REPORT



Water challenges and conflict dynamics in Southern Iraq

An in-depth analysis of an under-researched crisis

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1. Introduction

"The conflict over water amongst the local communities in and within the Iraqi provinces poses a threat to security and stability in the future" ¹

Iraq faces an increasingly dire water situation as both the quantity and quality of water continue to decline. Since the 1980s, water flows from the Euphrates and Tigris rivers, which provide up to 98% of Iraq's water supply, have decreased by 30%.² By 2025, water supply is expected to decrease by up to 60% in comparison to 2015.³ These declining water flows are the combined result of several factors, including intensive water usage by the oil and agricultural industry, the construction of dams, the impacts of conflict on water infrastructures, and climate change.⁴ While available water resources are decreasing, demand for water is increasing due to Iraq's expanding population,⁵ urbanization,⁶ and continued inefficient water usage by large industries.7 This also has negative impacts on water quality. Reduced flows in the Euphrates and Tigris rivers allow salt water from the Shatt al-Arab to enter Iraq's water ways making water increasingly saline. Discharge of untreated wastewater from cities, agricultural run-off and industrial pollution into Iraq's rivers also undermine the water quality.8 Water-related challenges featured as a key issue in the October 2019 protests that erupted in Basra and spread throughout Iraq, culminating in several casualties. While the protests concerned a wide array of issues related to poor public services, foreign influence and corruption, people clearly expressed frustration and concern over the quantity and quality of available water.9 These concerns were placed under a magnifying glass when the Covid-19 pandemic spread across the country, underlining the country's poor health care system and sanitation facilities such as access to clean water.¹⁰

Water-related challenges and conflict can be observed at different levels both across and within Iraq's borders, at interprovincial,

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provincial, and local levels. Water management choices of Iraq's neighboring countries on the Euphrates and Tigris rivers – Turkey, Iran, and Syria – undermine both the quantity and quality of water available in Iraq. This includes, for example, the construction of dams and the interception of tributaries that divert water flows away from Iraq. These conflicts are politically sensitive and have received considerable global attention.¹¹ Water management within Iraq's borders has received relatively less attention but has had a further, even more critical impact on the quantity and the quality of water in Iraq. Cheap water tariffs contribute to Iraq's high levels of water consumption (392L/per capita/ per day, as opposed to 200L international



average),¹² while neglect of damaged or aging infrastructures means water supply coverage reaches only 73% in urban areas and 40-45% in rural areas.¹³ The insufficient quantity of water resources is further exacerbated by extreme climate conditions, poor management of water, and industry water practices.

The relationship between water and conflict is complex and can manifest in many ways. This paper analyses three types of conflict that are present across Iraq's provinces. First, conflicts arise between authorities of different provinces, competing over water shares or illegal transgression of water flows. Dhi Qar province, for example, has accused neighboring Wasit province of not respecting water shares, undermining the livelihoods of Dhi Qar's agriculture dependent population.¹⁴ Second, conflict can manifest between citizens and provincial authorities and/or the central government. The protests that spread across Iraq in October 2019 exemplify this dynamic. Third, conflict can emerge between citizens competing over access to scarce water resources. This type of conflict primarily occurs between farmers, herders, and fishermen that depend on water resources to sustain their livelihoods and have limited alternative opportunities. These three conflict dynamics remain underresearched compared to transboundary conflict between Iraq and its neighboring countries yet lie at the heart of Iraq's water challenge.¹⁵

Addressing water-conflict dynamics within Iraq's borders presents an opportunity for Iraq to improve its water situation and more effectively mitigate water-related conflicts. This study aims to shed light on the link between water and conflict in Iraq at the interprovincial, provincial, and local levels in the provinces Basra, Missan, Dhi Qar, and Wasit in the south of Iraq. It assesses the most urgent issues, provides the building blocks for further analysis on watersecurity challenges in Iraq, and informs the development of trainings, capacity building, dialogues, and policy recommendations.

2. Assessment Framework

2.1. Research Objective

The objective of this paper is to provide an assessment of water-related conflicts in



Figure 1. Assessment Framework Water-Conflict Nexus Iraq



four Iraqi provinces located in the south: Basra, Wasit, Dhi Qar and Missan. As the water situation in Iraq becomes more dire, competition over scarce resources is likely to increase both within and between provinces, thus making an analysis of these dynamics increasingly relevant. The study focuses on a few of the most urgent issues that should be better understood in order to work toward mitigating these conflicts. This research is part of a broader engagement in Iraq undertaken by the Water, Peace and Security (WPS) partnership.

2.2. Description of the Assessment Framework

To understand the linkages between pressure on water resources and conflict risks in Iraq, this study has developed an assessment framework (Figure 1). This framework is an anchor point to assess the water and conflict situation in Iraq and identify key water-conflict pathways in the context of Iraq. The assessment framework considers relevant hydrological, geographical, socio-economic, environmental, and political factors, and the possible ways these can interact to lead to conflict. The relation between these factors is dynamic and cyclical, meaning that the path from a specific water situation to conflict is not unidirectional, with different factors influencing one another. To better understand these factors, Figure 2 illustrates the key concepts involved in the water-conflict nexus.

As illustrated in Figure 1, the water situation (quantity and quality of available water) in Iraq is impacted by several stressors. These can be identified as observable and tangible choices of different actors (e.g., government authorities, industry, and socio-economic groups) as well as environmental factors such as climate change. Stress on water resources makes it more difficult for citizens to sustain their livelihoods, undermining their (human) well-being and forcing them to adapt in order to cope with the new water situation.

There are several determinants of adaptive capacity, or factors that can either mitigate or exacerbate the impact of a water situation on one's well-being. These factors can also determine the type of coping mechanisms that is at someone's disposal. People's ability to adapt to a water situation and their choice of response are therefore dependent on their available



Figure 2. Key Concepts in the Water-Conflict Nexus



financial resources, social capital, age, and status (among other things). For example, people with more financial resources may choose to buy bottled water instead of relying on public tap water, while citizens that lack these resources may resort to migrating to areas with better water access. Given the cyclical relationships between these factors, coping mechanisms can not only alleviate the impact of the water situation on (groups of) individuals, but they can also have negative consequences for the water and/or security situation of entire communities.

The security situation is therefore measured on the spectrum between peace and conflict. For example, when people divert river flows, the amount of water reaching other populated areas can decrease and put pressure on those people's livelihoods, possibly leading to (violent) conflict. However, it is not a given that waterstressed regions suffer from different types of conflict. Declining water availability hardly ever directly leads to conflict, but it may act as a threat multiplier that exacerbates vulnerabilities and increases the likelihood of conflict. Even small events can have unpredictable and potentially devastating effects, especially when catalysts are involved, such as existing rivalries, tribal politics, and poor governance structures. Like determinants of adaptive capacity, catalysts are intervening factors that determine the impact of a person's response (to a water situation) on security. These factors can either mitigate or exacerbate conflict and can determine the type and level of conflict that erupts.

When conflict does erupt, it can range from a dispute between a few people to a full-blown crisis between whole communities that may or may not involve physical violence. Conflict can manifest at different magnitudes, as non-violent and violent disputes or crises. Non-violent dispute refers to a verbal disagreement that may result in legal action between a small group of actors. Non-violent crisis refers to a condition of regional, or national, social, economic, political instability that impacts a large segment of the population but that does not lead to (physical) violence. Violent dispute refers to disagreements that

lead to physical conflict between a small group of actors. Violent crisis refers to a condition of regional, or national, social, economic, political instability that impacts a large segment of the population but that includes (physical) violence.

In terms of their relation to water, some conflicts are directly related to water, such as competition over access to rivers for agricultural irrigation, while others are indirect water-related conflicts that include unemployment resulting from water shortage and low agricultural productivity. Conflicts also have various levels of engagement. For the purpose of this study, this entails intra- and inter-provincial levels. Intra-provincial means that the conflict stays within the geographical and legal boundaries of a province, including conflict between citizens and provincial authorities and citizens amongst each other. Inter-provincial conflict refers to the conflict between provinces either between provincial authorities and/or the central government or between citizens across borders.

In the next sections, the study methodology will be further elaborated and the main findings derived from the analysis of waterconflict pathways in Iraq will be presented.

2.3. Short Methodological Note

The objective of this study is to provide an overview of water-related conflict dynamics and security challenges in Iraq. The main findings will be used as a starting point for further WPS engagement to address these challenges. This study is primarily based on in-depth desk-based research using a wide range of English and Arabic language sources, including academic articles, scientific articles, reports, analyses, and news articles. The researchers also conducted interviews with organizations and individuals to gather background information, develop better contextual understanding, and to verify findings. Interviews were conducted with Andrea Cattarossi from Hydronova, Stefano Disperati from SWEDO, and Roger Guiu from Social Inquiry, as well as local experts



including Azzam Alwash, Ala'a Abdulrazaq, Mohammed Abdul Jabbar Mohammed. Saif Saad Kahlid, and Khalid Sulaiman. This study has also drawn on insights from trainings and workshops conducted on behalf of the WPS partnership with Iraqi government officials and experts on waterrelated issues. While these insights are not directly referred to in the study, they did provide useful reference points for further investigation and enabled the authors to better understand and validate desk-based findings. This study was conducted in three steps. The first step focused on identifying the pathways between water-related challenges and conflict in south Iraq. Based on this research, an assessment framework was developed that incorporates the identified relevant factors impacting the water-conflict nexus and the relations between them (see Figure 1). Based on the output of the first step, the second step focused on distinguishing water-conflict pathways at three different levels of analysis: the interprovincial (between provinces), provincial (provincial authorities and citizens) and local (between citizens) levels. In the third step, a set of main findings was extracted, providing an overview of key water-conflict dynamics in south Iraq. The approach has evolved from a granular and detailed analysis of each factor in the framework towards taking a 'good enough approach' that accurately reflects available information, within the scope of the research purpose and time. Despite the variety of sources consulted, conducting this study was challenged by the shortage of relevant information due to the limited number of sources, repetition of information, questionable accuracy and validity of some sources and information. These limitations combined with the study objective underlines the choice for a 'good enough' approach.

3. Main findings

This chapter outlines five key findings from the analysis of water-related security challenges in Iraq within and between four provinces in the south: Basra, Missan, Dhi Qar, Wasit. The first three findings relate to conflict dynamics at the interprovincial, provincial, and local levels and the last two findings relate to the key drivers and mitigators of conflict related to ethnoreligious sectarianism and tribalism. Each of the findings will be elaborated in a separate section.¹⁶

#	Main findings
1	Competition and conflict between provincial authorities. Provincial authorities engage in conflict over water shares and accuse each other of transgressing quota, in the form of political disputes and legal complaints.
2	Conflict between federal, provincial authorities and citizens. Water-related challenges lead to confrontation in the form of protests that can escalate to violence between citizens and the federal government and/or provincial authorities.
3	Inter-communal conflict between farmers, herders, and fishermen. Competition over scarce resources can occur between different socio-economic actors that depend on these resources to sustain their livelihoods and that lack access to government support and conflict resolution mechanisms.
4	Decline of ethnic identity and religion as core drivers of conflict. Ethno-religious sectarianism that has defined conflict in Iraq for decades is declining in influence, as national identity and shared grievances become more prevalent amongst the local population, despite sectarianism's continued institutionalization and political fervor.
5	(Re)emergence of tribal structures and influence. The tribe and tribalism have (re)emerged in Iraq, gaining an increasingly prominent position vis-à-vis state institutions in water-related conflict dynamics, both in a positive sense through conflict mediation and a negative sense through exacerbating cross-border instability.

