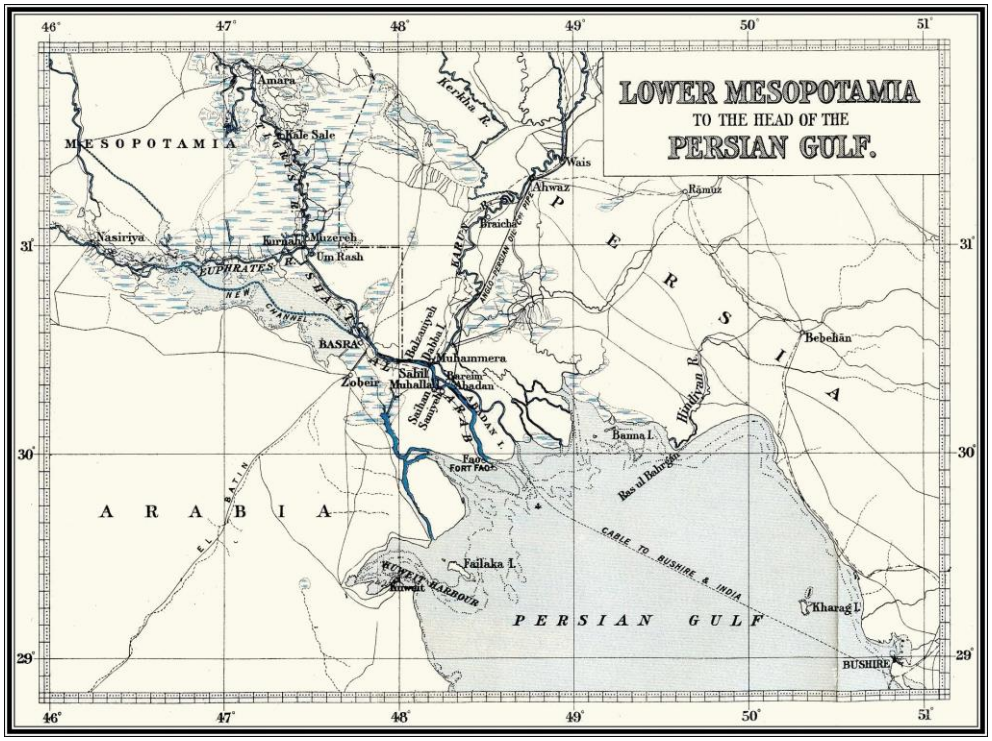

Figure 11: Shatt-al Basra Canal. Retrieved from https://www.britishempire.co.uk/images2/mesopotamia1897map.jpg (12.10.2018)

The sensitivity of the ecological problems increased even more when in 1992 Saddam announced the inauguration of Saddam River, just after the massive drainage projects in Marsh areas had inflicted substantial human and environmental losses. This river, which originates in the southeast of Baghdad, is a drainage canal collecting the irrigation water from the central part of Iraq and passing through the right bank of the Shatt-al Gharraf in the Central Marsh. The artificial river joins the Euphrates in the southeast of Nasiriyah and it is diverted by embedded syphons underneath of Euphrates in Nasiriyah to the edge of Hammar Marsh, draining the southeastern part of the marshland before discharging into Shatt-al Basra canal at Umm Qasr. Mother of Battles River or Umm-al-Maarik is another drainage canal that was inaugurated in 1994 (Partow, 2001). This drainage canal flows by using the diversion syphons under the Euphrates as well and it travels parallel to MOD on its west side. Its apparent function is to prevent the Euphrates river from entering into Hammar Marsh by diverting its flow to the southeastern Hammar Lake, which is itself separated by a large embankment from Hammar Marsh (Partow, 2001). Loyalty to Leader canal or Wafaa lil-Qaid is another drainage canal

inaugurated in 1997, which diverts the water of Al-Gharraf canal, and drains the remaining part of Hammar Marsh (Partow, Jaquet, Schwarzer, Allenbach, & Nordbeck, 2005).

In addition to the aforementioned drainage projects, which were implemented under the technical pretexts of hydrological necessities, parts of Al-Amarah marshland was drained during the war with Iran, particularly due to the Iranian military operation in Majnoun marshlands, a major Iraqi oil fields (Hiro, 1991). The drainage was conducted by the construction of a number of embankments, preventing water of Tigris from entering into the marshland. Prosperity River or Nahr al-Izz is one of the earthworks conducted on the east bank of Tigris cutting the Al-Amarah marshland for joining Euphrates River. The canal was constructed in 1993 and is meant to prevent the water from entering Al-Amarah marshlands along the Glory River, another shallow canal constructed in 1993 (Partow, 2001). This canal is located in the north of Prosperity River and follows from west to east, joining the Prosperity River later. In addition, there is another dam constructed on the Euphrates in the north of its conjunction with Tigris, which also functioned for preventing Euphrates to the marsh areas. Crown of Battles river or Tajj al-Maarik is another drainage implementation, preventing discharge of Tigris into Al-Hawizeh Marsh, constructed in the north of Al-Amarah marshland (Partow, 2001).

As it is evident from the detailed description of all canals and dams built in the framework of drainage projects in Iraq, the whole drainage system is an interconnected and complex entity. Although Iraqi authorities back then refused accusations that drainage projects were intentionally designed to oppress Marsh Arab tribes, the reality of drainage implementation and its massive social and ecological impacts cannot be denied (North, 1993). Abdul Wahab Mahmoud Al Sabagh, Minister of Agriculture and Irrigation of the Ba'ath regime, explained the drainage projects as the agricultural requirements for washing the salt-encrustation of agricultural farms due to salination irrigation water as well as supplying the water needed for since the country was (and still is) suffering from water shortage (North, 1993).

After the first Gulf War, news of the desiccation of Iraqi marshes resonated in western media, or at least among those concerned about environmental consequences of this huge ecological intervention in the Middle East (Adriansen, 2004). However, by that time, less was known about the fate of the inhabitants of these areas, Marsh Arabs. The Ba’ath regime claimed the drainage projects in marsh areas were based on the economic needs of the country, and in particular the need for reclaiming land for agriculture. Agricultural development was one of the main political agenda of the Ba’ath regime, as at one hand agriculture could be an alternative economic model to the oil industry, and on the other hand it could create considerable job

opportunities for Iraqi people, particularly in Shia majority suburban areas in the south-eastern parts of the country (Jaradat, 2002; Schnepf, 2004). The marshes were suitable regions for the cultivation of dry agriculture despite their huge and prosperous rice cultivation culture conducted in this area by Marsh Arabs (Ahram, 2015; Cole, 2008). Furthermore, the water accumulated in these regions, according to the Ba'ath regime, could be used for irrigating more farms. However, all these claims were made without considering the interconnected ecosystem of marshlands and the indigenous people living there (Ahram, 2015; Cole, 2008; Ellis & Arsel, 2010; Kazmi, 2000; Lonergan, 2012).

Water projects in the basin of Euphrates and Tigris in both upstream countries as well as within Iraq have changed the natural flow of two rivers and their natural cycles (Figure 12). Modernization and expansion of the agricultural sector through an increasing number of irrigation canals has decreased the water level of these rivers and changed the hydrology features of the whole basin (Al-Ansari & Knutsson, 2011b; Partow, 2001).

To pile up on the devastating effects of water projects, other damaging factors such as industrialization and industrial sewage effluents, and retaining of salinized and polluted irrigation water with chemical fertilizer in agriculture as well as retention of dam's sedimentation in the natural flow of major rivers all decreased the water quality entering into marsh areas (Partow, 2001). It shows the vulnerability of the areas to any ecological changes. Before the restoration projects started in the late 2000s, Hammar and Central Marshes were lost almost completely, with respectively around 97% and 94% of their total areas disappeared (Figure 13). Hawizeh was in a better condition, as it received part of its water from Karun and Karkheh Rivers in Iran, but part of its surface was also drained up (Partow, 2001).

Figure 12: Drainage projects in Iraq. Retrieved from CIA Publication IA 94-10020, 1994 (243K)

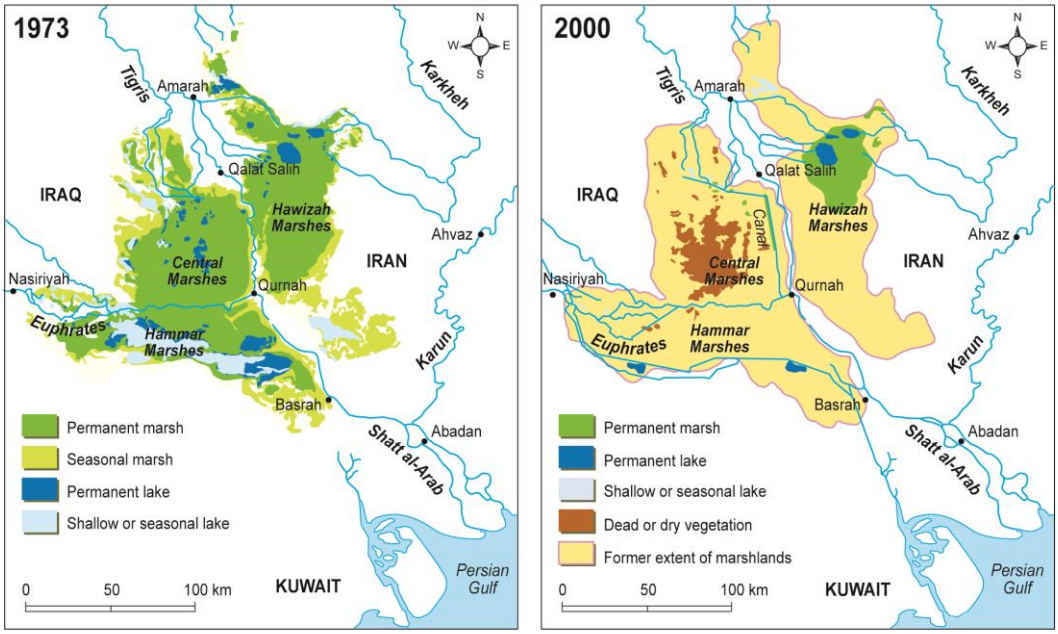

Figure 13: Desiccation of marsh areas after Drainage Projects in 1990 to 2000. Retrieved from Partow (2001)

3.10 Summary

In this chapter, the importance of shrinking water resources for Iraq was discussed in detail. The significance of water in this specific context is not limited to functional and environmental applications of water, but also to socio-political implications of water management. Water projects, especially numerous drainage projects implemented during the rule of Saddam Hussein, as described thoroughly in this chapter, seemingly served multi-faceted agenda of economic growth and political oppression. During all these decades of development and scarcity, two factors can be seen as a constant determinant in Ba'ath Iraq, water and Saddam Hussein. While the former was discussed in detail in this chapter as well as in chapter two, chapter four talks about the person behind some of the politically-charged decisions involving water in the Middle East: Saddam Hussein Abd al-Majid al-Tikriti.

4 POLITICAL PSYCHOLOGY OF SADDAM HUSSEIN

This chapter addresses the cult of Saddam Hussein, his upbringing, and how his political agenda was partly shaped by his childhood. The insight offered in this chapter is important to understand some of the personal intentions and political motivations behind the political use of water, either as a pretext or as a weapon, as described in two case studies in next chapter.

It is important to note that studying Saddam's biography is limited to his childhood, his rise to power and his reign at the helm of Ba'ath Iraq during the 1980s and 1990s.

4.1 Childhood and rise to power

Saddam was born in the town of Al-Awja in a Sunni family in the north of Baghdad. He was named Saddam, which in Arabic means one who confronts, or who will be confrontational (Post, 1991). Saddam never saw his father and there is no information about his identity. His mother remarried later, and Saddam was raised under the violent rule of his step-father, whose attitude towards the young Saddam made him escape to live with his maternal uncle Khairallah Talfah, a devout Sunni Muslim. Khairallah fought several years for the independence of Iraq between the United Kingdom and Iraqi Nationalists in 1941 and he was unmistakably a patriotic man. He became a mentor for young Saddam, regularly inciting patriotic emotions in him by describing Iraq as an oppressed country in the grip of colonial powers that needed to be liberated (Karsh & Rautsi, 1991; Post, 1991; Sassoon, 2012).

His uncle gave him the opportunity for going to school and mentored the political inclinations of Saddam. Years later, Saddam published an excerpt from the alleged speeches of his uncle under the title of "Three whom God should not have created: Persian, Jews and flies" in 1981, a year after war with Iran started (Post, 1991).

Saddam continued his education in a nationalist school in Bagdad, where he was introduced to Pan-Arabism, as well as to teachings of Michel Aflagh, a Syrian political philosopher, who promoted the doctrine of the first socialist Ba'athist movement based on Pan-Arabism movement in 1941. Young Saddam became interested in joining Iraqi Ba'ath socialist party and started dreaming about forming an Iraqi national government based on socialist principle and with an emphasis on Arab heritage and culture, intended to be a model for the entire Arab world. Saddam sought to revive the lost identity of the Arab world, something he presumed as

ruined by Persian, Israel and their western patronages (Des Roches, 1990; Karsh & Rautsi, 1991).

In this regard, Iraq, in Saddam's view, was the starting point for this ideal Arab revival, an idea which must expand further to other Arab countries. He saw himself as the only leader who was able to undertake this huge task and the one whom the Arab world gravely needed (Cockburn & Cockburn, 2000; Des Roches, 1990; Karsh & Rautsi, 1991; Post, 1991; Sassoon, 2012). In justifying Iraq's invasion of Iran, he did not stop at political arguments like the assumedly unfair 1975 Algiers Agreement on the determination of the border of Shatt al-Arab, or the imminent danger that Khomeini's Shia revolutionary power would extend to Arab countries. Saddam was seeking to liken (and to some extent event simulate) this 20th century military effort to the historical Arab/Muslim invasion of Iran at the end of Sassanid Empire in the 7th century, that led to the fall of the Sassanid Empire and Islamization of Iran (Des Roches, 1990; Post, 1991; Sassoon, 2012).

Young Saddam saw the Ba'ath party as a good opportunity for implementing his aspirations for changing Iraq into a powerful country among Arab states. The main agenda of Iraq Ba'ath party were set as fighting with colonialism, Western Imperialism and creating a unified Iraqi nation-state (Des Roches, 1990; Post, 1991; Sassoon, 2012).

The legitimation of the Ba'ath regime was depended on the success of their political agenda in creating a unified Arab Nation through solidarization and expanding security. Their local agenda was for Iraq to become a developed country through an approach that could be adopted by other Arab countries, with socialist principles "*such as patriotism, national loyalty, collectivism, participation, selflessness, inclusive labour, and civic responsibility without any sectarian gaps…"* (Metz, 1990, p. 192).

