The Impact of Covid-19 in Water-Stressed Iraq

How Covid-19 is exacerbating Iraq’s Health, Economic, Socio-political and Security Challenges

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This brief provides an overview of current trends and developments related to the Covid-19 pandemic in Iraq and contributes to a broader set of considerations on the need for an integrated approach for addressing water, security and health challenges in the country.

The consequences of the COVID-19 pandemic in Iraq, in parallel with the country’s water issues, are exacerbating existing health, economic, socio-political, and security challenges. This brief outlines the ways in which COVID-19 interacts with and impacts these four pressing and interrelated challenges. The analysis focuses on the impacts on Iraq as a whole and the four provinces selected for further engagement by the WPS partnership: Basrah, Dhi-Qar, Wasit, and Missan.

Covid-19 in Iraq

As of March 16, 2021, there have been total of 763,085 confirmed cases of Covid-19 in Iraq, with 13,788 people known to have died of the virus. Limited testing capacities suggest that the actual number of infections is likely to be higher. Iraq’s Ministry of Health confirmed the first case of the virus in the province of Najaf on February 22, 2020. Following this confirmation, the Iraqi government closed borders, schools and airports and restricted movement in public areas to prevent further spreading. In mid-March 2020, stricter measures were implemented including curfews and banning of travel between provinces. Government measures were not fully implemented and adhered to by citizens. Still, these measures initially kept case numbers low, until movement restrictions loosened in April/May 2020 ahead of Ramadan, which led to an acute surge in number

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of confirmed cases. Nonetheless, as of November 2020, the government fully lifted the curfew and restrictions on public gatherings, permitted travel between provinces, and reopened schools and universities. In response to the increase of confirmed cases at the start of 2021, on February 19th, the government imposed new measures including overnight curfews from 8:00 pm until 5:00 am, and full lockdowns on Fridays, Saturdays and Sundays. The government also enforced the closure of schools, prohibition of large gatherings and mandatory wearing of protective masks in public spaces. Despite lockdown measures, the number of confirmed cases has continued to increase, peaking on March 11th, 2021 at 5,170 cases. According to the Iraqi Minister of Health Hassan al-Tamimi, the spread of the new strain of the virus and citizens' defiance of government measures have contributed to the surge in the number of confirmed cases. As the number of confirmed cases continues to rise, Iraq has started to vaccinate the population to contain further spreading of the virus. On March 2nd, 2021, Iraq received the first 50,000 doses Covid-19 vaccines from China. While vaccinations should improve the situation in Iraq, the Covid-19 pandemic is likely to have an impact on water-stressed Iraq after most of the population has received a vaccine.

Figure 1: Number of confirmed cases per province as of 2 December 2020 (Source: Ministry of Health-Iraq)

The Health Challenge

Consecutive wars have damaged Iraq's healthcare infrastructures and services, while local authorities lack the necessary financial and technical resources to rebuild these facilities. In 2019, the government spent 2.5% of the national budget on the health sector, but this was insufficient to cover the full costs of repairing and maintaining health facilities and services. This has had a serious impact on the population's ability to access healthcare. There is a critical shortage in medical supplies, equipment and staff to take care of the number of Covid-19 cases, including intensive care hospital beds, human resources, ventilators, and personal protective equipment. Iraq has approximately 0.8 doctors per 1,000 people and 1.2-1.4 hospital beds per 1,000 people, and 85% of essential medicines are limited in supply or not available. Moreover, advanced testing capacity is limited to just five provinces that have WHO-approved centers. The remaining thirteen provinces often send swabs for testing to Baghdad.

Iraq also suffers from shortages in clean water and effective water, sanitation, and hygiene (WASH) services that are critical for limiting the spread of the Covid-19 virus. According to a report by the United Nations Economic and Social Commission for Western Asia (UN ESCWA), daily water demand for handwashing increased by nine to twelve litres per person per household as a result of prevention measures. Damaged infrastructure, deficient wastewater treatment and management systems, (industrial) pollution, and decreased river flows of the Tigris and Euphrates rivers limit the amount of available clean water for drinking and sanitation. In November 2019, the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) found that 36% of households outside of displacement camps and 46% of households inside camps are not able to take care of the number of Covid-19 cases.