Table 1. Main Findings of the Study



3.1. Competition and Conflict Between Provincial Authorities

The declining availability of clean water has a notable impact on politics and security in Iraq, including relations between provincial authorities of neighboring provinces in the south. The hydro-politics between the northern and southern provinces, due to the former's better access to water resources, has been the most pertinent and the focus of previous analyses. Conversely, the hydro-politics between provincial authorities in the south has received less attention and is only just starting to surface.¹⁷ If these tensions escalate, they can undermine Iraq's ability to effectively cope with declining water availability and undermine regional and even national stability. This section examines the dynamics between provincial authorities within the context of broader political developments and the potential impacts on Iraq's ability to manage its water crises. Table 2 includes an overview of these dynamics across provinces located in the south of Iraq.

3.1.1. Water allocation and needs

The dire water situation in Iraq puts pressure on provincial authorities' ability to serve their populations, making the allocation of water a contentious issue. Water resources in Iraq are distributed between provinces through a quota system whereby the amount of water a province receives is based on needs, allowing some provinces to receive more water than others.

The allocated water is often insufficient to meet provinces' needs, triggering competition between the central government and provincial authorities, and the latter amongst themselves.²⁴ The Ministry of Water Resources (MoWR), the Ministry of Finance (MoF), and the Ministry of Planning (MoP) share two main responsibilities of water governance and the allocation of water resources between provinces.25 Water quotas are distributed by the MoWR based on bottom-up requests from provinces that the three ministries subsequently assess. Law No. 50 of 2008 establishes the MoWR and generates a legal and technical foundation for the country's institutionalization of water resource management. The primary tasks of the MoWR consist of the planning and allocation of water resources, the regulation of the use of ground and surface water, and the establishment of sources and uses of water.²⁶

Despite the institutional foundation, the three responsible ministries lack sufficient information and coordination to effectively decide on actual water needs or change water

Competition and Conflict Between Provincial Authorities in South Iraq		
Provinces	Example	
Basra	Basra province demanded Missan province to address the issue of illegal fish farms that tap into the river system and curb the level of river flow that reaches Basra. ¹⁸	
	Disagreements took place between the federal government and Basra province over the construction of a dam near Abu Flous Port that was extended for several years. It was only after a series of popular protests and threats of establishing a semi-autonomous region that the federal government fulfilled the Basrawis' demands. ¹⁹	
Missan	On 24 November 2017, the council of Missan province announced that it would file a lawsuit against its neighboring provinces, Wasit and Dhi Qar, for disregarding Missan's allocated water share, causing material damage and harming citizens. ²⁰	
Dhi Qar	Dhi Qar province accused its northern neighbor Wasit province of breaching water shares, resulting in shortage of water in Dhi Qar that negatively impacts the income and wellbeing of Dhi Qar's agriculture-dependent population. ²¹ Wasit province denies these accusations. ²² Dhi Qar has also started a legal complaint against Wasit province over a reduction in water flow. ²³	

Table 2. Competition and Conflict Between Provincial Authorities



usage patterns towards higher efficiency.²⁷ A clear framework for interaction and delineation of responsibilities across ministries related to water allocation is still absent at the national and local levels. There is no overarching national water law, with a draft that has yet to be issued.²⁸ The resultant informal structures that underlie water allocation and distribution heighten the risk of political power play, corruption, and subsequent ineffective decision-making. The limited oversight in turn provides room for maneuver for provinces to lobby for more water resources, straining overall water resources and undermining the equitable distribution of available resources across provinces.

Suboptimal allocation also results from the fact that quotas are often determined based on historical usage patterns that prioritize provinces with higher water demands.²⁹ Provinces that require higher amounts of water to sustain agricultural production, for example, tend to receive more water shares than their provincial counterparts, often exacerbating highly inefficient water usage patterns, such as water-intensive flooding techniques.³⁰ These historical usage patterns may be adhered to when determining shares despite being centuries or millennia old and ill-suited to the contemporary socio-political, economic, and environmental context.³¹ As a result, governorates receiving lower shares of water resources are often dissatisfied with other governorate authorities' requests and with federal governmental institutions neglecting their voices and needs. The current water allocation system does not provide incentives to withdraw less water, increase efficiency or produce water savings in irrigation. Governorates that receive smaller water quotas blame, among others, water-intensive agricultural irrigation practices in other governorates for using too much water, placing them at disadvantage.

3.1.2. Competition over scarce resources

Provinces receiving smaller shares of water resources may feel undervalued and disregarded by the more politically powerful provinces and the central government, and denounce other provinces for usurping large amounts of water, such as water-intensive agricultural irrigation practices. Provinces may also blame each other for breaching the water quota or illicitly taking water from across borders and failing to punish citizens for such behavior. For a better comprehension of these conflictual dynamics between Governorates, Figure 3 shows a map of Iraqi provinces and the rivers that flow through them.

While some provincial authorities seek to resolve issues through consensus, others hold unfriendly relations with the central government in Baghdad and neighboring provinces.³² The governor of Dhi Qar, for instance, has blamed the MoWR for not increasing the share of water reaching the province and failing to meet promised water quotas.³³ Reallocating water shares based on current needs is politically sensitive, however, and can trigger competition at the institutional level³⁴ between provincial authorities in the form of political accusations and legal complaints. These complaints can also be tools used by political actors, governors, and their offices, to divert responsibility for internal failures to other provinces and temporarily alleviate internal pressures. In November 2017, the council of Missan province announced that it would file a lawsuit against its neighboring provinces Wasit and Dhi Qar for disregarding Missan's allocated water share, causing material damage and harming citizens.³⁵ In similar ways, Dhi Qar province accused its northern neighbor Wasit province of breaching water shares, resulting in a shortage of water in Dhi Qar with direct negative impacts on the income and wellbeing of Dhi Qar's agriculturedependent population.³⁶ Wasit province denies these accusations.³⁷ Dhi Qar has also filed a legal complaint against Wasit province over a reduction in water flow, asserting that any abuse of water shares by other provinces will not be tolerated.³⁸







Figure 3. Map of Iraq and its main rivers³⁹

Such tensions also arise between the other southern provinces. For example, Basra province has demanded Missan province to address the issue of illegal fish farms that tap into the river system and curb the level of river flow that reaches Basra.⁴⁰ These farms exceed water quotas established by the Iraqi government and override irrigation channels that are intended for household use and to water plantations.

These disputes tend to remain at the higher political level between provincial authorities, without the involvement of large segments of the population or physical violence. This trend can be explained by the disparate capacities and opportunities available at the provincial and local levels. Provincial authorities tend to have better accesstonon-violentmeansofconflictresolution, such as legal and political power and resources, to challenge the status quo. Citizens at the local level often lack access to such means, especially populations living in rural areas that are far removed from the government institutions. This enhances citizens' dependence on alternative coping mechanisms that may be violent, such as protests and direct confrontation. The combined

lack of trust in the central government and neighboring provinces feeds disillusionment among provincial authorities and citizens, as well as the sentiment of being 'second-class.' This also underlines the desire among provinces to become autonomous regions, comparable to the Kurdistan Regional Government (KRG).41 In 2019, Basra province sought to become a federal region to reduce the reliance on the federal government, after previous attempts in 2008 and 2014.42 The support for this move by the provincial authorities and large segments of the population underlines their shared perception of local governance and its benefits to improve basic services that the central government has failed to provide.43 Given that under 15 percent of Basra's eligible voters have allegedly participated in the 2018 parliamentary elections, compared to 44 percent national⁴⁴, reiterates the regions discontent and isolation from Baghdad.⁴⁵ The central government has quashed these referenda and rejected Basra's moves towards establishing autonomous status, in light of Basra's economic importance for the government.⁴⁶ While its efforts have been less concerted than Basra's, Wasit province has also made formal requests to hold a referendum on becoming a region.47

3.1.3. Fragmented water governance

Despite being non-violent, disputes over water resources between the central government and provincial authorities and the latter amongst themselves are not trivial.⁴⁸ Supporters of provincial-level autonomy argue that the only way to counter the central government's neglect of the southern provinces is to pressure it to improve their condition. While this may be true, provinces' attempts to establish more autonomy also risk further fragmenting Iraq and weakening its ability to effectively respond to and cope with current and future crises, including water crises.49 Iraq has always been a deeply divided country, split across political, ethnic, and economic lines, with multiple centers of power competing over how Iraq should be governed.⁵⁰ The water crisis has also fallen victim to this dynamic and furthered the political



disintegration and fragmentation of Iraq. Yet, as the water situation becomes more dire, collaboration between provinces also becomes more important to establish a sustainable nationwide water-sharing system. The importance of interprovincial relations is most evident between provinces in the north and in the south, as the Kurdish Regional Government (KRG) in the north enjoys preferential access to water flowing from the Tigris and its tributaries. This enables the KRG to capitalize on this early access or upstream advantage to put provinces in the south under pressure and gain political leverage. In case of a dispute, the KRG could severely undermine the southern oil and agricultural industries through its water policies, which in turn could lead to economic, and therefore socio-political, unrest.⁵¹ While the case of north-south hydropolitics is discussed often, the importance of south-to-south hydro-politics should not be underestimated. Reaching agreements between provinces on economic and political rules and institutions is always difficult and becomes even more challenging when relations between provinces are tense, with each seeking to secure its own interests and disregarding regional and national needs and priorities. South-to-south relations are crucial to ensure the equitable distribution of water shares between provinces depend on actual needs and for the development of a nation-wide strategy to cope with the dire water situation in the country. This includes the renovation and building of water infrastructures and plans for more sustainable use of water resources that require cross-border cooperation. Additionally, water-related challenges such as the illegal tapping of water resources and climateinduced migration have cross-border impacts that can only be dealt with effectively if provinces jointly address them. In a more general sense, interprovincial competition over water resources and its negative impacts on collaboration between provinces impede effective governance in Iraq, on water and non-water related issues.

3.1.4. Conclusion

Domestic interprovincial hydro-politics in

the south is likely to become an increasingly contentious issue in Iraqi politics over the next years. Increasing water shortages will put more pressure on provinces to come with solutions, which is compounded further by the central government's continued challenge to address these issues effectively. The outcome of this issue depends on whether political factions across Iraq's provinces perceive it to be in their interest to forge a compromise or decide that they would benefit more from independently moving in a different direction.⁵²

3.2. Conflict Between the Federal Government, Provincial Authorities, and Citizens

At the provincial level, south Iraq has seen several water-related conflicts between the federal government, provincial authorities, and citizens. In October 2019, for example, Iraq saw widespread protests that became increasingly fraught with violence and resulted in the death of hundreds⁵³ of people by security forces and paramilitary groups under state control.⁵⁴ Poor quantity and quality of water and related challenges featured prominently among protestors' criticism, alongside a range of other issues associated with poor governance, corruption, and high levels of unemployment. While demands for change were similar across provinces, protest dynamics varied considerably across provinces and phases of mobilization over time,55 depending on the interaction between broader structural conditions at the national-level and specific conditions at the provincial-level.56 This depends on provinces' socio-economic power, the organization (or lack thereof) of protest groups, demographic composition, local political and security structures, and the salience of social formations including tribal groups.

Taking this as a starting point, this section seeks to better understand the distinct conflict dynamics across Basra, Missan, Wasit and Dhi Qar; where power lies, who can wield it and how it is employed, along with conflictual responses from citizens to governmental power dynamics.⁵⁷ These dynamics are further illustrated in Table 3.