Saddam's hard work for distinguishing himself in the party ranks was noticed and praised by Michel Aflagh, and quite soon he became the vice president of under presidency of Ahmad Hasan al-Bakr. There were no apparent political differences between Bakr and Saddam (Bakr supported young Saddam and assigned him to several governments posts) but Saddam's ambition for becoming the president of Iraq soon led to a coup with the help of military intelligence chief Abdul Razzaz al Naif (Des Roches, 1990; Post, 1991; Sassoon, 2012). In 1979, Saddam Hussein put aged Bakr aside and presented himself officially as President of the Iraqi Government. He disposed of 68 members of Revolutionary Command Council (RCC) after he had assumed the president office, accusing them of planning a coup against him and calling them conspirators to their country. Twenty-two of them were sentenced to death in his big

Public Purge in 1979, in which he was observer of their execution (Des Roches, 1990; Post, 1991; Sassoon, 2012).

This purge was an important event in the story of Saddam since it helped to consolidate his power, but even more his image, as a tyrannical and ruthless leader. It also increased his confidence in the way to confiscate the party for himself. He changed the structure of the Ba'ath party and replaced the older politicians with people whom he trusted, mostly from members of his family and his townsmen from Tikrit. Those other party members who were not disposed of during the Public Purge had no choice but to endure Saddam's power and brutality (Cockburn & Cockburn, 2000; Des Roches, 1990; Karsh & Rautsi, 1991; Post, 1991; Sassoon, 2012).

By confiscating the party and reshaping it based on his goals and ambitions, Saddam distanced himself from the original ideology of the Ba'ath party and defined a new direction. He held a Regional Congress in 1982, for the Ba'ath members, which was more like a coronation ceremony for himself, at which he gave a speech about the so-called leader-necessity for Iraq (Des Roches, 1990).

This term, leader-necessity, basically explained *"The man who at a certain stage represents the aspirations and basic interests of the Party and the people. Therefore, it is in the interest of the Party and the people to preserve this (Necessity) and adhere to it in a sincere and genuine manner..."* (Des Roches, 1990, p. 29). In other words, the concept of the necessity of an absolute leader was not only meant for the Iraqi people but also for the party, and it diverted the party from its socialist and Pan-Arabist origins to power generating factory for Saddam as the necessary leader of Iraq.

4.2 Cult of personality

The roots of Saddam's violent political behaviour can be traced back to his miserable childhood; his father's illness during mother's pregnancy, mother's deteriorating mental condition, poverty, remarriage of his mother and mistreatment in hands of his step-father all played a crucial role for the mistrustful and aggressive personality of future Saddam (Baram, 2003; Post, 1991). However, and despite all psychological burdens such an upbringing might inflict later on one's emotional stability, he used the story of his childhood to emphasize his great personality and courage. The poverty of the family and his stepfather preventing Saddam to learn reading and writing was used as propaganda material for depicting his image as a hard-

working and intelligent character, stories that later elevated him to a hero of Iraqi society (Karsh & Rautsi, 1991; Post, 1991; Sassoon, 2012).

Another important factor affecting Saddam's political psychology was his passion for being like autocratic and dictatorial leaders like Hitler and Stalin, particularly the latter (Baram, 2003; Byman, Pollack, & Waxman, 1998; Cockburn & Cockburn, 2000; Karsh & Rautsi, 1991; Sassoon, 2012). Stalin had a mysterious personality, selfish and full of self-belief, and well-known for ordering the murder of his opponents in secret. Saddam's intense interest in Stalin was not limited only to mimicking his political strategies. Stalin became Saddam's idol in such a way that, as Said Aburish[10], a Ba'ath party member in close contact with Saddam, mentioned in an interview with Frontline channel, Saddam had a large library on Stalin in his working room, all collected by himself and assumedly all were read in details[11].

Another interesting aspect of Saddam Hussein was his hunger for gaining power through exerting more control. In the same interview, Aburish claimed that in the 1970s, when the Ba'ath regime started to construct its inner structure and fill vacant administrative posts with its member, nobody except young Saddam was eager to become the head of the security system[12]. Saddam transformed those departments of Ba'ath party responsible for security and intelligence into Department of General Relations, a move now understood as an attempt in expanding the scope of the responsibilities, and consequentially the power of young Saddam. Aburish describes Saddam as a man strongly believing in himself, and someone not being afraid of taking over new tasks such as the head of Security System, head of Peasants Department, actively playing a part in foreign and internal political relations such as the Kurdistan issue and the border debates with Iran. He also intervened in oil production by adding the position of the head of the committee for administrating oil industry to his responsibilities. To put it simply, he tried to confiscate all the important political posts required to increase his power in the party. As he received the power he needed, he replaced all key military ranks with trusted army men from his homeland, Tikrit, and then announced himself as the field marshal of the army, as his idol Stalin had done before[13].

In the late 1970s, he established a committee within the Ba'ath party, which was responsible for creating support and gaining votes for his presidency. The Iraqi media started to advertise intensely for the benefit of Saddam in the so-called biggest referendum in Iraqi history, named

[10] He was close member of Saddam's secret taskforce for acquiring chemical weapons and he wrote later a book called "Saddam Hussein: The politics of revenge" in 2000.
[11] https://www.pbs.org/wgbh/pages/frontline/shows/saddam/interviews/aburish.html
[12] Ibid.
[13] Ibid.

as Al-Zahf Al-Kabir (the Big March), by reviewing his measures and achievements as the vice-presidency of Revolutionary Command Council, and emphasizing on his character and his role in saving Iraq from the political instability and weakening economic conditions prevalent before the rise of Ba'ath party (Byman et al., 1998; Karsh & Rautsi, 1991; Sassoon, 2012).

The referendum held in 1979 offered only two possibilities: yes or no to Saddam Hussein's presidency. Saddam, not surprisingly, received 99.9% of yes votes, but he was, amazingly, absolutely furious about 0.1% responding negatively to his ambitions. He could not believe their rationale for not supporting him, or whether or not they were going to betray him later. He blamed the party's organization for failing to "inform" the Iraqi society enough of the blessing that was Saddam Hussein (Post, 1991; Sassoon, 2012).

According to a published report of the Central Intelligence Agency of the United States (CIA) in 1978, Saddam Hossein "*used economic and political carrots and sticks to create an impression of national solidarity…"*[14]. Based on this report, Saddam Hussein was famous for his courage, ruthlessness and shrewdness in his youth. The military was the most important organization for Saddam Hussein, and he changed the structure of the Iraqi army and other military forces completely, practically turned them into a private army under his control, by allocating parts of oil revenues for providing the Iraqi Army with new military technologies and construction of new building for educational and research aims, all of them now can be seen as preparations for his future war ambitions[15]. Although he was not a military man, he always wore a military uniform to give the impression of himself as a powerful leader, in the same manner as Stalin (Cockburn & Cockburn, 2000; Post, 1991; Sassoon, 2012).

Saddam's highly publicized policies revolved around the two main axes of "*Iraq's opposition to Israel, and Iraq as a leader of the Arabs against the Persian menace…"* (Des Roches, 1990, p. 4). These two axes formed the structure of the Ba'athist party under Saddam's presidency. His hostility towards Iran went much further than border conflicts between the two countries. He was afraid of the Persian domination in the Middle East, revolutionary Iran's leadership's claim of the Islamic world, an entity that from Saddam's point of view was inseparable the from being Arab (Des Roches, 1990; Post, 1991; Sassoon, 2012). Saddam tried his best to reinforce this conception among the Arab world. To do so, Saddam exploited religious feelings, in spite of the Ba'ath party being essentially a secular party, to justify the hostility

[14] https://www.cia.gov/library/readingroom/docs/CIA-RDP80T00634A000400010048-0.pdf
[15] Ibid.

with Iran, emphasizing the Sunni majority in the region. He also tried to evoke a historical Arabic/Islamic notion by claiming Islam as an integral part of the Arab world emerging from the core of Arab culture, and by saying that non-Arabic countries could not have any claim over the religion (Des Roches, 1990; Hiro, 1991; Sassoon, 2012). Although he was ideologically against the politicization of Islam and intervention of religious leaders into political affairs, even considering it as a threat to the political stability and a threat to his own power, however, he could not overlook the importance of Islam in constructing an Arabic identity more than any other factors. Therefore, he used Sunni Islam (Sunni) for gaining more credit among other Arab nations (Hiro, 1991). By spreading rumours and fear, Saddam managed to convince most Arab countries, and many western states as well, of imminent danger of an unchecked revolutionary Iran. Foreign aids both from Arab Nations and Western countries flooded to Iraq, and they were used not only to provide more military power but also to entice Iraqi society by implementing several developmental programs, as well as to the financial wellbeing of families of military associates, and to create a loyal inner circle around Saddam (Des Roches, 1990; Post, 1991; Sassoon, 2012).

His enthusiasm for the solidarity of all Iraqis regardless of their religion and ethnicity, expressed frequently and fervently through his patriotic speeches at the beginning of his presidency, impressed the Iraqi society to a great deal and contributed to the development of the cult of personality that Saddam enjoyed during most of his reign. To foster that status, coins, sculptures, graffiti, posters, TV and radio programs, chants and contents of school books were all designed to convey Saddam Hussein as a courageous, benevolent and patriotic person (Post, 1991; Sassoon, 2012).

He felt the burden of resurrecting 1,400 years of tension between Persians and Arabs on his back, raising the flag of the Arab world (Islam), and establishing a unified Arab government headed by Iraq especially after Egyptian President Anwar Sadat had signed in 1978 the Camp David Accords[16] with Israel, which gave Saddam a chance for claiming himself as the foremost leader among Arab nations. He saw also himself the legal guardian of Persian Gulf, calling it “Arabian Gulf” and claiming the Gulf as the Arab’s historical property (Woods et al., 2011). The war with Iran was advertised as a war of dignity in Iraq, a war to win Iraq's lost credibility (Post, 1991; Sassoon, 2012; Woods et al., 2011). Although his calculations about the length and outcome of the war with Iran were wrong, it did not decrease the popularity of

[16] http://www.mfa.gov.il/mfa/foreignpolicy/peace/guide/pages/camp%20david%20accords.aspx

Saddam Hussein among the Iraqis. People still worshipped his courage and his image as a national hero was rebuilt in the shortest of time (Sassoon, 2012).

Self-centred and self-fascinated, even somehow pleased with his war policies after the Iran-Iraq war, his power ambitions were not coming to end, and he took the liberty of starting another military campaign, this time in Kuwait. Scholars argue that Saddam was an avid attention-seeker, doing anything at any price so that the world would see him as the most powerful man in the region and commander of the best Arab world. He was not concerned that much about winning ar losing these wars, as long as the war could raise his name in the news as an inspiration to the Arab world, even at the price of being depicted as a villain to the world (Baram, 2003; Post, 1991; Sassoon, 2012).

In a video[17] released from a meeting called Ba'athist Public Purge, which was held right after Saddam Hussein was elected as the president of Iraq in 1979, we see him in a formal western-style black tie suit smoking a Cohiba cigarette, a stark contrast to his more down-to-earth proud son of the Arab nation image he showed before. During this video, he shows a calm and indifferent face listening to the speeches of the Ba'athist members in his praise. At the end of the purge, he reads the names of the former Ba'athist party members, declaring them traitors to the party, and also to all Iraqi people, and asks them to leave the building. It has been said that none of those people knew the horrible fate waiting for them outside of the building, but they were afraid, and this was very clear in the video. They knew Saddam Hussein was an unpredictable person. Saddam Hussein had ordered to shoot all of them (around 21 persons or maybe even more) outside the parliament in order to show his power to the members of the party so that no one would do anything against him, and by extension of him, against Iraq.

Sassoon described Saddam as an intelligent person who was familiar with the psychology of Iraqi society and knew how to manipulate the political situation for his own benefit and seducing Iraqi society along his political ends, for example by publishing books praising the excellence of his governance, emphasizing the unique needs of the Iraqi community, so as to establish Saddam Hussein as the only one who knew what is the best for Iraq (Sassoon, 2012).

According to Sassoon, Saddam Hussein was alien to reality, and the political world that he created for himself was not real. He made only a few trips outside the Middle East and his worldview turned out to be limited to the Middle East. Most people around him were sycophants and they were constantly praising him for the greatness of his personality. This reinforced the sense of supremacy in Saddam Hussein, the former poor orphan who was once so

[17] https://www.youtube.com/watch?v=kLUktJbp2Ug

close to missing learning how to read and write. In the political world of Saddam Hussein, Iraq and the Iraqi people were not defined outside of his personality. Indeed, for Saddam Hussein, the fate of Iraq and himself was inseparable and interdependent (Sassoon, 2012). For him it was important to show Iraq as a powerful country on the international stage, to the extent that even after the comprehensive defeat Iraq suffered in the first Gulf War, he insisted on his claim about having weapons of mass destruction, and thus putting the country under crushing pressures of international sanction, but not allowing Iraq to be known as a weak and miserable country with a weak and miserable leader (Byman et al., 1998; Cockburn & Cockburn, 2000; Sassoon, 2012).

He confiscated media and publications for his own interests, broadcasting and publishing several cultural programs, emphasizing on the urgent need of the country for having a leader like him. His cult of personality was reinforced by the propaganda departments of Ba'ath party and all ranks of government officials, who in turn received their political value from him (Karsh & Rautsi, 1991; Post, 1991; Sassoon, 2012). Moreover, Saddam established an array of awards for those civil servants, artists and other citizens who praised him more and better. People were encouraged, in exchange for money, to praise Saddam's personality, courage and eligibility for being the leader of the Arab world. All of these initiatives had a profound effect on Iraqi society and their belief in Saddam's supremacy (Karsh & Rautsi, 1991; Post, 1991; Sassoon, 2012).

Therefore, it should not be surprising to know that following the uprising in 1990, Saddam was disappointed and enraged of perceived disloyalty of Iraqi society towards him. The uprising and its aftereffects strengthened his paranoia of being hit by traitors, and not only led to his spiritual isolation but also his political rigours. He could not believe that people betrayed him despite all the services he provided Iraq, He articulated his disappointment as follows: "*The main factor, which probably I contributed to, was the trust in our people. In other words, what happened could not be expected and thus we were not prepared to face such a factor. I never expected of our people, even a small number, would betray us and unite with those who came across from Iran (Al-Dawa)…"* (Sassoon, 2012, p. 166). He used to put his government officials under immense psychological pressure to test their loyalty, often through elaborate schemes that included their family members. He announced himself the true qa'id (leader) for Iraq (Karsh & Rautsi, 1991; Post, 1991; Sassoon, 2012).

Saddam Hussein saw himself as an outstanding character in Iraqi history and he had the belief that Iraqi people have been waiting for such a long time for a leader like him as he said in one

of speech with his comrades that *"In my opinion and in my heart, the Iraqi people have been searching over eight hundred years for something like this. For someone to come from their offspring and from among them to lead them into a good life...."* (Sassoon, 2012, p. 191). In interviews, he never addressed himself directly, and he always used the third person to speak about himself, an indication of his egotistical outlook of himself, as he was often quoted saying that Iraq is Saddam Hussein and that Saddam Hussein is "Iraq", and he did not find them distinguishable. Also, in the last trial in 2005, after the invasion of Iraq by America, in his defence he said that "*I am not here to criticize Saddam Hussein,"* implying that even he himself cannot criticize Saddam Hussein[18].