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13 “Enabling Peace in Iraq, “Mitigating the Impact of Covid-19 in Iraq,” 1; Aboulenein and Levinson, “The Medical Crisis That’s Aggravating Iraq’s Unrest”; Mansour, Skelton, and Hussein, “COVID 19”; Mahmoud, “Iraq Health Workers to Protest Attacks, Lack of Employment”; Shaol, “Iraqi Health Care Workers Threaten Nationwide Strike to Demand Resources to Fight Pandemic”; The World Factbook, “Field Listing :: Hospital Bed Density”; Aboulenein and Levinson, “The Medical Crisis That’s Aggravating Iraq’s Unrest”; Our World in Data, “Hospital Beds per 1,000 People.” For comparison. The countries with the highest number of hospital beds per 1,000 are: United States Virgin Islands with 18.68, Greenland with 14.35, Monaco with 13.80, North Korea with 13.20, Japan with 13.05. The countries with the lowest number of hospital beds per 1,000 are: Mali with 0.10, Madagascar with 0.20, Senegal with 0.30, Niger with 0.3, Nepal with 0.3.
14 Mansour, Skelton, and Hussein, “COVID 19.”
unable to access enough water for domestic use. This means that a large part of the population is unable to follow the Covid-19 mitigation measures. There are currently 4.1 million people in Iraq in need of humanitarian aid and are especially vulnerable to the direct (health) and indirect (economic) impact of Covid-19. This includes 1.4 million Internally Displaced Persons (IDP) and 300,000 people residing in refugee camps. These communities often reside in overcrowded areas where they are required to collect water from public water sources, heightening risk of Covid-19 transmission.

The Economic Challenge
The Covid-19 pandemic has led to a substantial drop in global oil demand that, in turn, has led to a decrease in oil prices. This has critical short and long-term economic implications on Iraq's already fragile economic situation as oil revenues constitute 90% of the Iraqi national budget. The economic fallout affects the government's capacity to rebuild essential water infrastructure, provide critical WASH services, improve the health care system, and pay the public sector salaries.

In May 2020, as a response to the dissipating oil revenues, Iraq's newly elected Prime Minister Mustafa al-Kadhimi cautioned that the government may be unable to pay half of the 3 million total state-employed workers. Outside the public sector, citizens are also likely to lose their income as informal and formal businesses are forced to shut down. An initial survey shows that Covid-19 has negatively impacted production and employment, with an average reduction of 67% and 27% respectively. This has a huge impact on the country's economy and the population's ability to maintain their livelihoods. In 2019, 12.8% of Iraq's total workforce was unemployed and 25.2% of the youth population was unemployed. Covid-19 has exacerbated these trends and led to an increase in unemployment rates to between 30 and 35%. This in turn is likely to exacerbate current trends in Iraq's shrinking middle class and growing lower class (see Figure 2).

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28 Ahmad, “Covid-19 Induces Unemployment Rate up to %35 in Iraq.”
Figure 2: Iraq Population Distribution according to Income (Source: CSIS) 29

Water scarcity also poses a challenge to food security and the already fragile food system in Iraq. Increased stress on water resources due to the Covid-19 mitigation measures coincides with a growing need to allocate water supplies to the agricultural sector to increase domestic food production.30 However, increased household water demand means that less water is available for industrial and agricultural purposes.31 Damage to agriculture-related water infrastructure and crop fields during recent conflict and targeted attacks by ISIS further challenge Iraq’s ability to produce necessary quantities of food.32 The impact of Covid-19 on the disruption of Iraq's supply chains and increase in food costs is exacerbated by the decrease in the population’s purchasing power as many lose their jobs and slide into poverty.33

“The socio-economic impact of Covid-19 will push an additional 11.7% of the Iraqi population (4.5 million people) below the poverty line.”

Prior to the Covid-19 pandemic, approximately 22% of the Iraqi population lived under the national poverty line of 110,881 dinars per month (approximately $93.14) and between 2.5-3.9% percent lived in extreme poverty of under $1.25 a day.34 The United Nations International Children’s Emergency Fund (UNICEF) finds that the socio-economic impact of Covid-19 will push an additional 11.7% of the Iraqi population (4.5

million people) below the poverty line. Approximately 42% of the total population are especially vulnerable to poverty due to higher risk of being deprived of financial security, health, education, and appropriate living conditions. UNICEF also expects a 30% increase in the number of people struggling to make a living. This population group often works in the informal sector for minimal salary and are already on the brink of falling below the poverty line before the Covid-19 pandemic. To reverse these trends and mitigate the economic impact of Covid-19, a high-level Iraqi delegation has met with the International Monetary Fund (IMF) to request financial support and passed a law allowing for $10bn in increased deficit from both internal and external sources.

The growing lower class and portion of the population living in poverty means that households are likely to depend on external assistance and NGO’s for essential resources including food and clean drinking water. The inability of NGO’s to reach persons in need and provide such assistance due to Covid-19 related travel restrictions makes it difficult for the population to sustain their livelihoods, with direct implications for Iraq’s socio-political order and stability. Previous protests show that economic hardship is one of the key factors underlying citizen disenchantment, broader grievances, and even anger, leading to widespread protests across the country. As the economic situation in Iraq deteriorates further, it is likely to continue to stir instability and protests into 2021.

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37 UNICEF.