Water-related Conflict between Federal Government, Provincial Authorities & Citizens		
Province	Examples	
Basra	Iraqi citizens took to the street in July 2018, denouncing unemployment, corruption, poor governance, and lacking service delivery, triggered by power cuts by Iran. ⁵⁸	
	Violent protests erupted in September 2018 during the Basra water crisis because of water shortages and polluted water, which caused a major health crisis (>118.000 people hospitalized). ⁵⁹	
Missan	Protesters gathered in Qal'at Saleh, Missan, in June 2021 to demonstrate against power outages and were fired at by security forces. ⁶⁰	
	On the 3 rd of October, 2021, demonstrations in Missan demand the announcement of their water quota allocation after drought has severely undermined the agriculture, livestock, and fishery return. This escalated to demonstrators closing the al-Nadhim Bridge in the center of Amara city, subsequently opening the water gates towards their designated areas. ⁶¹	
Wasit	In October 2020, a demonstration took place in the capital of Wasit, Kut. The protest commemorated the anniversary of the October 2019 demonstrators by demanding social justice and economic development, in addition to political reforms and exposing the killers of the demonstrators and bringing them to justice. ⁶²	
	Protests were taking place in August 2021 in Wasit to demand better water quality and infrastructure. ⁶³	
Dhi Qar	In October 2019, citizens of Dhi Qar swept the country demanding job opportunities, a political reform, better provision of public services and the end of public corruption. ⁶⁴ Protesters, mainly recently graduated youth, close down oil facilities demanding jobs.	
	In February 2021, citizens in Dhi Qar were taking to the streets to demand resignation of the province's governor, when one protester was killed and 14 injured by government forces. ⁶⁵	

 Table 3. Water-related Conflict between Central Government, Provincial Authorities & Citizens

3.2.1. Poor governance and demand for change

The protests that erupted in Iraq in October 2019 mirrored demands in previous protest movements, including the call for an improved provision of basic services, governance, and employment opportunities. Demand for change was especially strong in the oil-rich provinces in the south where citizens have benefited little from the country's substantial oil revenues.⁶⁶ Access to clean water was only part of citizens' demands throughout the protests, but briefly stood at the forefront following the acute water crises in Basra that resulted in the hospitalization of 118,000 people.⁶⁷ Experts say that this was caused by water contamination due to high levels of salinity of water resources, resulting in an overwhelming amount of patients suffering from vomiting, diarrhea, and rashes.

The initial focus on "bread-and-butter issues" quickly evolved to include demands for systemic change such as better adherence to the rule of law (accountability, countering corruption and patriotism), freedom of speech and association, reform of Iraq's electoral law, and early elections.⁶⁸ Protesters also demanded a national identity that was free of sectarian differentiation These demands foreign influence.⁶⁹ and gained more traction after the government's violent crackdown of protests, which made the reluctance of the political elite to concede to protestors' demand for change starkly evident. While protestors' demands quickly broadened beyond direct issues related to water quality and quantity, key drivers of the protest movements included poor service provision, faltering infrastructures, unemployment, and corruption, which are indirectly related to water challenges. For instance, weak electricity supply and access, one of the key complaints across provinces, is related to the declining availability of water required for the production of oil and gas.70



3.2.2. Responsible actors

The protests across the south primarily targeted the central government in Baghdad as responsible for the dire circumstances in Iraq as a whole and the south in particular.⁷¹ Provincial authorities feature less prominently in protest chants despite being frequent targets of the physical destruction at protest sites, such as the damaging and burning of provincial offices and buildings.⁷² Protestors recognize (and regret) the control that the central government exercises over provincial authorities, the faltering decentralization process, and the unclear delineation of responsibilities between the central government and provinces. They resent the central government for simultaneously controlling and taking advantage of their provinces' resources, especially oil, while failing to invest in local infrastructure and public services.73 Restrictions imposed on the provincial authorities by the central government and long delays in passing plans and allocating budgets are perceived by many as willful discrimination. While this is likely the function of nationwide bureaucratic inefficiency, it nevertheless reinforces the sentiment among southern populations of state neglect, underinvestment, and micromanagement.⁷⁴ In other words, Governorates feel like they have less ownership over their territorial activities, with the central government controlling large parts of the work, leaving little room for freedom and autonomy.

This sentiment reflects the southern provinces' historical distrust of the central government, known as 'Southernism' or in Arabic 'Janubiya.'⁷⁵ Under the rule of Sunni leader Saddam Hussein, the southern Shia populations were ostracized and excluded from the political playing field. While the Shia population today holds a more prominent political position, the southern provinces share the belief that state institutions discriminate against Shia populations in the southern provinces. There are also widespread perceptions of prominent Shia political parties favoring other Shia centers, such as Baghdad, Karbala, and Najaf, while neglecting the voice of the south.⁷⁶ The confrontation between the

Shia population in the south and their coreligionists dates back to the establishment of Shia Islamism movements in the 1960's.⁷⁷ After Iraq's constitution was adopted in 2005, the southern regionalists opposed proposals for developing a federal entity with other parts of Iraq on purely sectarian grounds, promoting 'southern' regional identity on grounds of collective historical experience rather than a sect.⁷⁸ Already in 2004, under the adoption of the Transitional Administrative Law (TAL) allowed (any) three provinces to form a federal region. Subsequently, the southern provinces Basra, Missan, and Dhi Qar⁷⁹ created an alliance based on shared grievances. They sought to increase the power and influence of south Iraq vis-àvis the central government, a notion that was supported by local tribes in the region.⁸⁰ Today, southern distrust, and the perception of the central government as a free-rider and intrusive power that deprives southern provinces⁸¹ from their own oil, agricultural resources, and wealth remains prevalent. The shortcomings of Iraq's attempts at decentralization further undermine trust in the central government.

The oil industry and companies have also been a primary target of protests, especially in the oil-rich provinces Basra and Dhi Qar. While Basra and Dhi Qar have the largest oil reserves in the country, both are also among the poorest and benefit little from the oil revenues. The difference between the provinces is that in Basra citizens primarily complain about their lack of oil revenues, while in Dhi Qar (with fewer oil revenues)citizensprotestthelackofopportunities in the oil sector, with unemployed youth blocking the entrance to oil facilities and refineries.⁸²

Foreign meddling has been the third major target in protests with protestors condemning Iranian interference in Iraq's internal affairs and economic, political, and religious life.⁸³ Protestors chanted the slogan 'Iran, barra, barra' translated to 'Iran, out, out'⁸⁴ and attacked official Iranian buildings such as government buildings, the Iranian consulate, and parliamentarians' homes. They also launched campaigns to boycott Iranian products. While protestors are angry with



Iranian interference, it is also a reflection of peoples' anger with Iraq's political system more generally, and Iran is perceived to be one of the external backers of that system.⁸⁵ One can also assume that anti-Iranian sentiments are fuelled by Iran's water policy that endanger Iraq's water situation, along with their general uncooperative nature towards a joint agreement on water management.⁸⁶ The country's water policy towards Iraq consists of the construction of numerous dams and the diversion of water flows from the Tigris river, violating international law that prevent the detrimental cut off of natural river flows.⁸⁷ However, this upstream hegemony still fuels unrest amongst the Iranian population, with widespread protests demanding a better water supply and management thereof. This is mainly due to the inherent prioritization of unsustainable industries and the generation of electricity, leaving farmers with a small share of the already depleting resource.88

3.2.3. Provincial-level dynamics

While the demands and targets of the protests were similar across provinces, the trajectory of the protests differed depending on contextspecific factors that either aggregated or mitigated conflict. As became evident, power is not confined to official state institutions and is dependent on a constant process of collaboration and competition between state and non-state actors.⁸⁹ State institutions' coercive power is a function of their intersection with local dynamics, non-state actors and institutions "close to the ground," where interactions take place.90 Political and security actors both within and outside of the official government, shift between the role of 'spoiler' and 'stabilizer' depending on the political and economic benefits that can be accrued from either. At times government forces would collaborate with paramilitary groups and local tribal networks while at other times confronting them, to develop the most effective counter-protest campaign.⁹¹ Protestors in turn constantly shift tactics and strategies to adapt to state and non-state actors' coercive power and use of force to achieve desired effects.92

To understand conflict dynamics at the provincial level and the protest movement in Basra, Dhi Qar, Missan, and Wasit, this section seeks to identify and assess power structures that transcend beyond state institutions.⁹³

Basra: Cohesive Model of Repression

Basra's water situation has been impacted by its poor water quality, with residents being concerned about pollution and high salinity levels since the 1980s.⁹⁴ Upstream sewage of organic materials (including human and animal sewage and garbage) and runoff from industries (such as agricultural fertilizers and oil residues) increase algal growth, which can be poisonous to humans when consumed.⁹⁵ In 2019, approximately 300,000 residents remained unconnected to the water and sewage network, increasing the risk of groundwater contamination and illegal water tapping.⁹⁶ The hospitalization of over 118,000 persons in 2018 due to water contamination became the catalyst for widespread protests.⁹⁷

The disproportionate levels of violence against protestors in Basra stem from its high economic, and therefore political, stakes resulting from the high revenues generated by the oil industry. Security forces deployed a cohesive model of repression to curtail activism and protests, which was effective due to the tight-knit relations between Iraqi security forces, militia forces, and local tribes. The strength of these linkages is based on shared economic and political interests, subsequently resulting in a more integrated repressive apparatus.⁹⁸ These relations enabled a tighter intelligence campaign to monitor protest leaders and activists, instill fear and tactically erode protest networks.⁹⁹

Relations between Iraqi security forces, militia forces, and local tribes have a long history that can be explained by developments of the booming oil industry in Iraq, and Basra in particular. In the early twentieth century¹⁰⁰, the central government in Baghdad allowed international oil companies to expand in the south of Iraq. These oil companies in turn allocated money to powerful tribal and militia groups that held



control in these regions, as 'protection fees' to avoid being threatened by these groups.¹⁰¹ As the oil production expanded, so did the cost of bribes, enabling armed and tribal groups to solidify and expand their power, including by securing jobs for their constituents.¹⁰² The decision by former prime minister Haider al-Abadi (2014–2018) to expand control over militia organizations by placing them under the command of the armed forces¹⁰³ further reinforced ties with Iraqi security forces.

As protests progressed in Basra, a division of labor became evident between the Iraqi police units and armed groups including subcontracted local militia forces, with the latter primarily involved in targeted violence including assassinations and small arms fire. Over time the collaboration between police and local militia also became more coherent and strategic. Security forces shifted towards targeted deployment of violence outside protest squares, thereby lowering the visibility of their attacks to avert forms of chaotic and escalatory violence and to counter protestors' narrative in their favor.¹⁰⁴ Instead of clamping down on the protest movement, forces deployed targeted assassinations of key activists.¹⁰⁵ This restraint of force was a purely strategic decision made in response to protestors' exploitation of the government's use of force to gain popular support. In the same way, after the initial violent repression of protests, protestors also shifted tactics to avert further violence. Protestors sought to decrease the direct confrontation to the state as well as the targeting of 'sensitive targets' including government buildings and political offices that could provoke (and legitimize) a violent response.

Prime Minister Mustafa sought to rectify the excessive use of force and extend his authority by replacing commanders and prosecuting low-level security force members.¹⁰⁶ These attempts proved futile, however, and had limited impact on conflict dynamics as power and the use of force were not confined to state institutions. Instead, it exemplified the limits of state power and the reality that power is held locally and is not merely a function of the state's coercive capacity.¹⁰⁷

Missan: Mixed Signals and Inter-Militia Violence

Missan is among the provinces facing the highest levels of drought and water scarcity in the south, mainly due to its sole dependence on the Tigris River. Missan receives a low discharge of water given that they are the last province in the course of the Tigris before meeting the Euphrates at Al Qurna (100 km south).¹⁰⁸ The limited water from the Tigris river in Missan is not suitable for human consumption in the form of drinking water without treatment, which is not sufficiently carried out.¹⁰⁹

However, compared to Basra and Dhi Qar, the southern province Missan experienced lower levels of violence with fewer clashes between protestors and security forces, but more instances of inter-militia violence (between Asa'ib Ahl al-Haq and Sadrist movement) that grew amid the chaos of the protests.¹¹⁰ This can be partly explained by Missan's lower economic, and therefore political, stakes compared to the oil centers Basra and Dhi Qar, lowering the intensity of competitive dynamics and creating a more stable political environment. Partly, this is the result of Missan's status as a Sadrist stronghold that holds power at the executive and administrative levels of governance.¹¹¹ The Sadrist movement is a network of religious, political, military and social organizations that provides social and religious support to Iraq's millions of Shia poor. Their relative power and influence kept central government crackdowns in the province to a minimum and balanced tensions between local protestors, provincial authorities, and Iraqi security forces.