4.3 Saddam Hussein and religion

The Iraqi Ba'ath regime came to power as a secular party, but they never had a neutral view toward religious issues, nor did they promote apostasy within the society, but they also emphasized separation of religious issues from political affairs. Saddam Hussein had a strict view toward religion before his presidency, commanding his comrades not to give priority to religious obligations but rather to political responsibility. He was careful about that Ba'ath members would not use their position for promoting their religious ideas. Although he was a Sunni Muslim, he did not show himself as a fanatic Sunni, emphasising religious differences (Helfont, 2018; Sassoon, 2012).

However, religious politics of Saddam changed after the beginning of his presidency, particularly after the 1990 uprising, even though the party was at first reluctant about the politicization of religious issues or requesting help from religious leaders in political affairs (Sassoon, 2012). In other words, the politicization of religion for the Ba'ath Party was an alarming issue, due to Iraq including various ethnic groups and sectarian differences. Politicization of religious affairs was considered as a suicidal path towards social unrest and formation of rivals to the Ba'ath party's unrivalled grasp of power (Blaydes, 2018; Helfont, 2018; Sassoon, 2012).

Therefore, the Ba'ath Party's policy was to restrict religious activities in society. Strict policies toward Shiites living in Iraq was not limited to the Ba'ath regime, and sectarian differences emerged since the Ottoman Empire, as most Shia were excluded from senior jobs, but indubitably these policies were more intransigent after the Islamic Revolution in Iran in 1979. Joseph Sassoon argues that Saddam's political attitudes suffered a turn from anti-tribalism to

[18] https://www.youtube.com/watch?v=ZCSrujaUuMc

pro-tribalism and from secularism to religiosity, which indicates the extent of suspicion that Saddam held towards religious domination of Shia Iran (Blaydes, 2018; Helfont, 2018; Sassoon, 2012).

Sassoon discusses that after the Shia uprising, Saddam implemented a binary religious policy, on the one hand continuing the strict attitude toward religious activities, on the other hand promoting a new movement in Islam, formed by his own perception of Islamic ideas, as the true Islam against the Islamic revolution in Iran. Saddam said that *"Allah is neither Sunni nor Shia, he is also neither Catholic nor Protestant"* and he saw the sectarian differences just as human-made interferences by religious leaders in original religions for their own benefit (Sassoon, 2012, p. 260). The strict religious policy applied to all religions and religious ideas from every end of the spectrum of Islamic doctrines.

Saddam announced Wahhabism as an infidel movement after the 11th September 2001, took stricter policies toward religious activities in Shia mosques, controlling all Friday sermons and replacing the body of Awqaf and Religious Affairs with his trusted agents. Saddam commanded the party Secretariat providing a document for all sectors for vigilant supervision and prevention of negative practices in mosques or other religious buildings. However, there was no clear definition of those negative practices and each religious gathering could be apprehended for having negative elements. So the party promulgated the slogan that only "*the Ba'athist and his family are the ideal in behaviour and discipline…*" (Sassoon, 2012, p. 264).

Even after the Shia uprising, Saddam still attributed his parentage to prophet Muhammad and his cousin, Ali Ibn- Abi Taleb (Imam Ali for Shia Muslims, the most revered personage in Shia Islam after the prophet Mohammad), in order to strengthen his power and mitigate the social unrest after the uprising. This claim was accompanied by several programs in the media, making fake stories about Saddam Hussein's past and how his lineage can be traced back to the prophet's family (Blaydes, 2018; Helfont, 2018; Sassoon, 2012). The party also used the much feared Ba'athist Republican Guard (RGFC) for controlling Shia religious leaders' sermons against this particular claim of Saddam Hussein, or even preventing them from attributing their own ancestral origins to the prophet's family, a common practice in Shia tradition. Those who dared to call themselves "Seyed", implying that they were descendants of Imam Ali's family, were sent to jail (Blaydes, 2018; Helfont, 2018; Sassoon, 2012).

After the uprising, Saddam understood the necessity of being more tolerant toward religious affairs, which led to a decree called Faith campaign in 1993. New mosques were constructed, and new rules were laid down regarding the opening hours of bars and cafes during the month

of Ramadan, and suddenly there were many television programs devoted to religious affairs and radio started broadcasting Qur'an regularly. He also commanded to add the Arabic sentence in praising God, God is the Greatest (Allah Akbar) to the Iraqi flag just before his army was forced to withdraw from Kuwait in 1991, to give the war an Islamic value (Baram, 2003; Blaydes, 2018; Helfont, 2018; Sassoon, 2012).

Also, Iraqi media invited Shia religious clerics from southern cities as part of a faith campaign to talk about the importance of Islam for solidarity among Iraqi people against foreign countries, who supposedly sought every opportunity for destroying Iraq (Helfont, 2018; Sassoon, 2012). The intention of Saddam was not only to show himself as a religious man, which further reinforced his cult of personality but also he wanted to influence the waves of Shia uprising in southern cities, where the Iraqi oil industry, the economic heart of the country, is located (Blaydes, 2018).

4.4 Summary

Saddam Hussein was the very definition of an egotistical tyrant. He was brutal, self-absorbed and unpredictable. However, as discussed in details through evidences and anecdotes, one aspect of his psyche seemed not to change, whether before, during and after the end of his reign: his patriotic feelings towards the Arab nation, as reflected in his disdain for Persians, and for whatever that came from that side of the border. The next chapter discusses two case studies of how he treated such trans-border problems through the political use of water.

5 TWO CASE STUDIES FOR TARGETING WATER IN THE POLITICAL AGENDA OF SADDAM HUSSEIN

In this chapter two case studies are discussed in detail: the Iran-Iraq war (1980-88), and Shia uprising of 1991. Both case studies involve showcases of political use of water by Saddam Hussein to gain the upper hand in regional struggle for hegemony against Iran.

5.1 Case study I: The Iran-Iraq war

5.1.1 Political tensions between Iran and Iraq

To understand the socio-political context for both case studies, it is worthwhile to study the historical background behind the political tensions between Iran and Iraq. The political relations of both countries are affected greatly by geopolitical factors. The most important problems between the two countries, existing from Ottoman and Safavid empires included: controversies on the common border especially the Shatt al-Arab waterway, migration of Kurds and different religious attitudes (Amin, 1982; Cusimano, 1992; Hiro, 1991; Lauterpacht, 1960). As it is mentioned previously, due to Iraq's limited access to the Persian Gulf, to export its oil Iraq depended on Shatt al-Arab. This matter, which was Saddam's excuse for invading Iran, had been a point of disagreement between the two countries for centuries. However, these disputes were not only limited to Shatt al-Arab but also they were about north-western borders, where Kurds lived above rich oil fields (Cusimano, 1992; Hiro, 1991; Lauterpacht, 1960; Tashnizi-Mirzaei, 2002).

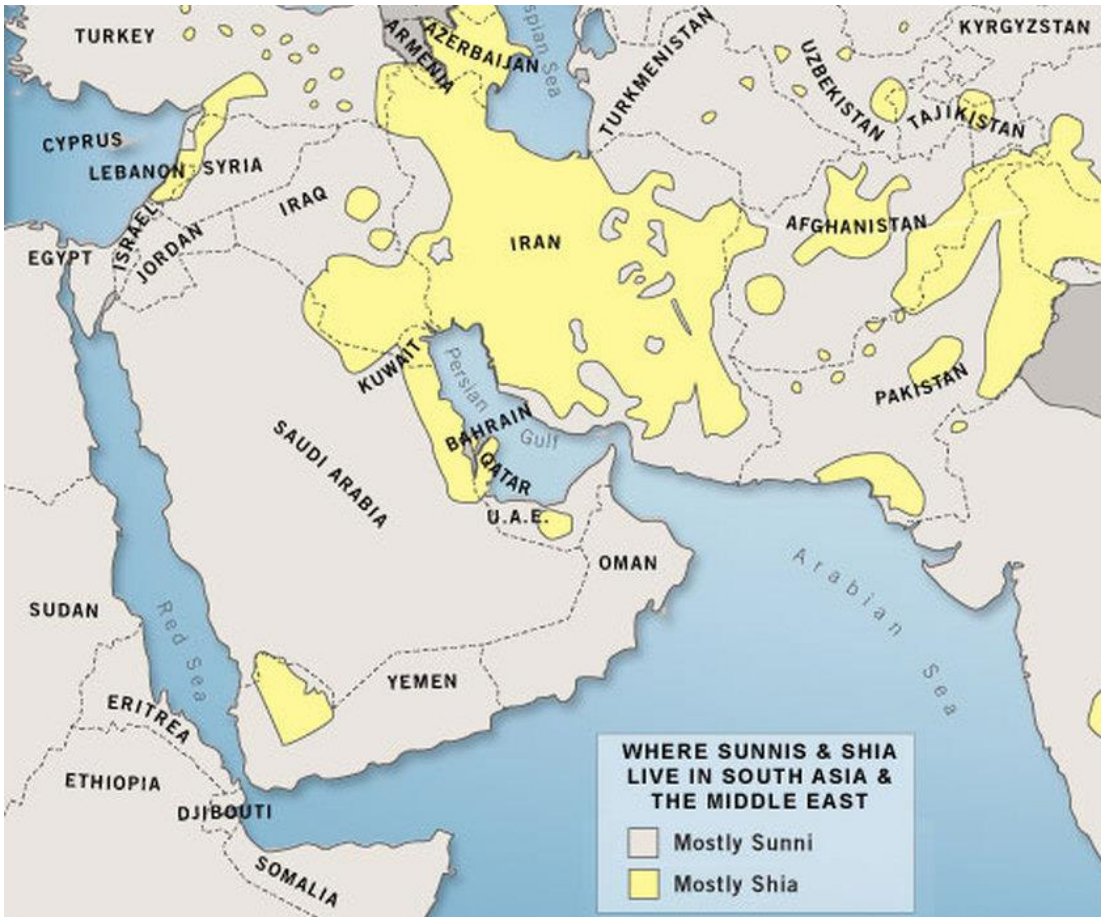

Figure 14: Shiite and Sunnis dispersion map in the Middle East (Nasr, 2016)

During the Ottoman Empire, the different religious inclination of the Safavid Empire led to border skirmishes, and many long wars between them occurred. The Ottoman Empire claimed itself as the leader of the Islamic world with the majority of Sunnis and it could not stand any threat for losing its power (Hiro, 1991). On the other hand, the Safavid Dynasty established Twelve Imams' Shiite as Iran's official religion. At that time, ideological differences turned into the most important reason in the confrontation between the two governments (Abdulghani, 2011).

As the result of power competition between the two opponents, Shah Abbas began to increase his grip through promoting Shia religious groups in important southern cities of Iraq that contained the majority of the Shia population in Iraq (Hiro, 1991). Furthermore, these areas include Shiite's holy shrines and visiting them was crucial for the Safavid Dynasty for propaganda purposes (Abdulghani, 2011; Hiro, 1991). The movement of Shiites across the southern borders through the Shatt al-Arab and their tendency toward Safavid Dynasty increased polit-

ical tensions (Hiro, 1991). These people lived in today Khorramshahr and Abadan ports[19] in the east of the waterway at Iranian territory and at Basra port in the west bank of the waterway that was part of Ottoman Empire at that time (Abdulghani, 2011; Hiro, 1991).

The first agreement between Ottomans and Safavids was called Amassieh, which was signed in 1555 (Hiro, 1991; Lauterpacht, 1960; Tashnizi-Mirzaei, 2002). Since that time until the last agreement in 1975, about 20 agreements and compromises were made between two countries (first between Persian and Ottoman Empires, later between Iran and Iraq), the most significant ones are: Zohab Agreement, The First Erzurum Agreement, The Second Erzurum Agreement, Tehran's Protocol, Constantinople's (Istanbul) Protocol in 1913, The Agreement of 1937 and Algiers' Agreement in 1975 (Hiro, 1991; Lauterpacht, 1960; Tashnizi-Mirzaei, 2002).

Zohab Agreement or Treaty Over Qasr-e Shirin terminated around 150 years of war between the two powers over western borders in Qasr-e Shirin area and common borders in the Caucasus. Based on this agreement, the whole basin of Euphrates and Tigris belonged to Ottomans. It also included both the banks of Shatt al-Arab waterway at the southern border. In return, Safavids gained areas in Caucasus. Although Qasr-e Shirin Agreement determined the first border demarcation between the two countries in 1639, mountainous areas in Qasr-e Shirin were still the scene of confrontation (Abdulghani, 2011; Cusimano, 1992; Hiro, 1991; Lauterpacht, 1960; Tashnizi-Mirzaei, 2002).

The First and Second Erzurum Agreements (1823 & 1847) were implemented by the involvement of Britain and Tsarist Russia who perused their own interest in western Asia. They interfered with the suggestion of a compromise between Iran and the Ottomans. Based on both the agreements, Iran had to resign on its claim over western borders in Qasr-e Shirin area and Ottomans recognized the right of Iranian ships for using the Shatt al-Arab waterway. This was because of British interest in establishing its navigation base for the benefit of the Anglo-Indian company in Western Asia. However, Iranian pilgrims had the right to visit the holy cities of Iraq (Abdulghani, 2011; Cusimano, 1992; Hiro, 1991; Lauterpacht, 1960; Tashnizi-Mirzaei, 2002). Nevertheless, both the agreements were only a mere negotiation round for demarcation of future borders, something that was enforced sixty-seven years later through the Istanbul Protocol in 1913-1914. In the meantime, the border areas between the new dynasty of Qajar in Iran and the Ottomans were still a place of militant confrontation (Abdulghani, 2011; Hiro, 1991).

[19] They were called Mohammareh and Khizr at that time. Mohammareh is an Arabic name, which was used later by Saddam as a subtext for claiming the Province of Khuzestan as part of Arab world (Hiro, 1991).

Tehran's Protocol in 1911 and Istanbul's Protocol in 1913 were again made with the involvement of Britain and Russia before the onset of World War I. At this time, Iran was divided into two de facto spheres of influence under the supervision of Britain and Russia, so that Britain gained the control of the southern part of Iran as well as Basra in Iraq (Amin, 1982). The provision of both protocols was the negotiated subject in previous Erzurum Agreements. The only difference was that Iran received Mohammareh and Khizr ports in the east bank of Shatt al-Arab and Iranian ships had the right of navigation along Shatt al-Arab after paying dues to Ottomans (Abdulghani, 2011; Cusimano, 1992; Hiro, 1991; Lauterpacht, 1960; Tashnizi-Mirzaei, 2002). It was part of Britain's plan to weaken the Ottoman Empire by gaining more control over rich oil fields in Qasr-e Shirin area on one side and Basra port on the other side, the latter would allow them to exercise influence over the oil-rich southern parts of both Iraq and Iran (Abdulghani, 2011; Akhtar, 1969; Hiro, 1991).