Muqtada al-Sadr is one of the most influential religious-political figures in Iraq and plays a crucial role in the country's development, especially given the recent election results.¹¹² The Shia cleric rose to prominence following the U.S. invasion of Iraq in 2003, where he led a popular militia group (the Mahdi army (jaysh al-mahdi)) against U.S.-led forces.¹¹³ His father, Muhammad Sadiq al-Sadr, formed the Sadrist movement in the 1990s, which is a religious Shia movement that is centered around returning to traditional Islamic customs and providing social



and financial relief to Iraq's poor communities.¹¹⁴ Muqtada later inherited the movement after his father was assassinated and has actively promoted an anti-Western agenda, along with Iraq's implementation of a strict Islamic regime.¹¹⁵

Throughout the protests, al-Sadr repositioned himself multiple times, seeking to leverage his role as a supporter, mediator, and spoiler¹¹⁶ to his advantage.¹¹⁷ Initially, al-Sadr formed 'blue hats' to support the protest movement from attacks by government security forces,¹¹⁸ vocally demanding the government to stop the repression, warning that the country would slide into further chaos and conflict.¹¹⁹ A few months later, al-Sadr toned down his criticism and repositioned himself as a mediator between the protestors and government security forces. From January onwards al-Sadr ordered his blue hats to clamp down on the protest movement, standing on the side of the security forces.¹²⁰ These efforts to repress the protest movement led to grave societal backlash that resulted in al-Sadr reasserting his support, with notable influence on protest dynamics in the province.¹²¹ The rejection of the movement nevertheless had lasting impacts and contributed to undermining its legitimacy among many as an autonomous political force.¹²² The shifting position vis-à-vis the protest movement is also driven by internal dynamics and fragmentation of the movement among Sadrist paramilitaries, the clerical networks, and the relations between the Sadrist leadership and its constituencies.¹²³ These dynamics have complicated Sadr's ability to position himself as a leader within Iraq, and Missan province, and resulted in the flip-flop approach towards the protests.

Besides being a Sadrist stronghold, Missan is known as Iraq's 'wild east,' ¹²⁴ insofar that it's home to numerous militia groups and Iranianbacked networks. This resulted in a shift from violence between citizens and government forces to intra-militia violence,¹²⁵ that provided the Sadrist movement an opportunity to act against competing militias.¹²⁶ Missan has a historical record of resistance acting as a central node for Iranian-backed 'special forces' operating in a wider cross-border network and the distribution of arms.¹²⁷ The province thus became a key front in the proxy war between the U.S.-Iraq coalition on the one hand and Iran and its militia forces on the other hand. The latter exploited the provinces' sparsely populated regions and cross-border sanctuaries to train and expand their influence. These militia forces include a mix of foreign-trained insurgent fighters and criminals driven by financial motivations.¹²⁸ While the circumstances have changed, the provinces' historical involvement in war and continued influence of militia groups continue to influence dynamics in the province.¹²⁹

Wasit: Students Take Hold

Water quality in Wasit province has declined over the last three decades due to the draining of the Marshes and pollution of the Tigris River. Although the residents of Wasit have not suffered from cases of mass poisoning like in Basra, ecological poisoning cases have occurred, severely depleting fish stocks and exacerbating conflict in the region.¹³⁰ Groundwater in different areas of Wasit also appears to be unsuitable for human consumption or irrigation if not properly treated.¹³¹ A study of the Al-Bashaar Water Treatment Plant in Wasit shows that even after treatment, the water remained unsuitable for drinking according to Iraqi and World Health Organization (WHO) standards, further illustrating the severity of water stress in Wasit.132

In previous years, water stress in Wasit played a central role in protests, such as in 2018. Demonstrators blamed poor infrastructure and corrupt practices in the central government as the causes for Wasit's water and electricity crises.¹³³ Protests were therefore centred around poor service delivery and infrastructure, although unemploymentwasanothercommonlymentioned grievance of people in Wasit. The governor of Wasit province at the time emphasized the lack of drinkable water, given that entire villages were left without sufficient water resources, leading people to migrate toward other parts of Iraq.¹³⁴

While Wasit province featured less prominently



in the news in October 2019, it has also seen protests and violent crackdowns by government security forces. The protest movement was dominated by youth that engaged in large-scale strikes, sit-ins, protests at public spaces,¹³⁵ and destruction of official buildings.¹³⁶ Universities education directorates were primary and targets, reflecting students' frustration over high levels of unemployment and demand for better job opportunities for graduates. Such drivers of conflict are indirectly related to the dire water situation given that the agricultural sector, the main source of income for locals in Wasit, is heavily dependent on clean and sufficient water resources. The quantity of water allocated to Wasit has been decreasing given the scarcity of resources at the national level. As such, the agriculture sector has suffered, leading to limitations regarding the creation of jobs and further inciting the youth population, who is the most vulnerable.

The entrance of the University of Wasit was set on fire,137 while employees of educational directorates were forced to vacate their offices, resulting in shutdown for several weeks.138 Protests also succeeded in forcing the step down of officials,¹³⁹ but not without the cost of enduring violence by Iraqi security forces.¹⁴⁰ To avert further escalation, provincial authorities set curfews on social gatherings and the provincial police chief reportedly threatened protesters that he would "end the life"¹⁴¹ of anybody who "burns tires or prevents students from education," resulting in widespread controversy and anger among protestors.142 A police officer has been given the death sentence for killing protestors in the province.¹⁴³

Dhi Qar: Hotbed of Youth and Tribal Revolt

The province Dhi Qar saw amongst the highest levels of protest in October 2019, due to its distinct history and current social, economic, and political conditions. Dhi Qar suffers from poor water quality and quantity, with the former relating to the lack of properly functioning infrastructure like sewage networks, lack of regulation, and the dumping of industrial waste into the Tigris

and Euphrates.144 Although Dhi Qar receives the highest water quota in the south of Iraq, this does not fulfil the water demands of the governorate, which in 2018 suffered a drought that affected 90% of fishermen and farmers in the province.¹⁴⁵ Like the other southern provinces, protests in Dhi Qar were therefore triggered by the dire water situation, which exacerbated conflictual dynamics between Iraqi security forces, citizens, and tribes. The province is renowned as an incubator of political movements throughout Iraq's history. During Saddam Hussein's rule, it became the hub for protests including the 1991 Shia uprising that was brutally repressed by Saddam. This sense of revolt again became apparent in the October protests, turning Dhi Qar into the "engine for the protests."¹⁴⁶

Growing urbanization in Dhi Qar has contributed to the breakdown of informal and non-coercive systems of authority and control over youth.147 This increasing urbanization can be attributed to water scarcity, with nine locations (eight rural) being heavily affected by water shortages.148 As people move to cities, they become more distanced from traditional social structures of control that ameliorate conflict in rural areas.¹⁴⁹ This social fragmentation combined with the high levels of poverty and unemployment creates a volatile mix of disenfranchised youth with little to lose, who are taking to the streets. The provincial authorities have few economic and political means for 'off-ramping' frustrations of disillusioned youth and conceding to their demands.¹⁵⁰ Financial resources available to other provinces like Basra - that enabled the employment of youth as a response to the protests - are lacking in Dhi Qar.¹⁵¹ Instead, the government relied on coercive power to quiet the protests resulting in a high rate of casualties and an escalatory cycle of violence.¹⁵² In August of 2020, Prime Minister Nouri al-Maliki asserted that Dhi Qar was dominated by 'youths' acting like 'anarchists' and 'outlaws' and the need for a plan to impose the law.¹⁵³ The government struggled to assert its autonomy vis-à-vis political factions and armed groups and sought control through coercion. It deployed General



Jamil al-Shammari, who was previously sacked from Basra amid protests, to carry out this plan and command the crackdown on the protests. This decision suggested that the government feared the situation in Dhi Qar would become more explosive than in Basra and sent a signal to protestors that the government had reached the limits of its tolerance.¹⁵⁴ The escalation of violence was further exacerbated by the relatively weak civic coordination and the reliance on informal structures rather than formal civil society groups, a wider diversity of tactics and greater incoherence of escalation between protest groups.

Tribes in Dhi Qar also had a huge impact on protest dynamics.¹⁵⁵ The Iraqi security forces struggled to assert control over the protests and armed groups, with armed groups and local tribes holding more coercive capacity. Tribes provided widespread support to protestors against the government and occasionally sought to mediate tensions (including the Badour and Abouda tribes).¹⁵⁶ Tribes contributed to the development of more violent protest strains by crafting protest tactics¹⁵⁷ and blocking military enforcements.¹⁵⁸ The escalation of violence was also the result of the focus on masculine concepts of strength and power, which further reinforced physical confrontation.¹⁵⁹ This support provided protestors with a safe haven that would enable the continuity of their protests despite government crackdowns.¹⁶⁰ The presence and cohesion of tribes was therefore a major reason underlying the choice to move the capital of the protests from Tahrir Square in Baghdad to Nasiriyah in Dhi Qar.¹⁶¹ Tribal retaliatory measures such as the extraction of blood money held authorities back from exercising lethal violence, deeming the potential consequences too high.¹⁶² Kidnappings were also less likely in Basra and Dhi Qar as these often carry greater risk of becoming entangled in complex tribal politics and triggering and escalating into broader conflict.¹⁶³ Tribal leaders have also threatened to take up arms against government forces to demand justice for their slain sons.¹⁶⁴ Distrust in the efficiency and effectiveness of the judicial system that has held few accountable, increases the risk that tribes will resort to force rather than awaiting prosecution.¹⁶⁵ Given the tribes' possession of a significant arsenal of weapons, this risk can have large-scale implications for the security of the entire province.¹⁶⁶ In other words, tribal politics is a key driver of conflict in this context.

3.2.4. Conclusion

Despite water not playing a direct role in provincial-level conflict dynamics, the key drivers of widespread protests, such as poor service provision, faltering infrastructures, unemployment, and corruption, are inherently related to existing water challenges. Poor quantity and quality of water affect sources of income and the socio-economic development of citizens, as well as the provision of clean drinking water and electricity. It brings various issues to light, further enhancing grievances towards the central government through dire health crises, frequent power cuts, and high unemployment rates that heighten the general distrust in the government to manage and allocate water resources in an adequate and equitable way. This ultimately resulted in widespread protests that were often met with a violent response from the government. However, these conflict dynamics differ depending on the provinces' socio-economic power, the organization (or lack thereof) of protest groups, demographic composition, local political and security structures, and the salience of social formations including tribal groups.

The Iraqi government has been unable to transcend the crisis of legitimacy following the (still ongoing) protests erupting in October of 2019. The protests brought simmering frustrations to the surface that have remained there ever since. The fact that protestors stayed on the streets despite the alarming levels of violence has underlined the seriousness and acuteness of the crisis.¹⁶⁷ Comparing the protest movements across south Iraq underlines how geographical borders matter only to the extent that the province-specific realities and dynamics impact the onset and trajectory of protests. As noted, an interesting interprovincial dynamic developed whereby protestors strategically move between



provinces and adapt their strategies depending on specific provincial-level dynamics and its impacts on their security and ability to express demands.

3.3. Inter-Communal Conflict Between Farmers, Herders and Fishermen

Water-related challenges have become a source of conflict at local levels in south Iraq between farmers, herders, and fishermen that depend on these resources to sustain their livelihoods. Decreasing water quantity and quality as a result of, among others, high usage of water in the agricultural sector, pollution and high salinity values, enhances the water stress at the local level. The mutual dependence of different local groups on increasingly scarce resources forces peoples to compete for access to these resources, which may ultimately turn into violent conflict.¹⁶⁸ Violent conflict is especially likely given a sufficient degree of political marginalization, polarization, and non-availability of dispute resolution mechanisms. The south of Iraq has been politically marginalized for decades, with rural communities in the marsh area having especially limited access to state resources.¹⁶⁹ An analysis of 1,793 security incidents for the period January 2016 to September 2020 in the southern provinces of Iraq shows an increasing trend in violent confrontation and conflict due to the loss of livelihoods, including inter-tribal conflicts over natural resources.170

This section examines conflict between rural populations in the south of Iraq,¹⁷⁶ paying special attention to dynamics in the Mesopotamia marsh areas located where the Tigris and Euphrates rivers meet,¹⁷⁷ including the central marshes, the Hammar marshes, and the Al-Hawizeh marshes.¹⁷⁸ While in urban areas water-related conflicts primarily occur between citizens and government authorities, in rural areas conflicts can be observed between (groups of) individuals.¹⁷⁹ Examples of these conflictual dynamics are illustrated in Table 4.¹⁸⁰

3.3.1. Declining access to water resources

The marshland area covering the southern provinces Basra, Dhi Qar, Missan, and Wasit is confronted by the emerging problem of degradation environmental coupled with governance challenges at the local and national levels. This includes dependence on dwindling natural resources, widespread poverty, low levels of human capital, and poor infrastructure development.¹⁸¹ Human activity over the past decades has led to a decline in the size and quality of the ecosystem area, starting with the damming and draining of the marshes during the Iraq-Iran war. This was done by Saddam Hussein in 1991, in response to the uprising against his government, further accusing the Marsh Arabs of betrayal and affiliations with Iran.¹⁸² In this period, the area of the marshes decreased from an estimated 15000-20000 km² to less than 2000 km² in 2003, with the central and Al-

Inter-Communal Conflict Between Farmers, Herders and Fishermen		
Province	Example	
Basra	Migration of livestock owners in Basra to other arable areas has caused friction over resources, with some herders reporting their cattle being shot by community members. ¹⁷¹	
	The regression of the marshes' water during drought season has spurred disputes between two tribes in the Al-Chibayish marshes which is part of Dhi Qar and Basrah provinces in the past. ¹⁷²	
Missan	There are reports of a tribal sheikh in Missan controlling water flows, with local authorities refusing to act against this. ¹⁷³	
	In June of 2021, a violent dispute erupted between two tribes, killing a child and leaving four people wounded. The conflict was carried out with Kalashnikov rifles and started over a loan of \$0,68. ¹⁷⁴	
Dhi Qar	In Dhi Qar province, 20 clan clashes erupted recently due to water scarcity in the year 2018. ¹⁷⁵	

Table 4. Inter-Communal Conflict Between Farmers, Herders and Fishermen



Hamar Marshes vanishing by 97% and turning into salt-crusted land.¹⁸³ The construction of dams on the Tigris and the Euphrates for irrigation, flood control, and hydroelectric power generation and drainage, canal construction projects, and pollution have further reduced the quantity and quality of water flowing into Iraq's main rivers.¹⁸⁴ Climate change adds additional pressure on resource availability, with higher temperatures leading to more evaporation and erratic rainfall patterns causing widespread drought as well as flooding, further contributing to the salinization of available water resources.¹⁸⁵

Large segments of the population in the south of Iraq are dependent on access to clean water to sustain their livelihoods¹⁸⁶. The combination of declining quantity and quality of water and the government's inability to resolve these pressing issues (despite recent growing efforts¹⁸⁷) has made it hard for many to make ends meet.¹⁸⁸ Drought and dust storms are becoming more frequent and intense, affecting 39% of Iraq's territory while salinization threatens agricultural production on an estimated 54% of Iraq's land.¹⁸⁹ The Ministry of Water Resources has previously announced that current water availability is sufficient to meet only a portion of Iraq's agricultural needs, with farmers having to cut down production to a fraction of their regular rates.¹⁹⁰ This led the ministry to ban the cultivation of water-intensive crops including rice, corn, sesame, millet, and sunflowers in order to preserve water resources, seriously limiting farmers' options for income especially in the south where many depend on rice cultivation.¹⁹¹ The ban has resulted in widespread protests in southern Iraq, with some farmers blocking the embankment of the Euphrates river to generate more water for their crops.

The declining quantity and quality of water also undermine cattle and buffaloes' health and milk production, causing an estimated 30 percent to die and or become invaluable as a source of income and sold off for slaughter.¹⁹² The value of these animals is also declining from an estimated \$5,000 to \$1,500 a head,¹⁹³ a major blow to the thousands of families that depend on livestock for a living, and are now forced to purchase water to feed livestock. Fishermen have also seen rapid declines in catch, with already falling 60 percent between 1981 and 2001,¹⁹⁴ that continue to be negatively impacted by today's unprecedented high levels of salinization and the spread of diseases.¹⁹⁵

3.3.2. Coping mechanisms and their impacts

To cope with water stress, people may resort to illegal water tapping, migration, or joining criminal groups that can have a direct or indirect impact on others' water situation and increase the risk of (violent) conflict.¹⁹⁶ This is especially likely given that these socio-economic groups remain politically marginalized and in turn have less access to formal conflict resolution mechanisms. This is also likely due to these movements disrupting informal agreements on land tenure and the governance of shared resources that apply across provincial borders.¹⁹⁷ While geographical borders between provinces and formal agreements on shared quota impact the relations between provincial authorities and urban populations, this is different in rural areas. In these regions, the government has a more limited presence and, instead, customary agreements on conduct carry more sway, making geographical borders a secondary issue.

Illegal access to water resources

The agricultural, farming, and fishing industries in southern rural Iraq tend to be small scale with owners having limited financial means to invest in modern systems that use less water and/or can purify polluted and saline water.¹⁹⁸ To overcome this barrier, people may resort to illegally tapping water, diverting river flows,¹⁹⁹ and/or digging wells to access groundwater.²⁰⁰

In response to the government's ban on waterintensive crops such as rice and corn, protesting farmers have blocked parts of the river to accumulate water for crop irrigation, enabling \water shortages.²⁰¹ Many citizens perceived the ban as an ill-informed intervention that instead should have been geared towards better management of water through modernizing infrastructure and irrigation systems,



supporting the shift towards efficient irrigation techniques, as well as creating an in-depth plan for dealing with scarcity in future instances.²⁰²

Tribal groups have also sought access to water resources by illegally encroaching on rivers through the construction of alternative pathways and corridors to safeguard their constituencies, a large part of which depend on agriculture.²⁰³ The practice of drilling wells to get access to groundwater has also been observed in Dhi Qar and Missan. This is often the last resort option given the generally poor quality of groundwater, which is barely suitable for animal consumption, let alone human consumption.²⁰⁴ While these practices offer viable short-term solutions, they can also have detrimental long-term impacts on the environment by disrupting the natural flow of water and risking over-extraction. This in turn leads to further deterioration of arable land, putting additional stress on precisely the people that have little alternative ways to access water.²⁰⁵ Moreover, not everyone benefits or is financially able to undertake such practices, reinforcing local inequalities and grievances amongst inhabitants. It can also undermine others' access to water resources and worsen relations between actors that have escalated to violent conflict in the past.²⁰⁶ In the Al-Chibayish marshes that are located in Dhi Qar and Basra provinces, for example, tribes have fought over the illegal encroachments on waterways that contributed to the regression of the marshes.²⁰⁷ Similar waterrelated challenges are also intensifying tribal disputes and conflicts in Missan province.²⁰⁸

Migration

Persons may also be forced to abandon their lands and migrate to other areas with better access to water and fertile land or migrate to urban areas.²⁰⁹ As of January 2019, water shortages are estimated to have displaced 5,347 families across the four provinces of Missan, Muthanna, Dhi-Qar and Basra.²¹⁰ While some people never return and seek opportunities elsewhere, others return seasonally depending on the availability of water resources.²¹¹ The arrival of new people to an area puts additional pressure on the available resources and the people that depend on them. When the situation becomes so dire that livelihoods depend on it, access may become a source of competition and potentially (violent) conflict.²¹²

Unlike water-induced migration, transhumance routes and the movement of pastoralists have evolved over centuries, allowing herders and sedentary farmers to develop a cooperative relationship whereby informal agreements are made on the use of land and resources.²¹³ This form of cooperation is put under pressure as water shortage forces both farmers and herders to migrate to more water rich areas along routes that often extend beyond traditional and agreed-upon routes. This heightens the risk of encroachment on others' lands that can cause damage to crop and livestock and incite conflict. In Missan province, farmers have complained about encroachments on their land that cause damage to their crops.²¹⁴ Herders in the Al-Chebayesh marshes²¹⁵ located in the southern part of Dhi Qar and Basra provinces have also engaged in disputes over access to land, after being forced to move to deeper parts of the marshes where salinity levels are lower.²¹⁶ Disputes have also transpired between displaced persons from the marshes seeking food and water for their buffaloes and settled populations, whereby settled populations accuse new arrivals of not having grazing rights.²¹⁷ Migration of livestock owners in Basra to other arable areas has similarly caused friction over resources, with some herders reporting their cattle being shot by community members.²¹⁸ The tribes of al-Fartous and al-Bu Ali in southern Iraq have also fought over land with deadly consequences.²¹⁹ The change in mobility patterns also means that traditional conflict resolution mechanisms and agreements over access to shared resources are absent, undermining the ability to mitigate conflict before it escalates. It is therefore not surprising that disputes have frequently escalated to armed confrontation.²²⁰ The return of persons that have migrated temporarily is also marred with challenges as individuals attempt to reclaim the land that may not be registered or recognized by others as theirs.²²¹



The risk of conflict escalation in the rural areas of southern Iraq are further aggravated by a general mistrust among populations in the Marshland area,²²² and the general absence of political representation and access to 'formal' means of settling disputes. This leaves actors with limited alternatives to secure their interests and livelihoods than through coercion.

Involvement in criminal activities

As water resources become scarcer and the economic impacts thereof increase, migration is likely to become a more widely employed coping mechanism. Migration may not be a viable option for some, however, given the cost of moving and the risk that they will be unable to secure a reliable source of income in a new area. People unable to provide for their family amid driedup and polluted water sources have resorted to seeking other sources of income that may involve criminal activities. These criminal activities do not directly relate to water resources; rather, they are a way of coping with decreasing financial resources, which is in turn induced by water scarcity in a specific area. Examples include drug trading, joining militia groups or arms trafficking.²²³ While the recourse to illicit sources of income appears less prevalent in the rural areas of Iraq, compared to illegal water tapping and migration, it has become prevalent in the cities. Engagement in illicit activities in the rural areas may increase in the future as the water situation becomes more dire and illegal tapping of water or migration become futile.

3.3.3. Conclusion

The possibility for conflict over water resources and the importance of agreed mechanisms to govern access highlight the potential role for the government to mitigate further onset and escalation of conflict in rural areas.²²⁴ The historical neglect and marginalization of rural populations, especially in the Marshes, has not only contributed to the deterioration of the ecosystem but also created conditions for conflict that can have an impact on the whole of Iraq.²²⁵ As water-related conflict moves to more local levels and geographical borders become less prominent, socio-political and economic factors increasingly drive disputes over scarce water resources. Groups such as farmers or herders choose to take action against the declining access to water resources, according to their different needs and personal situations. This results in various coping mechanisms; some, like migration, alleviate the adverse impacts of the dire water situation, while others, like illegal water tapping, contribute to added water stress.