The demarcation of borders was accomplished later during the Istanbul Protocol and it was enforced on Iran next year in 1914, so that Mohammareh was determined as the borderline between Iran and Iraq and it excluded Iran from any right over the waterway (Akhtar, 1969; Amin, 1982; Cusimano, 1992; Hiro, 1991; Lauterpacht, 1960). The border demarcation was in force until the collapse of the Ottoman Empire in 1922 and it only agitated the fire of historical disagreement between the two countries in the decades to come (Lauterpacht, 1960).

After World War I, the collapse of the Ottomans and triumph of the Bolshevik revolution in Russia fundamentally changed the power hegemony in the region. The wave of the formation of new nation-states from former colonial territories with the new borders, that was part of the United Kingdom doctrine, divided the Ottoman Empire in the basin of Tigris and Euphrates Rivers into three countries: Turkey, Syria and Iraq (Hiro 1991, Tashnizi-Mirzaei 2002, Rousu 2010, Akhtar 1969). Iraq was replaced by an independent nation-state, a few years later, Qajar regime in Iran collapsed as a result of Britain and Tsarist Russia's support for Reza Khan (later Reza Shah Pahlavi) (Zargar, 2011).

Britain's powerful presence both in Iran and Iraq required the establishment of diplomatic relations between the two countries in order to maintain the flow of oil. New Iraq under the British mandate joined the League of Nation and Iran was forced to officially recognize the new country. However, Reza Khan refused to recognize Iraq, since he assumed the two previous protocols over borderline were unfair and an imposition on Iran by the Ottomans, a political entity that did not exist anymore at that time (Akhtar, 1969; Hiro, 1991; Rousu, 2010; Tashnizi-Mirzaei, 2002; Zargar, 2011). He requested that the border should be based on thal-

weg of Shatt al-Arab. Reza Khan also asked for the establishment of an Iranian office in Iraq's territory for handling the affairs of Iranian pilgrims and citizens in Iraq and the autonomous Shiites along Shatt al-Arab waterway as well as territorial conflicts over Qasr-e Shirin, which was rejected by Iraq (Amin, 1982; Hiro, 1991; Swearingen, 1988).

Reza Khan defeated the self-designated government of Mohammareh under the rule of Sheikh Khaz'al in 1924, who wanted to separate Khuzestan province from Iran under the name of Arabistan and established his power at the southern borders. According to Jasim Abdulghani, Reza Khan pushed Arab Shiites in the west bank of Shatt al-Arab, in Basra against Iraq's government with promising them Iranian nationality (Abdulghani, 2011). The desire of Arabs to obtain Iranian identity, on the one hand, was because they would be exempt from going to military service in either countries, and on the other hand, was due to Shiite suppression in Iraq (Abdulghani, 2011). Furthermore, Iraq's belligerent trend toward Iranian Pilgrims increased the fire of old tension between the two countries (Abdulghani, 2011; Hiro, 1991). Simultaneously, Iraq, in turn, encouraged Arab tribes in Iran to protest against central government (Abdulghani, 2011; Hiro, 1991). After the rise of Hashemite kingdom in Iraq under influence of Britain, Iraq became a semi-independent country under the leadership of King Faisal I in 1929. Then, an official meeting was held between the envoys of the two countries discussing the necessity of political relations. The new Iraqi government accused Iran of suppression of Arab tribes in Khuzestan and Iran accused Iraq of interfering with internal affairs of Tehran by encouraging Arab tribes in the south of Iran to rebel against the state (Abdulghani, 2011; Hiro, 1991).

However, at the end, the unstable political condition in Iraq, with Britain's involvement in internal affairs of both countries and its plan to foster oil production in southern Iran, made King Faisal surrender more concessions, so that the Anglo-Persian Oil company, seemingly a company half owned by Iran, was able to use Shatt al-Arab (Hiro, 1991; Zargar, 2011). To achieve this goal, Iraq was compelled to accept a new treaty under Britain's command in 1937, which declared that Shatt al-Arab was a free waterway, open for navigation of all international ships and Iran & Iraq's borderline was based on thalweg line, four miles further from Abadan anchor, where Iran's main oil refinery is located (Hiro, 1991; Tashnizi-Mirzaei, 2002). However, navigating in Shatt al-Arab was still controlled by. For example, all ships sailing through the waterway had to have Iraqi flag and Iraqi captains, except in some areas that were conceded to Iran, which were under regulation of Iranian authorities. Other provi-

sions of the new agreement were based on two previous protocols of 1911 and 1913 (Amin, 1982; Hiro, 1991).

This agreement was still not favoured by Reza Khan and he saw the economic future of Iran in the grip of the Iraqi state, who could claim the ownership of the region at any point in the future. Reza Khan requested to add a new article to the agreement, raising the importance of the mutual management of the waterway according to equal footing, which was dismissed by Iraq, who wanted the exclusive right to the waterway (Akhtar, 1969; Amin, 1982; Hiro, 1991).

At this time, following the request of Britain, Iran, Iraq, Afghanistan and Turkey had to join the Saad Abad Pact in 1938 in Tehran, the first Middle Eastern non-aggressive agreement of its kind. It obliged the members to refrain from interfering with the internal affairs of each other, mutual measures for preventing subversive activities along with their borders (Hiro, 1991; Zargar, 2011).

After the end of World War II and the start of the Cold War, each Bloc tried to follow its interests in the Middle East. Consequently, Iran & Iraq were forced to sign the Good Neighbouring Relations Agreement, in 1949, again by the request of Britain, which sought to increase its economic benefits and oil production in the region (Hiro, 1991; Zargar, 2011). Following the increasing threat of international communism, the Baghdad Pact was enforced by Britain with the support of the United States in 1951, which included Iran, Iraq, Turkey, Pakistan and Britain itself, to create a united front against the Soviet Union (Hiro, 1991). Nevertheless, the pact did not last, since the new military Iraqi government under the command of Qasim withdrew from the pact and allied with the Soviet Union while Mohammed Reza Shah strengthened his ties with the United States (Akhtar, 1969; Hiro, 1991).

After the expulsion of Reza Khan by allied forces at the end of World War II as a punishment for his inclination towards Nazi Germany, and the coronation of his son Mohammad Reza Shah, the young Shah declared the border treaty of 1937 invalid and demanded free navigation in Shatt al-Arab for Iranian vessels. Mohammad Reza Shah placed his army across the waterway to prevent Iraqi ships from using it as well. Political rivalries and tensions between the two countries were suddenly concentrated on Shatt al-Arab. However, the main drive behind all the arguments was to maintain power hegemony in the region, in which Iran very soon found the upper hand, thanks to Iran's military superiority and political instability in Iraq. Iran’s regional hegemony increased then even further as Britain withdrew from most of its colonial interests in the Middle East (Akhtar, 1969; Amin, 1982; Cusimano, 1992; Hiro,

1991; Rousu, 2010; Tashnizi-Mirzaei, 2002). As a result, three strategic islands in the Persian Gulf, Great and Lesser Tunb, as well as Abu Musa, came under full control of the Shah's army and Iran became the cornerstone of the Western Bloc in the Middle East, to the extent that Shah announced himself the region's guardian (Ahmadi, 2008). Such rapid re-emergence of Persia was hard to fathom for Arab countries. However, due to extensive political and military support of the Iranian monarchy by the Western Bloc, none of them had the power to confront Shah (Hiro, 1991).

In such climate, and to solve the border issues once for all, Iran suggested a new negotiation based on recognition of either the thalweg or the median line principle and to share the sovereignty right of the whole of waterway between the two countries. Iraq still refused to accept the thalweg, as it saw Shatt al-Arab as an integral part of Iraqi. In return, Mohammad Reza Shah set his naval forces equipped with the most up-to-date military systems throughout the Shatt al-Arab to show his power in the region (Hiro, 1991; Rousu, 2010; Tashnizi-Mirzaei, 2002). The United States' support of Iran and Iraq's feeble position was in favour of Iran. There were numerous border skirmishes between the two countries until the last agreement was signed in 1975. The Iraqi Ba'ath, which saw itself in a weaker military position, strengthened its diplomatic relation with Eastern Bloc through signing a bilateral agreement of friendship with the Soviet Union. It is clear that Iraq's aim was to gain military aid from Soviet Union (Hiro, 1991).

The agreement was considered a threat for both Iran and its Western allies, the same way that letting a non-Arab country (Iran) making decisions about the Arab world's fate was too difficult for Iraq. Therefore, Iraq increased its financial support of Arab tribes in Khuzestan. Iran, in return, increased prompting Kurdish insurgent groups against the Ba'ath regime with the support of the United States and Israel, who were both eager to overthrow the Ba'ath party as well (Amin, 1982; Hiro, 1991; Rousu, 2010).

It led to a war between the Kurdistan Democratic Party and Ba'ath regime with Iran's direct military support of the Kurds' insurgents. Saddam Hussein, who was the vice president of the Ba'ath regime at that time, was in charge of negotiating the border disputes with Iran (Amin, 1982; Hiro, 1991). At the end of the OPEC summit in Algiers, on the 6th of March, 1975, a joint statement by Iran and Iraq was issued on how to resolve the long-standing divisions between the two countries. The joint declaration stipulated that the land borders between the two countries should be determined in accordance with the Protocols of 1913 and 1914 based on the thalweg line for the entire waterway. Moreover, the two countries should have strict con-

trol over the deterrence of the saboteurs at their borders to each other's territory (Akhtar, 1969). Based on the agreement, the Iraqi border moved from the Iranian side of the Shatt al-Arab to the middle of the waterway, which gave Iran 200 square miles more northwards (Amin, 1982). Both countries committed not to interfere with each other's internal affairs including encouraging their ethnic groups in the other country against the sovereign state and prevent sabotages at the common border. Also, it was mentioned, that both countries keep their commitment that any violation would abrogate the agreement (Tashnizi-Mirzaei, 2002).

Iraq never tried to hide its dissatisfaction with the agreement of Algiers, seeing it as an imposition by the West on herself and sought the right moment to abolish it. The opportunity came with the victory of the Islamic Revolution of Iran and the empowerment of Shia-based government, which altered the power asymmetry in the region (Amin, 1982; Hiro, 1991; Tashnizi-Mirzaei, 2002). From the beginning of the Islamic revolution in Iran, their opposition to the secular Ba'ath regime in Iraq, which was accompanied by the provocation of Iraqi Shiites against Saddam Hussein, led to the public loss of face of the agreement for the Ba'ath regime (Woods et al., 2011). Saddam Hussein, who announced himself as the new Iraqi president at quite the same time when the Iranian Revolution took place, was concerned that the revolution may prompt Shiites living in Iraq and other Arab countries to organize a similar political change in the region. This potential scenario could have created supremacy of Shia power over the majority of Sunnis. On a more nationalist note, it was unbearable for the Iraqi Ba'ath regime, to accept power hegemony of Iran as a non-Arab state over the majority of Arab-speaking countries in the Middle East (Abdulghani, 2011; Hiro, 1991; Rousu, 2010; Swearingen, 1988).

Therefore, Saddam tried to use the political unrests that plagued Iran after the revolution, to abolish the Algiers agreement. To do that, he first sent a message to Islamic authorities of Iran and congratulated the victory of the revolution and expressed hopes for further diplomatic relations, especially in order to revise the Algiers Agreement of 1975. Iran's clerics responded to him harshly, accusing the secular Ba'ath regime of suppressing the Shiites in Iraq and undermining Islamic values (Tashnizi-Mirzaei, 2002).

The sharp rhetoric of revolutionaries in Iran toward Iraq became more widespread through Iran's media. By creating Arabic speaking radio and television channels, Iranians started to question the legitimacy of the Ba'ath regime (Workman, 1991). Finally, it led to severe border skirmishes so that the eight-year war broke out between the two countries following official abolishing of Algiers Agreement by Saddam in 1980 (Hiro, 1991).

5.1.2 The dispute over Shatt al-Arab from the viewpoint of international law

Water crises are considered geopolitical in nature and therefore they are unlike political crises that are usually resolved with more relative ease. Geopolitical issues are viewed as part of national interests, and governments are not able to deal with them conveniently. The dispute over the boundary along Shatt al-Arab, on the one hand, is related to the legal ownership of the river by riparian states and on the other hand, depends on the definition of the borderline as well as water management policies about the rivers. Thus, any decision on the river boundary should be made between the beneficiary countries based on good-governance principles to achieve social equity, economic growth and environmental sustainability. According to International Law, three factors determining the utilization of water resources by such countries are Equal Utilization, No-harm and Cooperation (Malla, 2005; Tanzi & Milano, 2013).

Also based on the Agreement of Good Neighbouring, any water projects and changing of policy must be done through agreement of the beneficial neighbours and implementing one's interest in common water resources must not harm the right of other neighbours (Hiro, 1991).

Based on paragraph 2 of the Vienna convention, ratified in 1969, about riparian borders *"Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention*" (as cited in United Nations, 1994, p. 96). The same provision was mentioned later in the Helsinki convention in 1992. Here, the term of equitable means "*proper utilization of riparian countries over the shared water resources by appointing rational water policies and law in regard of water resources*" (as cited in United Nations, 1994, pp. 96–97). So, riparian countries should limit their water projects to equitable utilization, this must not be interpreted as exclusive right and all the beneficial countries should act in accordance with good faith to prevent any political conflicts (Tanzi & Milano, 2013). The aforementioned agreements necessitate political co-operation among beneficial countries. In international conventions, the environmental impacts of any water project or initiative are emphasized, too. Although the emphasis is not confined to human actors, natural alternation must also be taken into consideration (Malla, 2005).

The Vienna Convention was the basis for the Algiers Agreement of 1975 (Cusimano, 1992). Based on the latter agreement, the frontier line of the two countries was determined by thalweg (considered as the best method for determining the boundary line, because it is the deepest part through which ships can easily navigate), which is the proper method for determining

border in a fluvial landform (Biger, 1989; van der Zaag, 2017). Therefore, any changes in the natural watercourse must not affect the course of the frontier line. Furthermore, based on the thalweg, riparian countries have the equal right for navigation through trans-border rivers and waterways, an important factor being considered in the Algiers Agreement (Biger, 1989; Cusimano, 1992; van der Zaag, 2017).

The Algiers Agreement, by adopting the two former Delimitation Protocols of 1911 and 1913, refused any claim of Iraq over Iranian territories (Khuzestan) as well as three islands in the Persian Gulf and occupation of the east bank of Shatt al-Arab (United Nations, 1976).