3.4. Decline of Ethnic Identity and Religion as Core Drivers of Conflict

The Iraq political and security landscape is marked by a complex interplay between ethnoreligious sectarianism and nationalism that has turned the political elite and the population against one another. As the political, economic, and security situation in Iraq continues to decline, citizens have put increasing emphasis on shared national identity and grievances, rejecting the sectarian politics that has gripped the country for decades. This trend, coupled with Iraq's dire water situation, has threatened the political structure and the sectarian identity based on which the political elite has sought legitimacy. Today, sectarianism in south Iraq primarily influences relations between the political elite within and across provinces and has a relatively limited impact on conflict between citizens. Confrontations between citizens instead centre around differing views on governance failures and the need for systemic change. This chapter examines this dynamic and the declining role of ethnic and religious identity as a driver of conflict in relation to water, despite its continued institutionalization and political fervor, within and across the provinces of southern Iraq.

3.4.1. Sectarian apportionment loses legitimacy

Ethnic and religious identity has stood at the forefront of analysis on conflict and instability in Iraq for the past decades, marking the boundaries between segments of the population



and turning them against each other.²²⁶ Analysis of current water-related challenges in Iraq and related protests in south Iraq mark a shift in the role of ethnic and religious identity as a conflict catalyst. While Iraq has been marred by protests since its transition to democracy in 2005,²²⁷ the protest movement in 2019 is notable for rejecting the ethno-religious sectarian narrative.²²⁸ The democratic system in Iraq that was formed in the name of sectarian apportionment (known as the Muhasasa Ta'ifia) has lost its legitimacy and hold over the population in light of the system's failure to meet citizens expectations, including on the provision of basic services such as clean running water and reliable electricity supplies. The purpose of the Muhasasa Ta'ifia system is to guarantee the representation of the countries ethno-religious communities and their interests. Despite its laudable intent, however, this powersharing system has had perverse impacts by enabling the ruling elite to claim and justify their position based on identity, privileging group representation over the individual rights of citizens.²²⁹ Inclusiveness on sectarian grounds has reduced the incentive to develop political participation that appeals to voters based on capacity rather than connections, combat patronage network, nepotism, corruption, and strengthen accountability.²³⁰ The past few years have seen citizens outwardly reject the institutionalized sectarianism and powersharing arrangement. First through the ballot box and later through widespread and sustained protests, mobilizing around the notion of shared Iraqi identity, secular nationalism, and citizenship.²³¹ Polling data has suggested that most Iraqi citizens see themselves as an Iraqi citizen above and beyond their religious and/or ethnic background and geographic location.232

3.4.2. Protests and demands for civicness and a homeland

A thriving bottom-up movement has developed a new narrative that builds on shared grievances and national identity in light of Iraq's dire water situation.²³³ Water challenges served as a catalyst for widespread protests demanding the toppling of the system. This related to the notion

of 'madaniyya' defined as 'civicness', which stood central to citizens' demand for greater economic opportunity and social justice and a post-Islamic political system, partly motivated by the trauma of Iraq's violent sectarian history. Three trends underline the declining relevance of ethno-religious sectarianism.²³⁴ First, the fact that the majority Shia in the south took to the streets to revolt against the Shia political class that was meant to represent their interests. Citizens conducted targeted attacks on offices of political parties and militia of Shia political parties, by looting, damaging, and setting them on fire, especially as anger increased after the violent response by government security forces (leading to many casualties).²³⁵ This signaled an unprecedented rupture in the relations between the political elite and their core constituency in the Shia-majority south of Iraq. Citizens demonstrated that they are no longer willing to accept political rule based on the argument that politicians protect Shia from 'their enemies,' whether they are Iraqi Kurds, Sunni, or foreign powers. Instead, the Shia political rule is perceived as equally complicit in today's dire socio-political, economic, environmental, and security situation in south Iraq regardless of the sectarian label. Part of this shift can be attributed to the recent elimination of existential threats to the Shia population following the fall of the Saddam regime in 2003, initial wariness by the Sunni regional powers to accept increased Shia control in the government, and the defeat of the Islamic State of Iraq and Syria (ISIS) terrorist group. Second, the protestors' narrative placed national identity ahead of ethnic and religious identity, carrying the Iraqi flag and defying other ethnic and religious symbols, with protestors reiterating the slogan 'nurid watan' translated as 'we want a homeland.'²³⁶ Citizens in the north of Iraq widely expressed support and sympathy for the protest movement in the southern provinces, pointing to their shared grievances and demand for change.²³⁷ While the upstream northern Sunni and Kurdish majority provinces have better access to water, the protests in the south targeted the Iraqi central government and provincial authorities, blaming them for



poor water governance and management rather than upstream behavior by Iraq's neighboring countries. The fact that the northern provinces were less involved in the protests has less to do with the sectarian split between Shia, Sunni, and Kurdish citizens than with the fact that the north was still recovering from ISIS presence and conflict. Many feared that protestors would be viewed by the government as ISIS affiliates and be punished violently. Tribes across Iraq are also downplaying their ethno-sectarian differences and taking on a more unified approach, as the protests linger.²³⁸ A third trend downplaying the relevance of ethno-sectarianism is the intra-Shia rift²³⁹, or the confrontations between the Shia Islamic-led government and a predominantly Shia population. The protest movement was supported (albeit inconsistently) by Shia religious leaders Grand Ayatollah Ali al-Sistani and Shia Cleric Muqtada al-Sadr, who have regularly led citizen protests against government corruption and mismanagement, including by Shia politicians. Protests also underlined the intra-sectarian competition between actors representing the same ethnoreligious identity for influence and power. Sadr's sudden turn against protestors, after providing initial public support, undermined citizens' trust and further strengthened the sentiment that citizens are victims of a larger political game for power and influence.

3.4.3. Issue politics and water-related challenges

The protests showed a trend away from 'identity politics' towards 'issue politics'²⁴⁰ that addressed challenges that are both directly and indirectly related to water. Few protests only focused on direct water-related challenges including poor water infrastructure, access to water resources, and water quality. Water challenges nonetheless became a trigger that pushed people to the streets where wide-ranging demands were bundled together until water became 'one of' the central issues. While the protests in Basra in 2018 were closely related to the dire water situation, as protests progressed,

challenges related to unemployment, corruption, and Iranian interference also became key demands. In other provinces, direct waterrelated demands were also overshadowed by broader socio-economic and political issues. In Dhi Qar, for example, citizen protests against the shortage of potable water on which they depend amid the dire water situation, received far less attention.²⁴¹ The main driver of protests, therefore, are issues indirectly related to water and concern deeper and systemic issues in Iraq such as lack of basic services (especially shortage of electricity), unemployment, and corruption.

3.4.4. A new civil society movement

The move away from ethno-sectarian identities as a driving force of instability is also evident in the new civil society movement that evolved from the protests.²⁴² The protest movement emerged spontaneously, ad-hoc, and without a clear leader, and was supported by divergent ethno-sectarian communities.²⁴³ The traditional and well-established civil society networks and organizations played only a minimal role at the start of the protests. As the protests evolved, an interesting split became evident between traditional civil society organizations and networks of activists that controlled the movement and were united by their shared values and interests. The old civil society groups favored advocacy and capacity building while the new activists favored protests and voicing their demands for reform, operating more independently from the state.²⁴⁴ Overt ime, a symbiotic relationship developed between the old and new movements. While the protests were initiated by the youth (often educated and unemployed), as the protests unfolded, civil society organizations and persons with former activist experience began to play a coordinating to previous movements, role. Contrary coordination was not the driving force of the protests but instead slowly evolved out of the initial protests as citizens started to merge their efforts both within and across provinces. Together the old and new protestors formed a new kind of civil society that consisted of a group



of loosely connected individuals with shared grievances. This role of civil society was generally perceived as constructive by the population, including their role as providers of food, shelter, and medical care.²⁴⁵ The role of civil society and the cohesion of the protests differed per province. While protests in Basra were partly led by civil society groups, in Dhi Qar, civil society played a smaller role and protests were mainly formed from ad hoc and loose coalitions of students.

A major challenge to the success of the protest movement stemmed from the incongruity revolutionary and reformatory between protestors. Their divergent demands and approaches to achieve change presented a barrier to uniting efforts to harness change that would satisfy the population.²⁴⁶ While the revolutionary protestors called for the complete overhaul of the government and its institutions, others developed a more pragmatic approach.²⁴⁷ These reformatory protestors focused on the facets of existing institutions that can be harnessed for change through more involvement in political processes (such as voting in elections) and the appointment of technocrats.²⁴⁸ They did not call for the dismantling of government institutions in their entirety.²⁴⁹ Instead, they worked within the red lines established by the government counter-protest actors, to maintain and maneuver space that would enable them to negotiate entry into the political system.²⁵⁰

3.4.5. Entrenched sectarianism in governing power structures

The issue-based protests that spread across Iraq powerfully illustrated the populations' ability to unite across ethnic and religious divides. Transforming this sense of unity and momentum into structural change to Iraq's power-sharing system has proven more difficult, however. Despite not reflecting protestors' sentiments, sectarianism remains a reality in Iraq at the institutional level, entrenched in political power structures and the broader formal and informal power structures that govern the state.²⁵¹ Regardless of the incentives of the power-sharing system in the constitution, it has worked in practice to further validate sectarian identity as a political category.²⁵² This has divided identity groups rather than bring them together and challenged the ability for political action outside of sectarian confines.²⁵³ To many elites across sectarian divides, a place in government is perceived as an entitlement in order to ensure they can represent the interests of their ethnoreligious community.²⁵⁴ These power-sharing arrangements could eventually equate to an inequitable distribution of natural resources along sectarian lines, with the Iraqi distribution scheme being gripped by intra-governmental competition over oil, water, and electricity.²⁵⁵

The entrenchment of this logic has meant that political elites have only paid lip service²⁵⁶ to popular demands by co-opting the narrative of the protest movement to redefine their own identity and legitimacy.²⁵⁷ Co-opting the narrative of protestors represents a shift in campaign tactics more so than a structural change since politicians' claims have so far led to limited change and implementation of reform. Sectarianism has therefore created a "closed feedback mechanism" through which the same political elites remain in politics, holding public office despite popular criticism of their performance.²⁵⁸ Conflicting parties continue to compete for resources, status, and power.²⁵⁹ Thus, while the character of politics has changed, its nature has not.²⁶⁰

3.4.6. Conclusion

The dwindling legitimacy of the ethno-sectarian power-sharing system and the political elites' inability to deploy sectarianism to rally popular support have forced them to increasingly rely on covert and overt coercion and exercise of power. Defending the existing system and their positions in it has become increasingly difficult, with protestors showing perseverance, despite the high levels of violence they have incurred by both state and non-state actors.²⁶¹ Decreasing legitimacy of the current system also weakens the central government's ability to effectively address a water crisis, as trust in



governmental action is low, ultimately resulting in governmental policies of limited impact.

3.5.(Re)emergence of Tribal Structures and Influence

Tribes and tribalism are key to understanding Iraq's conflict landscape, with long historical roots and a continuously developing dynamic of coordination and confrontation. The boundaries between tribal networks in Iraq do not overlay with geographical borders between provinces, resulting in complex cross-border dynamics that also impact water-related challenges. Tribes' powerful position in Iraq's southern provinces²⁶² makes tribal influence and decisionmaking key for determining how water-related challenges will play out in southern Iraq in the next years.²⁶³ To this end, this section examines tribalism and tribe-state relations in the context of water-related conflicts in and between provinces. Table 5 includes an overview of such conflictual dynamics.

Tribalism in Iraq has a long history and remains a defining characteristic of Iraqi society with 75% of the population belonging to one of Iraq's 150 tribes (see Figure 2).²⁶⁴

A tribe often includes members with different ethnic and religious backgrounds (including Shia and Sunni Muslims) and they differ in size, with the largest encompassing hundreds of thousands and the smallest just several thousand.²⁷⁰ Tribes may downplay their sectarian differences to adopt a more unified response to growing security issues in the country.²⁷¹ In Missan province, for instance, approximately two-thirds of the Province's population are affiliated with a tribe including from varying branches of the Al-Sawa'id, Albu-Muhammad, Bani Lam, Al-Sarai, Al-Bahadil, Albu Darraj, Al-Azeirij, Ka'ab, Kinana, Banu Malik, Al-Sudan, Ubada, Khafaja, Tameem, Al-Maryan, Al-Sada, and Al-Sabi'a Al-Manda'iyya groups.²⁷² There is already a notable reverse in the trend of shedding tribal identities as citizens revert to their tribes for support and power.²⁷³ In several parts of Iraq, tribes already represent the most powerful actors that are positioned to influence local conflict and peace dynamics.²⁷⁴ As the effectiveness and legitimacy of institutions across Iraq falter, these centuriesold tribal power structures and dynamics are likely to gain more prominence. The October 2019 protests have contributed to this trend, as the legitimacy of the central government and provincial authorities reached an all-time low.

Tribal Conflicts over Water Resources		
Province	Example	
Basra	The regression of the marshes' water during drought season has spurred disputes between two tribes in the Al-Chibayish marshes which is part of Dhi Qar and Basra provinces. ²⁶⁵	
Missan	In Missan, water-related challenges are intensifying tribal conflicts and instability. Recent water-related disputes between armed Huraish and Marian tribes resulted in the death of at least twenty-five people. ²⁶⁶	
	A tribal sheikh in the northern areas of Missan province controlling the water flow of the Tigris River to irrigate his farms. While top officials are aware of his acts of encroachment, they have not successfully intervened on behalf of the central government to end this behavior and its impacts on conflict with neighboring citizens. ²⁶⁷	
	In Dhi Qar province, 20 clan clashes erupted recently due to water scarcity in the year 2018. ²⁶⁸	
Dhi Qar	Conflict arises between two tribes over water quotas, leading to two deaths and eight injuries in Suq Al-Shoyokh, Dhi-Qar, Iraq in 2017. ²⁶⁹	

Table 5. Tribal Conflicts over Water Resources





Figure 2. Overview of Tribes in Iraq²⁷⁵

3.5.1. Tribal and State Relations

The influence of tribes in Iraq has expanded and contracted over the years, as tribes adapt and evolve in response to the changing political, social, and economic circumstances. Tribal affiliation increasingly influences daily life with many Iraqi citizens resorting to tribes for security, conflict resolution and mediation, and the management of resources (including water resources).²⁷⁶ The tribe and the state have both distinct and overlapping functions in Iraqi society²⁷⁷ that may be complementary at times and contradictory in others. There are formal and informal cooperation and integration between state law and tribal law with the latter often functioning as a first responder or filling gaps

that are left unaddressed by the state.²⁷⁸ Tribal and state relations in Iraq are evident across three fields: justice and dispute resolution, land tenure and resource governance, and politics (national elections), as outlined in the next sections.

Justice and Dispute Resolution

Tribes have an important role in Iraq as citizens often turn to tribal entities to seek justice and settle disputes.²⁷⁹ The state's recognition of the importance of tribes is evident through the existence of the Directorate of Tribal Affairs in the Ministry of Interior that has branches in every Iraqi province and offices within the Ministry of Justice. The Directorate deals directly with tribal sheikhs and includes a Committee for Tribal Conflict Resolution (Lajnat Fadd Nizā'āt al-'Ashā'iriyya).²⁸⁰ It has been involved



in several legislative proposals related to tribal customary law to reduce violence and provide the Iraqi government with better resources to address security threats to public order.²⁸¹ Article 45(2) of the Iraqi constitution recognizes the role that Iraqi tribes and clans can play in 'developing society' but stops short of formally and explicitly recognizing (the entirety of) tribal justice systems by forbidding tribal customary law and justice mechanisms that run contrary to Iraqi law. ²⁸² For example, tribal laws that undermine human rights, such as giving away female relatives as compensation or conducting honor killings.²⁸³ In this context, a covenant was signed in October 2021 by more than 40 tribal leaders to support efforts to harmonize tribal customs and practices with Iraqi state law, including by amending tribal customs and ending practices such as revenge killings and retaliation.²⁸⁴ Several parliamentarians, representatives of the security sector, and local networks joined the event in show of support.

In practice, tribal and formal state law and systems coexist²⁸⁵ with senior tribal leaders often interacting with state security actors following the occurrence of a crime to retain order and stability and de-escalate tensions.²⁸⁶ Tribal justice practiced outside of court systems and tribal conciliation can also impact formal sentences and enable accommodation, reduction of sentences, or the termination of legal proceedings.²⁸⁷ Tribal leaders may even contact relevant state justice systems if they are convinced that the convicted is innocent and deserves to be freed.²⁸⁸ They also communicate with the state judicial system to provide updates on disputes resolved through tribal mechanisms.²⁸⁹ When tensions and insecurity mount, local authorities may co-opt tribes to intervene on their behalf. This can be because security forces require tribes' connections and greater influence in the areas and/or to compensate for the absence of local policemen. Wasit province, for example, partly relies on tribal entities to address gaps in security provision and strengthen security in the province. While this kind of collaboration can be effective and necessary in some cases, it has also resulted in a patchwork of tribalpolitical allegiances that further complicate and fragment approaches to security and justice in the country.²⁹⁰ This is especially true when one tribe and its members are prioritized in formal processes and offered positions in the government or given a stake in projects. These forms of collaboration might solve one issue but also ignite another by fueling (violent) competition between prioritized and sidelined tribes.²⁹¹

In terms of water disputes, tribes generally prefer to not fight over water and function as mediating actors that tend to resort to other traditional conflict resolution mechanisms that deter the escalation of conflict. In many instances, they have served as instruments of cooperation, brokering informal water-sharing agreements between communities.²⁹² While inter and intra-tribal disputes present a security threat, in several provinces tribal forces are also mobilizing to "ensure the arrival of the water allocation agreed upon by the provinces".²⁹³

Land Tenure and Resource Governance

Land-related problems in the rural areas of Iraq have frequently resulted in conflict over claims between individuals and groups that are likely to increase as water and arable land become scarcer.²⁹⁴ Understanding these conflicts require an assessment of how land is governed and the complex interplay of laws and actors involved. The governing structure of land rights in Iraq is complex²⁹⁵ and defined by a certain degree of 'legal pluralism' whereby current state laws, customary (tribal) laws, and Islamic religious ideology influence how land rights are practiced.²⁹⁶ While the statutory land system legally covers Iraq's territory,²⁹⁷ the centralized nature of the system combined with the poor presence of the state institutions in rural areas make enforcement difficult. In marginalized areas tribes therefore have a substantial impact on the governance of land where they have exercised customary land ownership rights (called 'dirah') for decades.²⁹⁸ When conflicts erupt, tribal leaders gather to settle the dispute, with their verdict frequently overriding formal state laws.299



The Tribal Disputes Act drawn up by the British in 1916 authorized tribal law to rule in tribal areas, giving sheikhs judicial control over their tribesmen³⁰⁰ while state law primarily applied in Baghdad.³⁰¹ The British realized the power and influence of tribes and granted them legal powers that effectively made them feudal landlords,³⁰² consequently guaranteeing the security of ownership over the lands they claimed to possess.303 Tribal sheikhs therefore controlled these areas by virtue of the powers granted to them by the British authorities and not by coercion.³⁰⁴ Tribal leaders were able to register large portions of land under their names, bypassing the individual rights of tribesmen.³⁰⁵ This resulted in rural areas of Iraq laying in the hands of a few powerful sheikhs that held power over the rural communities³⁰⁶ and engaged in exploitative tenancy structures, according to the tribal system.³⁰⁷ Conflict over land therefore involved competition between individual claims over land and claims pursued by tribes, often based on historical claims.³⁰⁸ Local militias also became involved in the service of protecting specific tribal groups, further heightening the risk of violence.³⁰⁹ After the U.S. invasion of Iraq in 2003, customary tribal laws again gained in importance as state institutions fell apart.³¹⁰ Today's continued weak state presence in the countries' peripheral areas and citizens' disillusionment with the central government signifies that tribal laws continue to hold sway. The expansion of falsified land and property documents further contributes to this dynamic.³¹¹

National Elections

Tribes also play a salient role during national elections,³¹² with politicians historically utilizing tribal networks as a mobilizing force to acquire votes. This relationship can be seen as a 'marriage of convenience', in which tribal leaders ensure votes by their tribal members and in return the candidate party provides jobs and services.³¹³ The political party often has the upper hand given its ability to manipulate the list-based voting system and divert state funds in exchange for tribal cooperation, making tribes less of an equal partner.³¹⁴ There is a shift occurring,

however, with political leaders notably absent from large tribal gatherings and celebrations and limited competition between tribal leaders to win tribal support through organizing feasts or distributing gifts. Rather than diminished tribal influence, however, this shift reflects tribes' move away from being a mobilizing force serving the interests of a political party to positioning themselves as independent political actors and representatives of the people.³¹⁵ This shift can be explained by two factors. The first is the 'October Effect' following the October 2019 protests that made many tribes wary of being perceived as a close ally to the country's political figures held responsible for the brutal crackdown of demonstrations.³¹⁶ Second, the establishment of a new election law that favors local candidates by eliminating the list-based voting, which opens more space for tribal leaders to assert themselves in the political dimension and enforce their own agendas, and step away from previous compliance to leading parties.³¹⁷

3.5.2. Confrontation with the State³¹⁸

"The (tribal) militias have become synonymous to security forces and the tribes are now equivalent to the judicial authorities."³¹⁹

The population's (re)turn towards their tribal networks has increasingly empowered tribes to engage in social regulation and legal governance.³²⁰ Despite the state's restrictions on customary tribal law, it often holds more power on the ground, especially in the poorer more marginalized regions of southern Iraq. Where government institutions leave gaps and/or tribes do not trust the Iraqi government, the police, or the army,³²¹ citizens rely on their tribe to resolve conflicts and ascertain appropriate punishment and financial compensation for damages or losses.³²² The support for tribal practices among the population and its ability to overtake formal justice systems and procedures has in many cases resulted in de facto judicial autonomy.323 While there is a collaboration with the state on many fronts, the differing fundamentals underlying tribe and state views on justice and



responsibility also lead to confrontation.³²⁴

Tribal justice is based on reciprocity and compensation that often contradicts Iraqi state law on human rights. In the case of water-related conflicts, this is most evident in the practice of forced displacement.³²⁵ On the one hand, tribes often function as a social support network to internally displaced persons and migrants moving within and across provinces.³²⁶ There has been substantial movement from Dhi Qar to al-Zubair district in Basra due to the presence of tribes from Dhi Qar that have lived in the area since the 1980s after fleeing prosecution. Tribes utilize their extensive networks across provinces to recruit agricultural workers and their families that are willing to move. In exchange for a portion of their produce, tribes provide these workers with a stable source of income and often also include housing and other support to encourage longer-term stays.³²⁷ On the other hand, tribalism contributes to forced displacement through practices of 'jalwa' as a conflict resolution mechanism, which stipulates that the perpetrator and his/her family must leave the community when unable to settle the dispute, for a period spanning from months to years.³²⁸