In accordance with Article 5 of the Algiers Agreement, in the form of unchangeable borders and full respect for the territorial integrity of the two governments, the two governments agreed on the definitive and unchangeable frontier line based on thalweg, that being a globally accepted definition, it remained valid and could not be violated even by political changes in both countries. Besides, according to international law, none of the riparian countries has the right of changing the determined frontier line or occupying trans-border river with or without the consent of the countries involved (United Nations, 1976).

The Henske Convention also raised the importance of beneficial utilization and condemned unilateral implementation like the diversion of the watercourse of Shatt "*merely for the purposes of harassing another…* " (Parhi & Sankhua, 2013, p. 258). All countries have to provide other beneficial countries with accurate information about their water projects and policies about common water resources. In the case of Shatt al-Arab, sedimentation of Tigris and Euphrates rivers reduces its width and restricts naval movement, which requires continuous dredging. Saddam sought to reduce Iran's water surface by conducting one-way dredgers to increase his coastline in Shatt al-Arab (Fend & Gunther, 1985).

5.1.3 The dispute over three islands in the Persian Gulf

Abu Musa, Lesser and Greater Tunbs are three islands located in the Persian Gulf close to the Hormuz Strait, between the Persian Gulf and the Gulf of Oman. The islands are of utmost strategical importance, as they offer control over Hormuz strait, through which a substantial portion of the world’s fossil energy is transported. The only shipping route for oil tankers is the naval space between Abu Musa and Greater Tunb because it offers the biggest depth in the area (Ahmadi, 2010). Therefore, the historical ownership of these islands by Iran has been an important source of Iran’s hegemony in the Persian Gulf. Saddam frequently criticized Iran

for occupying the islands and claimed that the islands belonged to Arab countries, namely the United Arab Emirates (Ahmadi, 2010).

However, this claim was mostly due to Saddam's ambition to access oil fields under the Persian Gulf, and also to establish a military base in these islands (Ahmadi, 2010). Such much-desired military base not only would give Saddam the upper hand over his arch enemy, Iran, and would guarantee safe shipment of Iraqi oil, but also it would allow Saddam to control Arab states in the Gulf, and watch closely over the US military bases in Qatar and Bahrain (Ahmadi, 2010). For Saddam the access to the Gulf not only could empower Iraqi oil industry, but also strengthen his foothold in the Persian Gulf, so that he could announce himself as the most powerful ruler in the Arab world and the guardian of the Persian Gulf, the same status Mohammad Reza Shah of Iran had claimed through restoring the ownership of three islands back to Iran in 1971 (Ahmadi, 2010). For Saddam, Iranian dominance over the Persian Gulf, as represented by the control over the three aforementioned islands, was seen as the hegemony of Iranians over Arabs (Ahmadi, 2010; Hiro, 1991; Tashnizi-Mirzaei, 2002).

5.1.4 Ruhollah Khomeini

Ruhollah Khomeini was the uncompromising opponent of the Pahlavi monarchy, leader of the Islamic revolution, and the founder of the Islamic Republic of Iran. He was the initiator of the ideology of establishing a pure Islamic state in the Middle East, who rejected any involvement of either Western or Eastern Blocs in the internal affairs of Islamic countries. His famous slogan was "*No East, No West, only the Islamic Republic*"[20], which criticized the Shah's monarchy and its dependency on Western countries (Tashnizi-Mirzaei, 2002).

However, Khomeini not only criticized the Shah, but also the Arab monarchies. He considered these monarchies slaves of the United States, and called the latter "Great Satan"[21]. With the declared aim of the liberation of oppressed Muslims, he accused Arab states of having a tyrannical state and humiliating their Shiite population (Hiro, 1991).

Khomeini's ideology to establish an Islamic government was based on returning to the pure Islamic state ruled by a theocracy. His Islamic fundamentalist ideas divided the world into two groups: the oppressed (Mostazafin), and tyrants (Mostakberan). The first group are poor people, who were suppressed by autocratic governments, like Arab monarchical states, and

[20] http://en.imam-khomeini.ir/en/n21537/Iran_emerged_victorious_due_to_Imam_Khomeini%E2%80%99s_leadership
[21] https://www.nytimes.com/1989/06/05/world/ayatollah-ruhollah-khomeini-89-relentless-founder-of-iran-s-islamic-republic.html

the second group is the Western Imperialism and its puppet rulers (Abrahamian, 1993; Al-Marashi, 2013; Tashnizi-Mirzaei, 2002).

Khomeini underlined fighting against Israel in the Middle East as a compulsory religious obligation for all Islamic states and believers as the only path to a resurrection of pure Islam, Muhammadi Islam (Islam as preached by prophet Mohammad), to the Middle East. He criticized Arab states for not responding properly to the occupation of Palestine by Israel, describing them as the servants of Western imperialism (Abrahamian, 1993; Tashnizi-Mirzaei, 2002).

Khomeini spent 13 years of his exile period in Iraq, where he developed his utopian ideas about establishing a unified Islamic state, or as it is known today, the theory of Vilayat-e Faqih (Hiro, 1991; Tashnizi-Mirzaei, 2002) His desired that government included a large number of high-ranking clergy and Islamic jurists who are responsible for teaching Muslims (Ummat) to fulfil their religious duties in the absence of Shiite Imams. On paper, the responsibility of these clergy was to teach people religious education to clear the world from hypocrisy, oppression and tyranny, and create a government based on the Twelve Shiite Imams (Abrahamian, 1993).

From the perspective of Vilayat-e Faqih, the true leader of the Islamic world is *Mujtahid,* a cleric who has devoted all his life to learn and teach religious issues and advise people. So, Khomeini saw himself in such a position and from his point of view, none of the Arabic monarchical states was eligible to rule over Islamic societies (Abrahamian, 1993).

Promoting and exporting the Islamic Revolution was and still is allegedly the main political objective of the Islamic Republic of Iran. This process is supposed to result in establishing a unified Islamic state in the world, as Khomeini declared in one of his more famous speeches: "*we will export our revolution throughout the world because it is an Islamic revolution. The struggle will continue until the calls, there is no God but Allah and Mohammad is the messenger of God are echoed all over the world. The struggle will continue as long as the oppressors subjugate people in every corner of the world …"* (Reisnner, 1989, p. 61).

After the victory of the Islamic Revolution (1979), Khomeini explicitly called the Ba'ath regime a tyrannical and corrupt government that represses the Iraqi Shiites ruthlessly. Revolutionary Iran, under the instruction of Khomeini, tried to incite Iraqi Shiites to pledge allegiance (known as Bey'at in Islamic teachings) to Iran's ideology and to launch uprisings and riots against the Ba'ath regime (Hiro, 1991). Islamic revolutionaries in Iran, fervently shouting slogans like "War until the victory of the Islam" and "The way to Jerusalem goes through

Karbala", set their target to destroy tyrannical and oppressive rulers in the world and even considered it as a religious duty of all Muslims to participate in such endeavour, a concept strongly related to the notion of Jihad in Islam (Navazeni, 2010).

5.1.5 Saddam Hussein and Iran

The Islamic Revolution and the political instability in Iran provided Saddam with the opportunity to reverse the Algiers Agreement. For Iraq, Shatt al-Arab was the inalienable right of Iraq, even based on the equitable principles, since Iraq is the only member of OPEC which has no viable access to free water and the life of its oil and petroleum economy is at risk of falling under the control of his neighbours (Amin, 1982). Saddam tried to exploit the unstable political situation after the expulsion of the last Shah in 1979 in Iran for Iraq's advantage. He thought that instability in the newly found Islamic Republic of Iran might convince the new government to return to agreed provisions of the 1937 treaty and Iraq can regain its control over the waterway. Therefore, he conditioned the diplomatic relation with the new government on three demands: Iraq's rights over the Shatt al-Arab, conceding three Islands in the Persian Gulf to Iraq, and finally autonomy for the Arab minority in Iran (who mostly lived along Iranian side of the Shatt al-Arab) (Hiro, 1991; Tashnizi-Mirzaei, 2002).

However, Khomeini refused to negotiate with the Ba'ath government and instead he counter-attacked Saddam with the slogan of the destruction of the Ba'ath regime. Accordingly, military confrontation was an option to restore the lost reputation of Ba'ath regime after signing the Algiers Agreement among patriotic Iraqis and indeed Saddam thought of the agreement as the proper pretext to persuade the Iraqi society of going to a war with Iran (Al-Marashi, 2013; Hiro, 1991; Woods et al., 2011).

Nevertheless, the Algiers Agreement and control over Shatt al-Arab was not the main reason behind the invasion of Iran. The emergence of a Shia-based government in the neighbouring country (Iran) could be a significant threat for a country with the majority of Shia population (Iraq), and Saddam Hussein was aware of that (Chubin, 1989; Tashnizi-Mirzaei, 2002; Woods et al., 2011; Workman, 1991). So, he expelled all Iranians who lived in Iraq and those Iraqis who could not provide any Iraqi document and were suspicious of cooperation with Iran. Later on, Saddam said that he expelled alien agents out of the country (Amin, 1982; Hiro, 1991; Wright, 1985).

The Islamic Revolution of Iran also gave Saddam the pretext for announcing himself as the president of Iraq and removing Ahmad Hasan al-Bakr (Hiro, 1991). In an interview by FBI

Agent George Piro in 2003, Saddam Hussein acknowledged that he had always seen himself clashing Iran and considered Iran as his main enemy[22]. In the same interview, he went as far as to mention that his claim about having weapons of mass destruction was a bluff just to threaten Iran[23]. For Baghdad, Iran was considered the enemy of the Arab world and the boundary tensions were not as important (Post, 1991). It is also noteworthy that going to war with Iran was very crucial for Saddam Hussein in order to maintain legitimacy, since restoring Shatt al-Arab and returning an alleged nineteenth province back to Iraq, a claim that was directed at Arab-speaking parts of Khuzestan and the whole country of Kuwait, were among his main election promises for the presidency back in 1979 (Hiro, 1991). Iraqi geographical maps started to depict Khuzestan as Arabistan (Amin, 1982).

For achieving the latter goal, annexing Khuzestan to Iraq, Saddam relied on promoting the notion of Pan-Arabism among Iran's Arab minority (Amin, 1982; Reisnner, 1989; Tashnizi-Mirzaei, 2002). Arab tribes in Khuzestan, in spite of their loyalty to Iran, were used as a trump-card by Saddam to exert control over Shatt al-Arab and large oil fields in the area (Amin, 1982; Hiro, 1991). In July 1979, a new Arab separatist group known as Black Wednesday was formed by Iraq's support. Black Wednesday exploded two oil fields in Khuzestan and interrupted the delivery of oil in Abadan's refinery. However, contrary to his assumptions, most of the Shia Arabs in Khuzestan were highly critical of Saddam's behaviour towards Shiites in Iraq (Amin, 1982). But Saddam did not stop there. At this point, he was determined to go to war with Iran.

According to an article in the Middle East Journal (2012), by Mark Gasiorowski, Bruce Laingen, a political officer of the State Department of the US, informed Amir Abbas Amir Entezam, foreign minister of Iran in 1979, about the formation of a secret campaign for separating Khuzestan by Saddam Hussein (Gasiorowski, 2012). Based on the Gasiorowski's article, After Amir Entezam asked for any US Intel regarding Iraqi intentions towards Iran, Laingen informed him about "*information from an early June cable from the US interests section in Baghdad reporting rumors and visual evidence of large movements of Iraqi armored units from northeastern Iraq to the southeast, where Iran was most vulnerable to an attack…*" and later he tried to warn Amir Entezam that "*Iraq did not seem likely to invade Iran but that 'a quick punch-out of an infeebled Iran' could not be ruled out…*" (Gasiorowski, 2012, p. 617). In addition, in 1979, the U.S. Intelligence community published a report warning about the possibility of Iraq invading Iran one year before the outset of war (Gasiorowski,

[22] https://www.youtube.com/watch?v=SBLhU-4WsM
[23] Ibid.

2012). In this report, quoting from Howard Teicher, senior director of Near Eastern issues for political and military affairs of U.S National Security Council (NSC), it was mentioned that Iraq had transported a large armoured unit to the south-eastern border with Iran in 1979, a sign for Iraq's military preparation (Gasiorowski, 2012). Tariq Aziz's assassination by Islamic Al-Dawa's group gave Saddam more credit for the oppression and torturing the Shia population (Hiro, 1991), an incident that could be construed as an internal plot by Ba'ath regime to offer another reason for the legitimacy of the war on Iran.

However, in an interview, two major generals of Iraqi army during the war with Iran, Generals Al-Hamddani and Al-Makki, stated that although the invasion was considered as the right action among Ba'ath party, neither Saddam nor the party had any thought about the end goals of war, whether it was the collapse of the Islamic Republic in Iran, the occupation of Shatt al-Arab, the annexation of Khuzestan, or even the occupation of the whole country. Such confusion is considered the main reason for a reported lack of motivation among the Iraqi soldiers during the war since most of them did not know exactly why Iraq had to go to war and what would be gained finally (Woods, Murray, Holaday, & Elkhamri, 2009).

For Saddam, this war was nevertheless more ideological than tactical (Reisnner, 1989). Saddam felt the Ba'athist ideology is in danger, therefore, the war was a prudent action for defending his favoured version of ideological revolution (Ba'athist) against the new revolution in Iran. Charles Tripp argues that the war with Iran had "*the effect of reinforcing Saddam's autocracy in Iraq, by allowing him to demand complete submission to his will, as the means of ensuring effective mass mobilization to prevent an Iranian invasion…"* (Tripp, 1987, p. 72). Indeed, the war was a tool serving Saddam's populist strategy to depict himself as the defender of Arab nations and at the same time an opportunity to extend his political hegemony in the region (Workman, 1991).

This war, which isolated Revolutionary Iran from international affairs even more, increased the international political presence of Saddam and ultimately created a famous image of him in the international media (Hiro, 1991). Saddam wanted to be globally known as the only power that could keep the Islamic Revolution of Iran in check (Hiro, 1991; Post, 1991; Sassoon, 2012; Woods et al., 2009). Moreover, he used the war to promote Arab Nationalism among Arab states by reminding them of historical Al-Qadisiyyah battle between fourth and last Persian Empire before Islamic era and the invading Arabs in the year 636, and warning them about Iranian/Persian colonization (Al-Marashi, 2013). In Iraqi press, he started to address Iranians as Al-Adu Al-Ajami, where Adu in Arabic means the enemy and Ajam means

who is illiterate, an offensive term used by 7th and 8th century conquering Arabs for referring to Persians. In this way, he wanted to portray Iranians as illiterate enemies. He also called them Majus, which means those who worship the fire, a reference to Iran's ancient religion, Zoroastrianism. Through all such name callings, he desired to question the new Islamic government of Iran and its legitimacy for liberating oppressed Muslims by depicting them as not being a true Islamic government and not having the right for any claim over Islam (Al-Marashi, 2013).