The second confrontation between tribal and state law stems from their perspectives on responsibility. While collective responsibility is a core precept of tribal law, Iraqi law enshrines the principle of individual responsibility. This contradiction is evident in the practice of degge 'ashairiyye (lit. dakka 'asha'iriyya) referring to the spraying of bullets on houses of wanted tribesmen during a tribal feud to force the clan of the enemy to depart from the area.³²⁹ While the state has condemned the practice³³⁰, curbing tribal dispute mechanisms has proven difficult. The state lacks the means, authority, and legitimacy to counter these practices and enforce its views on the rule of law.³³¹ The government may seek to appease tribes by responding to their demands, but this is no guarantee for longterm support. Tribes often shift allegiances depending on circumstances to achieve their objectives, as said "you can never buy tribal groupings," "they're for rent."³³² This is partly because tribes may be covered by government parties that bequeath them with powers that the judiciary is unable to challenge, especially when judges are threatened by tribal groups.³³³

In some areas, tribal sheikhs holding more power than government authorities may play a role in coordinating mobilization against the government. Tribal leaders have supported uprisings against the government and provincial authorities in Basra, Dhi Qar, and Missan.³³⁴ In Basra, for example, armed tribe members have blocked access to oil companies to demand jobs for Basra's citizens, a key demand repeated in the October 2019 protests.³³⁵ Activists threatened by state security forces or armed groups also draw on their allegiance to a tribal network to intervene on their behalf.³³⁶ The government's efforts to confront tribal conflicts are not only impeded by the lack of resources but also the overlapping tribal networks within the political and security forces, making the latter reluctant to intervene in tribal conflicts.³³⁷ This is further complicated by the fact that the influence of tribal networks is no longer confined to rural areas. Population growth, migration, and increasing urbanization have brought tribal influence into the cities, enabling them to expand their networks of power in areas traditionally controlled by the state.338 This trend has popularized a distinction between 'traditional sheikhs' and 'new sheikhs.' Traditional sheikhs refer to the revered leaders of a tribe that have an ancestorial claim to sheikhdom, while new sheikhs refer to men who have become leaders without a bloodline pedigree. These new sheikhs often come to power amid political or security turmoil or due to strong political or business connections and are often deployed as a pejorative term for corrupt leaders.³³⁹

These parallel governance structures and the empowerment of tribal entities and networks pose challenges for the implementation of a coherent and effective water governance strategy within and across Iraq's southern provinces. Given the historical absence of effective governmental intervention in the south, tribes



have taken matters into their own hands to establish water governance mechanisms in their regions.³⁴⁰ Sheikhs belonging to different tribes negotiate with one other over water allocation, while also setting up meetings to resolve water disputes. Even when the government introduces measures to mitigate these issues, implementation fails as local populations refuse to adhere. This could be caused by the largescale distrust of citizens in the formal legal system of Iraq.³⁴¹ As a result, governmental attempts at implementing an effective water governance strategy might be undermined by pre-existing locally agreed upon agreements, governed by tribes. The parallel governance structures also challenge the government's ability to curb tribal conflict and illicit practices, as elaborated in the next section.³⁴²

3.5.3. The Tribal & Criminal Nexus

Iraq has a thriving criminal market including the trafficking and smuggling of illicit goods, such as drugs, weapons, and oil resources that have expanded since the United States' invasion of Iraq in 2003.³⁴³ Iraq ranks among the top ten countries with the highest criminality scores combined with low levels of resilience, according to the Global Organized Crime Index.344 Weapons from decades of conflict remain in circulation, enabled by a combination of continued insecurity, porous borders, weak border security, expanding tribal and militia groups, and corruption among government officials. Weapons diversion and the proliferation of weapons in civilian markets intended for government security forces and law enforcement adds to this trend. An estimated third of the Iraqi citizens, including Iraqi Kurdish citizens, possess firearms.³⁴⁵ Basra province in the south of Iraq has become a hub for drug trafficking within the country and abroad.³⁴⁶

These criminal networks operate across borders and are often organized along tribal lines.³⁴⁷ As tribes gain power and influence, they have also become implicated in the smuggling of illicit resources such as arms and narcotics.³⁴⁸ This follows from a trend already observed during

the days of President Saddam Hussein, when tribes were engaged in the smuggling of oil.³⁴⁹ Criminal groups and tribal networks often have ties to state-embedded actors that may be from the same tribe and support its efforts, hindering concrete efforts to combat criminal activity. The integration of tribal and criminal networks has made it more difficult and dangerous for provincial authorities, and the central Iraqi government, to address. Security officers have been threatened by criminal groups, including tribes whose members are affiliated with gangs, in the past.³⁵⁰ Kidnappings for instance may be used to settle disputes and has in ways become a coercive extension of business negotiations, especially in the trade of illicit goods.³⁵¹ As the economic situation in Iraq deteriorates, engagement in the trade of illicit goods may become a more attractive and viable option, especially for tribal leaders that seek support from their constituencies in exchange for providing financial resources.

3.5.4. Competition over Water Resources³⁵²

In south Iraq, water scarcity has instigated tribal conflicts and contributed to pushing simmering tensions between tribes into open confrontation. It is estimated that tribal disputes caused by water scarcity make up 10 % of ongoing disputes that are likely to increase as water becomes scarcer in the future.³⁵³ The provinces Wasit and Dhi Qar have issued warnings about the negative impacts of the water crisis and competition over scarce resources on tribal conflict.354 In Dhi Qar, water scarcity has contributed to the recent eruption of 20 clan clashes.³⁵⁵ Most of these disputes are fought over agricultural land water quotas, resulting in the government's inability to curb these tribal differences over water, especially given that most tribes control the flow of water in southern Iraq.³⁵⁶ Significant overlap can be observed between tribal conflicts and the clashes amongst socio-economic groups that were described earlier in this paper, given that most tribal constituents are farmers and herders.

Growing water scarcity and governance failures,



including the poor provision of basic services, have provided an impetus for further tribal conflicts over water resources.³⁵⁷ As large parts of the population depend on agriculture, tribal leaders increasingly seek control over water resources to safeguard their legitimacy. This includes diverting water and encroaching on rivers to guarantee access for their own constituencies.³⁵⁸ The impact of these practices on other tribes downstream or across borders is often disregarded, providing a source of conflict between individuals and groups.359 Diversion of water may also be deployed purposely to prevent water from reaching areas populated by adversary tribes.³⁶⁰ Some water-related conflicts build on feuds over access to water that have been passed on from generation to generation, reincited and exacerbated by Iraq's current dire water situation.361 The tribes' infamous 'gun culture' heightens the risk that conflicts become deadly.³⁶² The regression of the marshes and illegal encroachments has spurred disputes between tribes in the Al-Chibayish marshes, which are part of Dhi Qar and Basra provinces.³⁶³ In Missan, waterrelated challenges are also intensifying tribal conflicts and instability.³⁶⁴ Recent water-related clashes between the Huraish and Marian tribes resulted in at least 25 casualties.³⁶⁵ While current tribal conflicts are primarily evident at the local level between a small group of actors, there are signs of these dynamics turning into largerscale crises. Some tribes have even warned the central government in Baghdad of a "war" that may erupt if the government fails to take adequate measures to resolve the water crisis.³⁶⁶ The government and provincial authorities may be aware of acts of encroachment on waters but often have limited power to take action.

3.5.5.Conclusion

The increasing strength and influence of tribalism present both a threat and an opportunity to water security. Inter- and intra-tribal disputes present a threat to security and stability in Iraq, with the cross-border nature of tribal networks making the confinement of these conflicts complex and difficult. Oftentimes, the sheikhs' legitimacy relies on the ability to secure the livelihoods of their tribal members, resulting for instance in the encroachment of river flows. These actions may result in violent conflict between tribal groups, with the potential to spread beyond the geographical area where the issue originated. ³⁶⁷

Tribal forces can also have a positive impact, however, due to their embeddedness in society, power, legitimacy, and cross-bordernature. Tribal leaders can mobilize their constituencies to enable equitable water allocation that is agreed upon between neighbors, and contribute to conflict mitigation and resolution,³⁶⁸ given that sufficient measures are taken to rein in violent conflict and fragmentation.³⁶⁹ The negative perception of the political elite as corrupt and the cause of Iraq's dire water situation means that tribes may be in a better position to mobilize constituencies.³⁷⁰ Iraq has a long history of merging different forms of law that can provide lessons for dealing with the current water crisis in the country to connect statutory and customary law in mutually beneficial ways.³⁷¹ In this context, finding the right balance between leveraging the tribes' contribution to stability and limiting further fragmentation of the security environment is a key challenge for addressing waterrelated challenges in Iraq in the coming years.

4. Conclusion

The dire water situation in Iraq impacts the complex interactions between different political and socio-economic actors, at the federal, provincial and local levels. While most research so far has focused on transboundary developments, this study underlines the importance of subnational trends in understanding the dynamics between water and conflict. The analysis focused on water-related security challenges within and between four provinces in the south of Iraq: Basra, Missan, Dhi Qar, Wasit.

Although geographical and institutional divisions in Iraq can explain some of the conflicts associated with water challenges, it became



apparent that this explanatory power is limited. Rather, the analysis of informal networks, which in Iraq are dominated by tribes, is key to understanding conflict dynamics. The complexity is compounded by the fact that formal institutions and informal networks are not dichotomous. Formal-informal relations coexist as integral parts of a broader system. Their interaction enables informal networks to become intertwined within formal structures, through processes such as corruption and patronage networks.

Five main findings summarize the core of this paper. The first three relate to conflict dynamics at the interprovincial, provincial, and local levels, while the last two findings pertain to the key drivers and mitigators of conflict in terms of ethno-religious sectarianism and tribalism.

1. Competition and conflict between provincial authorities.

Geographical boundaries and governmentally determined quotas dictate access to water resources across Iraq. Provincial authorities engage in conflict over these politically, and often inefficiently, determined water shares. They often accuse each other of transgressing quota, in the form of political disputes and legal complaints. Water allocation rights and distribution mechanisms are central to such conflicts.

2. Conflict between federal, provincial authorities, and citizens.

Water-related challenges lead to protests, which can escalate to violence between the federal government and/or provincial authorities on the one hand, and citizens on the other. In such conflicts, borders are relevant only to the extent that they define the specific economic, socio-political, and security context.

3. Inter-communal conflict between farmers, herders, and fishermen.

As conflict moves to more local levels, geographical borders lose relevance and

become subservient to socio-political and economic drivers of conflict. Conflict is induced by the competition between different actors that depend on scarce resources to sustain their livelihoods. Violent conflict is especially likely given a sufficient degree of political marginalization and the lack of access to conflict resolution mechanisms.

4. Decline of ethnic identity and religion as core drivers of conflict.

Ethno-religious sectarianism that has defined conflict in Iraq for decades is declining in influence as 'issue politics' takes over. Confrontations between citizens centers around differing views on governance failures and the need for systemic change. Water challenges, such as poor infrastructure and water quality, are triggers for protesters to act, although social movements tend broaden in focus as they progress, to touching upon topics like unemployment, interference. corruption Iranian or

5. (Re)emergence of tribal structures and influence.

The tribe and tribalism have (re)emerged in Iraq, gaining an increasingly prominent position visà-vis state institutions in water-related conflict dynamics. Tribes are deeply embedded in Iraqi society and enjoy great legitimacy and power. Their conflict mediation processes can positively impact and, to a certain extent, prevent the escalation of disputes. At the same time, tribal networks exacerbate cross-border instability given their spread across provincial borders and the penetration of the political system.

Institutional structures interact in complex and crucial ways with informal networks in Iraq. The ways in which they contradict and complement each other should be at the heart of further analysis on water-related challenges in Iraq.



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