5.1.6 The Iran-Iraq war

War started with Iraq's limited military action such as attacking the border city of Qasr-e Shirin in the west of Iran. This attack was responded by Iran with missiles to the Khanagin and Mandali towns in Zanin-al Qaws village on 2nd September 1980 (Hiro, 1991). However, the main war theatre did not start till 22nd September and most confrontations were limited to border skirmishes. Iraq found these small actions the best opportunity to raise the border issues once again and to withdraw from the Algiers Agreement. The abolition of the Algiers Agreement by Saddam in September 1980 practically meant declaring war on Iran (Connell, 2013; Hiro, 1991; Tashnizi-Mirzaei, 2002).

At the onset of war, Iraqi troops included twelve mechanised armoured force divisions, five of which were sent to Khuzestan as the main target of the war. Iraqi troops eventually attacked along all the borderline with Iran, including Kurdish speaking parts of both countries. Iraq soon captured the main roadway of Baghdad-Tehran in Qasr-e Shirin as well as Kurd-speaking City of Mehran, which connects the west of Iran to Khuzestan. Iraq's army also captured one of the hydro-dams in this area and sent three fully army brigades to conquer its main target cities of Khorramshahr, Abadan, Dezful and Ahvaz. In the beginning, Iraq tried to penetrate into Khorramshahr and then Abadan. Further, they assaulted Dezful and Ahvaz (Connell, 2013; Hiro, 1991; Tashnizi-Mirzaei, 2002).

Therefore, they managed to capture almost all of their considered targets in the first months of fighting. Iraq's rapid advance through Iranian territories was mainly a result of military purges that had happened after the Islamic Revolution and lack of preparation and disintegration of the Iranian army (Al-Marashi, 2013; Sassoon, 2012; Woods et al., 2009, 2011). However, unlike Iran's ground forces who were subjected to some of the most brutal political purges, the vastly superior navy and air forces of Iran, both inheritances of the ousted Shah, managed to attack Basra and two main Iraqi oil tankers in Al-Faw peninsula, Khor al-Amaya and Mina al-Bakr (Connell, 2013; Hiro, 1991). Iraqi navy was almost completely destroyed by Iran in

its first battle in the Persian Gulf. Iran's navy blockaded the Shatt al-Arab waterway and prevented Basra from using the waterway. Aerial and naval retaliations by Iran came as a huge surprise for Saddam Hussein, who thought Iran's military is not powerful at that moment (Connell, 2013; Hiro, 1991; Tashnizi-Mirzaei, 2002).

After capturing the strategic port city of Khorramshahr and vast swaths of Khuzestan, Saddam declared that Iraq is ready to negotiate a ceasefire with Iran, as Iraq had supposedly achieved its war targets which were to capture Shatt al-Arab waterway and Khuzestan. However, Iraq had some conditions for stopping the war, such as gaining full control over Shatt al-Arab, Iran's guarantee that it would not interfere in Iraq's internal affairs, as well as termination of Iranian ownership over the three islands in the Persian Gulf (Connell, 2013; Hiro, 1991; Tashnizi-Mirzaei, 2002).

However, the request was rejected by Tehran, and the Shiite clerics and the revolutionaries insisted on their agenda of continuing the war until destroying the Ba'ath regime. Moreover, the two main ports were still in the grip of Iraq. Iranians believed that Saddam would not be satisfied and would attack Iran again after restructuring Iraq's army, even though he was the first one to come up with a ceasefire offer. Iran also thought that accepting the ceasefire would elevate Saddam Hussein's profile among both Westerners and Arab countries (Connell, 2013; Hiro, 1991; Tashnizi-Mirzaei, 2002).

Therefore, Tehran decided to continue the war, even after Iran managed to defeat Iraq in several huge military operations and regain almost all Iranian territories. At this point, the rhetoric of Ayatollahs in Tehran changed from defending Iran to defending the Islamic revolution and its values. From 1982 to 1987, Iran implemented several offensive operations pushing the war into Iraq (Connell, 2013; Hiro, 1991; Tashnizi-Mirzaei, 2002).

Later on, with the prolongation of the war and the resistance of Iranian forces, Saddam Hussein also started to adopt a more religious tone in his propaganda (Wright, 1985). He ordered a substantial increase in the salaries of the military personnel and the financial grants for their families and sending the Shiite and Sunnite clergymen to the frontline to increase the religious morale among the Iraqi army (Al-Marashi, 2013; Sassoon, 2012; Wright, 1985). He defamed Khomeini as one who has diverged from true Islam and wants to have a theocratic government with the superiority and power of the clergy among people to suppress them and called the war on Iran a jihad for true Islam (Hiro, 1991; Sassoon, 2012).

In late 1983, Iran started the battle of marshes operation (Figure 15), which aimed to conquer the oil fields of Majnoon Island in southern Iraq near Al-Qurnah city and to find a way for

reaching Baghdad. Iranian operation in Hawizeh Marsh, the historical habitat of Shia Marsh Arabs, later led to the implementation of several drainage projects in this marshland by Iraq during the war (Connell, 2013; Hiro, 1991).

Figure 15: The route of Iran's Marshes Operations. Retrieved from https://en.wikipedia.org/wiki/Operation_Dawn_8#/media/File:Operation_dawn_8_map.svg (14.10.2018)

The most successful Iranian Operation in the marsh areas was the Dawn operation, which started in the Al-Faw Peninsula in the south of Shatt al-Arab (Connell, 2013; Hiro, 1991). The operation was carried out in both water and ground theatres with the aim of capturing the oil-rich province of Basra and to disconnect the Iraqi oil industry from the Persian Gulf (Connell, 2013; Hiro, 1991). Iranians also wanted to occupy the Umm Qasr port in the western edge of the peninsula near Kuwait, the only means of access of Iraq along Shatt al-Arab waterway for

the transit of oil tankers and establishment of oil piers. At the beginning of the war with Iran due to several successful Iranian air strikes, Iraq transferred all of his naval equipment to this port (Connell, 2013; Hiro, 1991).

In the middle of 1987, Iraq started going offensively again, especially in the marsh regions, with the help of satellite maps provided by the United States and chemical weapons provided by western countries (Connell, 2013; Hiro, 1991). During the final two years of the war, the real war was between The United States and Iran. The main reason for accepting the Resolution 598 was the limited military capacities of the fatigued Iranian army and exhausted economy for fighting with the U.S. The U.S. government threatened that if Iran rejects the Resolution, it would start to fight with Iran directly. At the same time, Iran's oil tankers were attacked by American warplanes in the Persian Gulf (Connell, 2013; Hiro, 1991).

According to an article published in New Scientific journal in 1985, Saddam Hussein was claiming that he wanted to use a new weapon in the war with Iran. Satellite pictures from 1977 until 1984 offered some clues to the nature of the new weapon, a big hydrological project in the port of Basra. Peter Fend and Gunther stated that Iraq built a huge water barrier that is more than 50 kilometres long and up to 10 kilometres wide in its water reservoir, and it is still growing (Fend & Gunther, 1985). Although the project seemed to have begun in the 1970s before the start of the war with Iran, indicating Saddam Hussein's previous plan for preparing the country for a war (Fend & Gunther, 1985). According to this article, this project was probably for constructing a new boundary for the nineteenth governorate of Iraq, including Kuwait and the Arab- speaking part of Khuzestan Province in the southwest of Iran and connecting oil reserves of this province to oil facilities in Basra port. Based on this article, satellite pictures indicated a trench filled with water with around 30 km length, also there have been recorded four narrow canals for directing the water into this trench by using giant pumps (Fend & Gunther, 1985). This article was followed by severe reactions in western media studying the satellite pictures published in Fend and Gunther's article in the same year. The result came with revealing of the secret plan of Saddam Hussein in the middle of the war for changing the borderline with Iran so that construction of the artificial lake in the north of Basra pushed the borderline into Iran’s territory and increased Iraqi coastline along Shatt al-Arab[24].

In the picture below (Figure 16), imposed limitation on Iranian forces for penetrating Iraq by construction of an artificial lake in northern Basra is displayed.

[24] http://theoracle.works/PF_GBW/3rd%20Panel_web.pdf

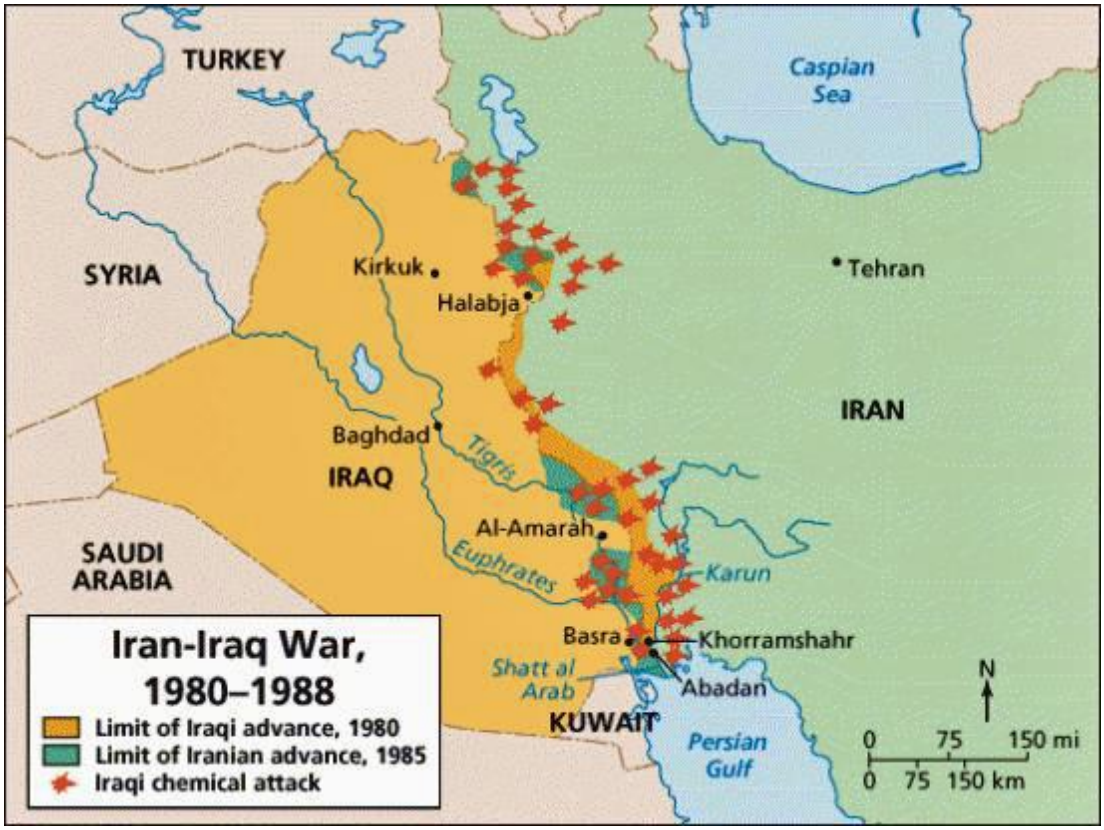

Figure 16: The scope of military operations of Iran and Iraq during the war. Retrieved from https://weaponsandwarfare.com/2015/08/14/iran-iraq-war-ii/ (14.10.2018)

The costly war imposed on the Iraqi nation by Saddam Hussein, and crippling economic conditions gripping Iraq after the war, were the main reasons for uprisings in northern and southern cities of Iraq in 1991 (Amnesty International, 1991; Goldstein, 1992).

5.2 Case study II: Shia uprising of 1991

In 1991, there were numerous reports published by Amnesty International and Human Rights Watch, warning about the violent behaviour of the Ba'ath regime toward its own people (Amnesty International, 1991, 2003; Goldstein, 1992). The reports wanted to urge international attention to the ongoing massacre of civilians in the southern and northern part of Iraq by Ba'ath army. After the bitter defeat of the Ba'ath regime in the two-days invasion of Kuwait in August 1990 (Klabbers, 1994), parts of the Iraqi army, who were tired of the successive wars and harsh economic conditions, ignited the fire of a widespread uprising in the north and south of the country, somehow symbolically starting by attacking Saddam Hussein's images in public squares in Basra (Haddad, 2011). The uprising was started as a spontaneous movement by Iraqi masses, without the direct or explicit interference of religious, racial or

ideological factors, and it included all the opponents of the regime: army deserters, Kurds, Shia Arab Islamists and far-left groups (Ellis & Arsel, 2010; Haddad, 2011). But since the uprising started among Shia army deserters, it gave the Ba'ath regime enough excuse for severe suppressive actions against Shia clerics and their religious activities (Goldstein, 1992; Haddad, 2011). By attributing the uprising to Iran, Saddam attempted to distract the public from the brutal measures he took to suppress the uprising: torturing, illegal imprisonment, and executions, all these measures were carried away by accusing the demonstrators as conspirators and agents of Iran. Lack of leadership and unity among disconnected cores of the demonstrations allowed the Ba'ath regime to easily and brutally put down all the riots. There is still no accurate information about the number of victims (Amnesty International, 2003; Goldstein, 1992).

The brutal campaign of the Ba'ath regime against the uprising of 1991 led to the establishment of No-Fly-Zones (NFZs) by the United Nations Security Council through Resolution 688 (Figure 17), forbidding the Ba'ath Republic Guard from bombarding civilians with military aircraft (Amnesty International, 1991, 2003).

Figure 17: No-Fly-Zones maps in north and southern parts of Iraq. Retrieved from https://www.globalsecurity.org/military/ops/images/nofly-l.gif (14.10.2018)

However, NFZs were not enough to stop Saddam and Ba'ath party from applying other measures for suppressing Shia population. Saddam Hussein's inhuman actions in suppressing

of his opponents were revealed many years after his toppling, a list that includes death campaigns with massive massacres using chemical weapons in Iraqi Kurdistan and southern Shia cities, and destroying Marsh Arab culture by desiccating marshlands (Goldstein, 1992). Saddam and other Ba'ath party members, who had active roles in his genocide campaign, were accused later in 2003 in the International Tribunal for Justice for their crime against humanity[25]. Human Rights Watch declared in its report "Justice for Iraq" that they had found several documents about the brutality of the Iraqi Ba'ath army and Ba'ath plainclothes. However, such information is limited in regard to drainage projects in marsh areas and their effects on human lives, since most of the measures were not deliberately documented by the Ba'ath regime[26].

5.2.1 Shia uprising (Sha'aban Intifada) of 1991

As was mentioned before, the uprising was a widespread protest movement with several rebellions in the north and south of the country during March and April 1991 (Amnesty International, 1991). Successive wars, stagnation of the economy by decreasing oil sales, United Nations embargo on the Iraqi economy and sectarian policies put in place by Sunni Ba'ath party were the main reasons for the country plunging into rebellion (Ahram, 2015). The rebellion spread shortly to other southern cities, especially those with holy Shia shrines and religious institutions, Najaf and Karbala (Goldstein, 1992; Haddad, 2011).

The uprising was also accompanied from the beginning by American media provocations, especially several broadcasts of speeches by President George W. Bush encouraging Iraqi society for taking action against Saddam Hussein[27]. According to released information by the CIA in 1998, financial aid to dissident groups was considered as a primary plan for toppling Saddam's regime[28]. However, at the end, U.S withdrawal from helping the rebellion in southern cities due to fear of giving the Islamic Republic of Iran the opportunity to use the unrest in its favour for establishing a Shia government in Iraq at one hand provided the Ba'ath regime with a de facto green card to suppress the rebellion[29].

The Ba'ath regime implemented a massive military operation, firing at will at ordinary people who were suspected to participate in the uprising. According to the reports of Human Rights Watch in 2003: "*In their attempt to retake cities, and after consolidating control, loyalist*

[25] https://www.hrw.org/legacy/backgrounder/mena/iraq1217bg.htm
[26] Ibid.
[27] https://web.archive.org/web/20121103122106/http://www.fas.org/irp/crs/crs-iraq-op.htm
[28] Ibid.
[29] https://www.washingtonpost.com/wp-srv/inatl/longterm/iraq/stories/cia091596.htm

forces killed thousands of unarmed civilians by firing indiscriminately into residential areas; executing young people on the streets, in homes and in hospitals; rounding up suspects especially young men, during house-to-house searches, and arresting them without charge or shooting them en masse; and using helicopters to attack unarmed civilians as they fled the cities..."[30]. There were many occasions of illegal execution of suspected persons, whether among dissident groups or army deserters during the 1990s till 2003. However, the particular action that is discussed in this thesis is desiccation of marshlands to destroy Shia Marsh Arabs.

5.2.2 Desiccation of marshlands from an ecological perspective

The special significance of Iraqi marshlands is due to their location in a belt of desert areas in Iraq, the Western Desert in the west and Syrian Desert in the north of the Mesopotamian plain, which makes them a unique and distinguishable ecosystem in Iraq. Marsh areas were described by the World Conservation Monitoring Centre as a fabulous ecosystem for further studies (Kazmi, 2000). The drainage projects in Iraqi marshlands have both ecological as well as human consequences. Indeed, they led to the destruction of an interconnected ecosystem covered by water with its special animal species and human life. However, after drainage projects, most parts of Hammar and Amarah Marshes and even the agricultural farms around them became encrusted dry land with eroded soils, which were not anymore suitable for agriculture (Adriansen, 2004; Ellis & Arsel, 2010; Stevens & Ahmed, 2011).

Marsh areas are ecologically closed spaces. They have limited contacts to open waters and are surrounded with massive floral coverage like reeds, grasses and sedges and they are primarily fed by the flooding of major rivers. Therefore, their ecosystem is very vulnerable to human intervention (Kazmi, 2000; Stevens & Ahmed, 2011). The gradual death of a natural environment by cutting down the inflow of water into it can result in the death of the fauna and of humans associated with the natural cycle of the environment, something that scientists are calling as "ecocide", a rhetorical term describing the deliberate acts that result in diminishing one ecosystem and its inhabitants (Adriansen, 2004; Ahmed, 2003; Dellapenna, 2007).

Humans are viewed as an integral part of ecosystems. A report by U.N asserts that "*Changes in human conditions drive changes in ecosystems; and ecosystem changes drive changes in human conditions…*" (Walther, 2011, p. 11). The marsh areas have put "*a setting of values, order, classification, the learning of certain systems, behaviour, and acceptance of social*

[30] https://www.hrw.org/legacy/backgrounder/mena/marsharabs1.htm

demands in the life of Marsh Arabs…" (Rapoport, 1982, p. 67), in other words, an intimate relationship based on ecological awareness and tribal kinship (Cole, 2008). The hard life in marsh areas taught Marsh Arabs how to adapt themselves to the environment without harming it (Kazmi, 2000).

In regard of desiccation of marshlands in Iraq, ecocide was used as a means for the genocide of Marsh Arabs as subversive agents of Iran (Dellapenna, 2007). These areas were always isolated from other parts of the country, but not because of their indigenous people, but more due to the amount of water that covered the area and made them quite inaccessible, therefore they were for a long time intact from external influences and they had developed a unique ecosystem. These areas were also a good nutritious supply for Gulf fish, which made them a crucial environment for the local fishing industry and employment of locals (Al-Tameemi, 2016).

Because the marsh ecosystem is an intertwined system, bound between Marsh Arabs and the marsh areas, the massive devastation of marshlands provoked public feelings about the depth of the disaster and condemned Saddam as a reviled villain among many Iraqis (Ellis & Arsel, 2010). Azzam Alwash, who received the Goldman Environmental Prize in 2013 for his effort to restore the marshes in 2003, recalled about the drainage projects as "*one of the greatest ecological crimes of the 20th century, Saddam Hussein managed to drain, poison, and desiccate the lush wetlands that were home to 250,000 Ma'adnis, as well as a crucial stopover for birds ... Saddam launched a punitive assault in 1991 that brought desertification to one of the world's most valuable delta regions …"* (as cited in Ellis & Arsel, 2010, p. 56).

5.2.3 Marsh Arabs

The Iraqi marshlands are considered as the home for some of the earliest human civilizations. These areas are home to around 500,000 marsh dwellers, who lived there for about 5000 years. They are also called Ma'dān (dweller in the plains) or Shroog (coming from the east) (Thesiger, 2007). However, the last term was used more for attributing them to Iran and it had political implications (Cole, 2008). Also, there is a discrepancy about the lexical meaning of Ma'dan as a derogatory word of Mou'ada, meaning hostility and antagonism, which was spread at the time of British mandate in Iraq, describing Marsh Arabs as dissenting and disobedient peoples. However, some interpreted the word for those who lived between two rivers and bred water buffalos (Al-Tameemi, 2016). Marsh Arabs included different tribes, who converted to Shia Islam in the late eighteenth and early nineteenth centuries like most tribes in the southern part of Iraq (Cole, 2008). Each tribe lived on its artificial reed-based island, on

local conception of kinship and they have their own administration with authority handed to a tribal sheikh within marsh areas, most famous of the tribes are Bani Asad, Bani Tamim, Albu Hassan, Albu Muhammad, and Bani Lam (Cole, 2008). They maintain their livelihood through fishing, rice cultivation, hunting, breeding water buffalo and creating different things from reed, which was the main vegetation of these areas. Even their houses are mostly created from reed and reed is also the main cooking fuel. Marsh Arab traditional lifestyle is in accordance with the environment they live in and it derives its social elements from nature (Al-Tameemi, 2016; Cole, 2008; Kazmi, 2000). The same way marshlands are dependent on flooding of Euphrates and Tigris, their inhabitants, Marsh Arabs, cannot be studied outside of their relation to the water that surrounds them. Their life shows a sustainable relationship of the environment with human lives, "*the architectural tectonics of the people as "woven societies in reeds" the settlement pattern and dwelling, the socio- organization of the Marsh Arabs and even their economy in correlance together…"* (Al-Tameemi, 2016, p. 41). However, they were excluded from Iraqi society for such a long time that they were far from social and economic developments in the mainland (Adriansen, 2004; Cole, 2008; Ellis & Arsel, 2010). Furthermore, their own distinguished Arabic dialect makes it quite hard for other Iraqis to communicate with them (Cole, 2008). Wilfred Thesiger, the first western explorer and travel writer who travelled in these areas, described them in his book "The Marshmen of Southern Iraq" in 1954 as thieves with bad social standing (Thesiger, 2007). Their exclusion from the history of Iraq got intensified after the empowerment of the Ba'ath regime with amplifying the perception of their relationship with Iran and demonstrating them as the conspirator to Iraqi national security. They were neither part of any political administration nor counted in any population census (Cole, 2008). The negative propaganda of the government in the media against the Marsh Arabs caused a sense of fear and uncertainty among other Iraqis (Adriansen, 2004; Ahmed, 2003; Cole, 2008; Ellis & Arsel, 2010; Stevens & Ahmed, 2011). To make the matter worse, they also have their own religious rituals that are different from other Shiites in Iraq (Cole, 2008).

After the oil boom in the 1970s and vast development programs of the Ba'ath regime, Iraqi marshlands were still not subjected to any proper improvement. In the 1980s, by decreasing the oil production and deteriorating the economic condition of Iraq because of the war, most of the population had to leave their homelands for working in big cities as seasonal workers, which decreased the population of these areas significantly (Ochsenschlager, 2005). However, they always played a crucial role in the economic growth of the country with their rice culti-

vation, which supplied the demands of urban areas and their fisheries provided almost two-thirds of fish consumption in Iraq in the 1980s (Cole, 2008).

5.2.4 Assault on Marsh Arabs

Marsh areas provided a suitable hide-out for sheltering Saddam Hussein's opponents, who participated in the uprising of 1991 in the southern cities and even those civilians who were accused of playing a minor part in the uprising. To save their lives, they escaped from cities to these remote areas. So, it gave Saddam an opportunity for controlling Marsh Arabs, whom he considered as non-Iraqi communities (Pearce, 1993). Through engineering actions, Saddam ordered to drain the marsh areas, leading to desiccation of almost 90% of marsh areas after the end of the uprising. This led to one of the worst environmentally-based human disaster in the world, including forced migration of Marsh Arabs to cities or even to neighbouring countries like Iran, Turkey and Saudi Arabia as environmental refugees or Internally Displace Persons (IDPs). There were lots of Marsh Arabs, who fled to Iran and lived for such a long time even after the collapse of the Ba'ath regime in refugee camps in Khuzestan (Partow, 2001). According to the AMAR International Charitable Foundation - assisting Marsh Arabs and Refugees throughout Iraq and neighbouring countries - around 200,000 Marsh Arabs have been living in Iran after the demise of marsh areas in the 1990s[31]. However, due to a lack of accurate information about the population of Marsh Arabs, it is hard to estimate the amount of internally displaced persons, disappeared, imprisoned or killed Marsh Arabs (Clark & Nicholson, 2002).

Drainage projects in marsh areas, however, were not a direct consequence of Shiite uprising. Saddam had planned for such drastic action for a long time by accusing Marsh Arabs as Iranian-trained agents or subversives and hostile elements since the early 1980s. Before starting drainage projects, the marshes were already suffocated by numerous irrigation canals as well as dams at the edge of marshes, which hampered the seasonal flooding of Euphrates and Tigris to the marshes area, under the pretext of reclaiming agricultural land and extracting water for irrigation (Ochsenschlager, 2005). Edward Ochsenschlager, who did ethnoarchaeological fieldwork in marsh areas during 1968-1990, described in his book "Iraq's Marsh Arabs in the Garden of Eden" that the drainage projects were started in 1970 with the construction of different water hampering facilities for preventing water from entering the marshes. He wrote about the life of Marsh Arabs that "*in the middle of the 1970s some of the traditional crafts and practices had completely disappeared, and barter was increasingly replaced by cash-*

[31] https://reliefweb.int/report/iraq/iraqi-marshlands-human-and-environmental-study

driven economy. Goods made elsewhere and purchased in market towns became more common, eroding traditional, almost total, reliance on the material resources of the local area" (Ochsenschlager, 2005, p. 8), or *"It was not until the late 1970s that we realized a part of this program of marsh draining, whether by default for design, gave the government greater access to people seeking refuge in the marshes"* (Ochsenschlager, 2005, p. 11).

From the outbreak of the war with Iran, the Ba'ath regime began to construct several defensive facilities in the marsh areas near the border with Iran, by deploying the mechanized infantry forces for the sake of preventing Marsh Arab from joining Iranian troops, and hampering the movability of the Iranian army. Furthermore, it helped Iraqi troops with the creation of a dry frontline with Iran for transferring military equipment to the border and preventing counter-attack by Iranian troop in marsh areas (Adriansen, 2004). According to UN investigative teams, the Iraqi government used chemical weapons in Hawizeh Marsh in 1984-1986 against Iranian forces and they forced the inhabitants of these marshes to leave the area by using helicopters, and then transferred them forcibly to the brick houses in the desert (Ahmed, 2003; Ellis & Arsel, 2010; Goldstein, 1992; Stevens & Ahmed, 2011), a sort of lifestyle that was very different from their nomadic life, far from waterscape they were so used to, and without proper drinking water, health and social infrastructures (Cole, 2008). In fact, they were subjected to gradual death in the desert, like exiled prisoners of Gulag in the Soviet Union. Ochsenschlager strongly asserts that the drainage of parts of Hawizeh marshland was more a deliberate action to get rid of Marsh Arabs than preparing a dry frontline for Iraqi tanks (Ochsenschlager, 2005).

Beside Marsh Arabs being Shia and accusing them of cooperating with Iranian troops, inaccessibility of their environment and the lack of proper information on their culture and lifestyle, the widespread misconceptions depicting them as undeveloped people and fear of rebellion and guerrilla actions by them were as well influential factors for pushing the Ba'ath regime to drain the marsh areas and to displace the Marsh Arabs to controlled areas for the sake of governing them (Clark & Nicholson, 2002). But Saddam did not stop. Ba'ath regime burned all the reed plants and livestock of Marsh Arabs and drained these areas for finding the dissidents despite the 'no-fly zones' imposed by United Nations on both south and north of the country (Adriansen, 2004; Ahmed, 2003; Amnesty International, 1991; Kazmi, 2000; Stevens & Ahmed, 2011).

In February 1993, there was a comprehensive report published by Max Van der Stoel, the Dutch special rapporteur of U.N on Iraq, in which he described all the inhuman crimes and

military implementations of the Ba'ath regime in regard of Marsh Arabs[32]. In this report, he described the plans of the Ba'ath regime for wiping out those so-called subversive agents (Marsh Arabs) as follows: "*Conducting ''Strategic Security Operation'' in marsh areas, such as explosions, contamination of the environment with use of chemical weapon, burning the houses, plants and livestock for disturbing the security condition there; amnesty proposal for fugitive and deserters soldiers in exchange for implementing the command for killing those subversive agents in marsh areas; economic ban for marsh areas for crippling the inhabitant of these areas for affording their livelihood, ban on food agencies for delivering food in these areas, and amputation and other punishment for those who help the inhabitants of marsh areas with giving them their needed foods; assigning an extensive network of "undercover collaborators" for finding the army deserters and other opponent groups, who hide in marsh areas; controlling all commutes to marsh areas, such as public and private vehicles with considering security committees in provinces of these marsh areas, using helicopters and military aircraft for finding army deserters and subversive elements in these areas; transferring Marsh Arabs to dry areas, for controlling them and establishing road in marsh areas after complete drainage of these areas…*"[33].

In most parts of this report, the emphasis is on the Third River (a water drainage project that is described in detail in chapter II) as an intentional project by the Ba'ath regime for controlling Marsh Arabs[34]. An economic blockade was justified by the Ba'ath regime as eliminating marshlands as the place of subversive activities (Ahram, 2015; Dellapenna, 2007; Ellis & Arsel, 2010). The economic blockade was followed by banning them from selling their fishes, rice crops and livestock production, and punishing and torturing those other Iraqis who helped them shortcutting the economic blockade. The blockade was implemented by ordering the army to take marsh areas under surveillance, implementation of a security network by Ba'ath Republican Guards and security intelligence for detecting so-called undercover collaborators with Iranians and for finding the hide-out place of army deserters[35]. Even a local spying network was created to control commuting of Marsh Arabs to cities and controlling all the vehicles coming into the region (since the government confiscated their boats and they had no other means of transportation)[36]. The Ba'ath regime systematically prevented human rights organizations from visiting and reporting on the situation in Iraq and in particular in marsh

[32] https://www.hrw.org/legacy/backgrounder/mena/marsharabs1.htm
[33] Ibid.
[34] Ibid.
[35] Ibid
[36] Ibid.

areas, and by that practically erasing Marsh Arabs and their tragic fate from collective records and news. Most of the reports published in the 1990s and afterwards are therefore based on interviews with Marsh Arab refugees in Iran and other neighbouring countries. Drainage projects were continued until 1999 (Adriansen, 2004; Dellapenna, 2007; Ellis & Arsel, 2010). Displaced Marsh Arabs became an easy bait for human traffickers, and many of them were targeted for sexual exploitation, while many others who escaped smugglers, turned into petty thieves for survival and faced even more rejection and distrust from the Iraqi society (Cole, 2008; Ellis & Arsel, 2010; Kazmi, 2000).

5.2.5 Development as a political discourse for Saddam Hussein

Development was the main excuse of Saddam for his massive engineered program for draining marsh areas. Agricultural development was also one of the main political agenda of the Ba'ath regime, which was strongly followed by Saddam. Indeed, the cultivation of many lands and the people's employment in agriculture was not only a policy of the Ba'ath socialist government to control society and establish peace in society but also to replace agriculture as the alternative economy of the country. For this reason, Saddam, after grabbing the top position in Ba'ath party, pursued huge agricultural development policies without considering the capacity of Iraq's water resources (Adriansen, 2004; Brown, 1999; Jaradat, 2002; Schnepf, 2004).

Saddam claimed that he only continued the proposed plan for reclamation of marsh areas by the British engineer, Frank Haigh in 1951 for legitimation of his drainage projects in these areas (Ellis & Arsel, 2010; Partow, 2001). Hanne Adriansen argued that the proposed plan for marsh areas by Frank Haigh was based on the common accepted environmental discourse as the outcome after World War II, which saw the environment from user perspective rather than protective perspective (Adriansen, 2004). In her article, Adriansen quoted from Dryzek that *"Once areas of marshy land were called swamps. The only sensible thing to do with swamps was to drain them, so the land could be put to some useful purpose. Governments subsidized landowners to drain swamps. Today, we call the same areas wetlands, and the governments have enacted legislation to protect their recognized value in providing habitat for wildlife, stabilization of ecosystems, and absorption of pollutants…"* (as cited in Adriansen, 2004, p. 216).

The plan by Frank Haigh was not meant to destroy the livelihood of Marsh Arabs in these areas and its goal was using water for irrigation of more lands and solving soil salinization of over-irrigated farmlands (North, 1993; Partow, 2001). However, using the same logic, that

was calling these areas as swamps, Saddam designated these areas as frivolous lands that should be used for the development of agriculture, without considering the long-standing human life and rich culture embedded within these areas. Saddam used even media as his means for convincing Iraqi society in regard to his draining in marsh areas as "*an integral part of the cultural processes that are crucial for producing environmental meanings"* (Adriansen, 2004, p. 1). While it was long after the Ramsar Convention came into force in 1971, which aimed to protect marsh areas from human intervention and negative environmental impacts, Saddam, however, refused to sign the convention (Dellapenna, 2007).

Especially after the imposed sanction on the Iraqi economy, the need for agricultural expansion increased. At this time, water scarcity in the country due to mismanagement of water resources and increasing of water projects of Turkey and Syria endangered the Ba'ath regime with social unrest throughout Iraq among large number of farmers, who were dependent on agriculture for affording their life (Adriansen, 2004; Schnepf, 2004). Furthermore, the political negotiation over Euphrates and Tigris with Turkey and Syria showed the weakness of Saddam in regard of solving the water scarcity in the country, which could reduce his political legitimacy in the society (Beaumont, 1998). So, the drainage projects were justified as an alternative for solving the water scarcity in the country. However, these drainage project was not started after the Shia uprising in 1990, as was the common perception, They were already started in the late 1980s based on the discovered documents after the liberation of Iraqi Kurdistan in 1991, which were the only surviving documents that informed about the enforcement of a program for reclamation of marsh areas, as Action Plan for the Marshes in 1987 (Clark & Nicholson, 2002; Goldstein, 1992; Stevens & Ahmed, 2011). The plan clearly showed that drainage projects were the already in the agenda of the Ba'ath regime with the pretext of reclamation of agricultural lands for destroying the rich cultural history of Marsh Arabs and destroying their ecosystem for controlling Marsh Arabs, who seemed to have the potential for carrying out guerrilla operations with help of Iran against the Ba'ath regime, which could put the hegemony of Saddam in the region in check. Nevertheless, the Shia uprising gave Saddam only an excuse for enforcing his actions in these areas (Adriansen, 2004; Ahmed, 2003; Dellapenna, 2007; Ellis & Arsel, 2010; Goldstein, 1992).

The rich oil fields in marsh areas were the other excuse of Saddam for using again the importance of these areas for development of the country. These unexploited areas increased the ambition of Saddam in the time of social unrest in the country, particularly after enforcing the Oil-for-Food Programme (OIP) by U.N, so that he could use these oil resources for supplying

basic needs of the society (Adriansen, 2004; Ahram, 2015; Clark & Nicholson, 2002; Ellis & Arsel, 2010).

5.2.6 Drainage projects and social development for Marsh Arabs

Saddam claimed the drainage projects of the ecosystem of Marsh Arabs for helping them to receive better development programs and modernization of their life condition (Adriansen, 2004; Ahram, 2015; Clark & Nicholson, 2002). There was a propaganda campaign within the society calling Marsh Arabs "monkey-faced" people in Iraqi media even long before the Shia uprising[37], as Ba'ath Party newspaper Al-Thawra described them as people who "*had become so accustomed to breeding buffaloes that they had become indistinguishable from them and that they had an intrinsic degraded nature…"* (as cited in Adriansen, 2004, p. 10). Therefore, the Ba'ath regime claimed the drainage projects for improving the social statue of Marsh Arabs within the society and providing them with public services such as education and health programs (Adriansen, 2004; Ahram, 2015). The Ba'ath regime transferred them forcibly to houses without water, electricity, proper sanitation facilities and schools (Adriansen, 2004; Cole, 2008). Indeed, displacement policy and changing the demographic structure of the country was part of Saddam Hussein's policy for controlling the country, like setting Arab tribes in Iraqi Kurdistan for changing the demographical structure of the region (Fawcett & Tanner, 2002). In case of the Marsh Arabs it was the same logic although with the pretext of improvement of their social status within the society (Adriansen, 2004; Cole, 2008; Ellis & Arsel, 2010). Though, in fact, it was only a justification for taking them under his control.

5.3 Summary

Both case studies clearly depict the importance of water resources in Saddam Hussein's internal and regional campaigns against the alleged ideological hegemony of Revolutionary Iran. In the first case study, the Iran-Iraq war, water's presence in the shape of Shatt al-Arab waterway has a strategic importance as well as an emblematic significance. The waterway/borderline represents the clash between two ideologies (socialist Ba'ath vs. revolutionary Vilayat-e Faqih), two sects (Arab Sunni vs. Iranian Shia) and two clashing egos (first Saddam vs. Shah and then Saddam vs. Khomeini). In the second case study, water is present in its pure material form, as the essential ingredient of life and human survival. As shown in the context of Shia uprising and suppression of Marsh Arabs through drainage of marshlands, water in its

[37] https://www.eeob.iastate.edu/classes/EEOB-590A/marshcourse/III.4/III.4u%20Anna%20Sophia%20Bachmann.htm

physical form can be weaponized to exert control and oppose the alleged agency of a hegemonic rival, Iran.

6 CONCLUSION AND RECOMMENDATIONS

This thesis asserts that Saddam Hussein used water extensively as a political leverage or an ecological weapon against his perceived internal and external enemies. Beside the numerous events documented in this thesis as evidence, the aforementioned assertion is supported in this thesis by a number of interweaved arguments. As water is essential to survival and prosperousness of communities, it can be consequently used to deny the same communities a path forward, or in another word, to suppress or even annihilate them. Another essential feature of water is that it, like other natural elements, does not abide by legal, political, and social divisions. Being a transborder resource, water has the potential to be used in International Relations as a negotiation tool with transborder implications and outcomes. This research shows that water can be used either as a pretext for going to war against an external threat to regional hegemony, or as a resource essential for propaganda and intimidation.

As demonstrated in both case studies, Saddam Hussein had a certain attention to water resources in Iraq. While his agenda concerning water included several items such as security, development, propaganda, war and suppression, they were all tied together by an underlying ambition for regional hegemony that is gaining the upper hand in power relations in the Middle East. Political psychology of Saddam Hussein, discussed in chapter four, demonstrates two intertwined characteristics. He was on one hand a headstrong leader determined to become the next great leader of the Arab/Islam world. On the other hand, he had a pathological fear of revolutionary Iran and a strong hatred against Iranians. Case studies in this research show that Saddam's plan for addressing these two personal features included a multilayered approach, in the first two stages of which water played an important part: Becoming the indisputable leader of a powerful Iraq, and challenging the alleged (or soon-to-be expected) hegemony of revolutionary Iran in the region.

By contemplating statements and actions Saddam Hussein carried out during his reign, one can, with relative confidence, assume that he was aware of the fragility of Iraq when it came to water. Not only has the country suffered from a chronical water scarcity for almost its whole existence, Iraq has limited control over its main water resources, Tigris and Euphrates Rivers. This puts the country in a delicate situation concerning its position in regional power relations. One can surmise that the issue was only exacerbated by the emergence of a revolutionary Shia Republic in Iran. Saddam was worried about the influence of Khomeini's aggressive discourse among the poverty-stricken and subordinated Shia majority of his own country. To buy Shia population's loyalty, Saddam ordered an extensive and highly publicized agricul-

tural development in Iraq, and he promised to provide the scarce element, water, by implementing several water projects. The rationale behind targeting the agricultural sector for implementing such a huge propaganda development project was that Iraq, having an oil-dependent economy at the margins of global capitalist relations, had no other viable industrial or service-based options for creating much-needed jobs amongst Shi's Iraqis. Assuming that this development project would succeed, Saddam Hussein would have met two targets. First, he could boast his leadership for enacting policies in line with socialist ideals of the Ba'ath regime, and improve his standing among Arab nations as a successful successor to Jamal Abdul Nasser. Second, he would manage to deter the advances of revolutionary Iran inside his own soil by improving his standing among Shia Iraqis. It is evident, as this research argues through numerous examples, that water has had an influential role in internal politics of Iraq under Saddam Hussein.

However, as environmental capacities of Iraq were not effectually considered in aforementioned water projects (as described in details in chapter three), Iraq's agricultural sector did not benefit from the enacted policies. To make matters worse, uncalculated implementation of water projects led to desiccation, salinization, and consequential dust storms that hit the agricultural sector hard, to the extent that even many of existing farms were abandoned. This led to worsen the economic conditions of many Shia Iraqis, who were traditionally dependent on agriculture in southern parts of the country. After the catastrophic defeat of Iraq in the First Gulf War, chronic unemployment among Shia Iraqis, a situation that was mainly a result of Saddam's water projects, coupled with other historical and social factors, resulted in the 1991 Shia uprising. Saddam Hussein considered the uprising another threat raised by Iran against his dream of a hegemonic Iraq, and blamed Shia Marsh Arabs, the inhabitants of Iraqi marshlands as conspirators of Iran's agenda.

While water projects displayed an affirmative political application of water as the fuel for propaganda, Saddam Hussein's reaction to the 1991 Shia uprising can be categorized as a showcase of how water can be weaponized to suppress communities and exert control. As this thesis shows, Saddam Hussein's order to draining Iraqi marshlands had implications beyond the advertised purposes and it targeted Marsh Arabs in an act akin to ecocide. Here, like in the example of water projects, Saddam's obsession with Arabic hegemony against Iran is evident, as he considered the marshlands as gateway for Iranian influence.

Third example of political use of water, as depicted in the first case study of this thesis, offers a different argument to support the hypothesis of the research. Saddam Hussein ordered the

invasion of Iran on the pretext of Iraq's alleged rights over the strategically important Shatt al-Arab waterway. Here, water is not used directly in its physical form for irrigation (propaganda) or drainage (suppression), but symbolically (pretext). Shatt al-Arab waterway was seen by Saddam Hussein as a symbol of military superiority of Arab's archetypical enemy, Imperial Iran. After the Islamic Revolution had toppled the last Shah of Iran, Iraq's struggle for regional militaristic hegemony turned into a conflict with idealistic hegemony at its heart. While Shatt al-Arab waterway had and still has an indispensable position in Iraq's economic life, this thesis asserts that it was the clash of ideas between Shia Revolutionary Iran and secular Ba'ath party and later Sunni Muslims that ignited the Iran-Iraq war.

This thesis displays different ways through which water can be exploited in International Relations to increase a country's standing in regional hegemonic order. The political use of water as a leverage is not limited to direct involvement in regional conflicts, but it involves the potential for fighting ideological influence of regional rivals through enacting certain water management policies on the national level. Economic, social and political pretexts can be used for justifying the weaponization of water. Such arrangements offer more destructive potential in regions already suffering from water scarcity, as it is the case with the Middle East, to the extent that one can claim that water is more strategically important than oil, and it has more potential for starting conflicts and igniting wars.

This research was conducted within the scope of a master thesis and with limited resources available concerning its subject matter, and thus it cannot hold any claim to comprehensiveness. Hence, the researcher recommends two overlapping paths for continuing this research. While this research has already established a framework to study historical precedents for political use of water by central governments, a worthwhile question would be about the role water can play in the occurrence of social unrest in Iraq at present time. Moreover, the question of political use of water in International Relations can be followed up, not only by studying existing precedents, but also by predicting future trends and places vulnerable for emergence of water-related conflicts.

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9 TABLE OF FIGURES

10 TABLE OF ABBREVIATIONS

CIA	**Central Intelligence Agency**
DIIS	**Danish Institute for International Studies**
FBI	**Federal Bureau of Investigation**
MOD	**Main Outfall Drainage**
NDP	**National Development Plan**
NFZ	**No-Fly-Zones**
NSC	**National Security Council**
OPEC	**The Organization of the Petroleum Exporting Countrie**
RCC	**Revolution Command Council**
RFGC	**Republican Guard Forces Command**
UNEP	**United Nations Environment Programme**