38 Dagher, “Iraqi Stability and Its Free-Falling Middle Class.”


The Socio-Political Challenge

The difficulties of appointing a new prime minister on May 7th 2020 and forming a government has undermined the population’s trust in the government. Corruption and the absence of key public services and socio-economic opportunities have sparked several protest movements in the past years. Demonstrations in 2019 quickly escalated due to the security forces’ harsh response resulting in the death of over 600 demonstrators. The same security forces that cracked down on public demonstrations are responsible for enforcing curfews to mitigate the spread of Covid-19. In this context, many perceived the governments’ ban on public gatherings as an attempt to undercut the momentum of the demonstrations. Deteriorating state-society relations present a critical challenge to Iraq’s response to Covid-19. The convergence between medical facilities and security forces in carrying out quarantine policies has heightened distrust of public medical services leading some to reject quarantine as they believe it resembles a form of arrest. In addition, religious beliefs in some parts of the society render the population reluctant to take Covid-19 tests and seek treatment even if they have severe symptoms, as illness is stigmatized, and quarantine requires isolation from family members.

The spread of Covid-19 impacts men and women in different ways and has distinct social, economic, and security impacts on women. Although mortality rates are higher for men than for women (at 67% and 33% respectively), the spread of the virus has undermined the already precarious situation of women. Women face an increased burden of domestic work and care responsibilities for children and sick persons, leading to a greater loss of economic livelihoods and autonomy that has increased the gender gap in the labour market. In addition, women face more barriers to accessing health and support services due to social and religious norms and relatively

46 Mansour, Skelton, and Hussein, “COVID 19.”
48 Mansour, Skelton, and Hussein, “COVID 19.”
limited decision-making power. Moreover, they are at heightened risk of domestic abuse and gender-based violence. Increased levels of domestic abuse coincide with weakened protective social support networks, assistance, and aid, as well as a lack of access to sexual and reproductive health services. These factors put women at greater risk of suffering preventable mortality and illness.

The Security Challenge

Iraq’s security context is also deteriorating. In many parts of Iraq, the Islamic State (ISIS) has (re)gained momentum and influence due to the governments’ focus on mitigating Covid-19, the limited capacity of security forces to conduct counter-insurgency operations, as well as the partial suspension of the US-led military campaign against ISIS. ISIS has strategically exploited security gaps and the health, economic, and socio-political turbulence in Iraq to relaunch attacks in rural and urban areas across the country. There has been an increase in the total number of ISIS attacks in the first three months of 2020, compared to both the previous quarter and the same quarter the previous year (Figure 3).

![Figure 3 Number of attacks in Iraq per quarter (2018-2020), sorted by attack type (Source: Washington Institute)](image)

54 Hadeel et al., 5; World Health Organization (WHO), “Responding to Uptick in GBV in the Context of the Covid-19 Pandemic.”
The number of attacks by ISIS initially decreased between the last quarter of 2018 and the first quarter of 2019 from 357 attacks to 292 attacks. Since then, the number of attacks has increased. In the second, third, and fourth quarter of 2019 the number of attacks increased from 396 to 431 to 550 attacks. This trend continued and in the first quarter of 2020 when the number of attacks reached 566 attacks. A comparison between 2019 and 2020 shows a 94% increase in attacks from 292 in the first quarter of 2019 to 566 in the first quarter of 2020.

Figure 4 demonstrates a notable difference between the number of attacks per province in Iraq. Most attacks took place in Diyala, followed by Baghdad, Salah al-Din, Anbar, Kirkuk, and Nineveh.

ISIS has also propagated instability by damaging Iraq’s water infrastructure and burning agricultural fields, putting additional pressure on Iraq’s shortage of clean drinking water and agricultural production. Affected agricultural communities become fertile grounds for recruitment by ISIS.

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who offer young people food and livelihood security for their families. Moreover, Iraqi civilian security forces are still in critical need of reforms to assimilate various local militias into a unified force that protects all Iraqi citizens on an equal and impartial basis.

The destabilizing impacts of Covid-19, that may spread beyond Iraq’s borders, has caught international attention. In January 2021, the Netherlands deployed 120 military personnel to help secure troops and equipment stationed at Erbil International Airport against attacks from ISIS. This Dutch-led Force Protection platoon is part of a broader international anti-ISIS coalition stationed in northern Iraq mandated to support regional military authorities in its efforts to independently fight terrorist organization ISIS in the long term.

A Vicious Cycle

Covid-19 acts as a burden multiplier to the already dire water situation in Iraq and compounds prevailing health, economic, and political challenges. Breaking this vicious cycle requires these formidable challenges to be tackled simultaneously. If the health challenge is not controlled, economic stability is likely to worsen. Prolonged economic insecurity, in turn, undermines the livelihoods of the Iraqi population and increases instability in society. Socio-political instability will widen the security gap in which armed groups like ISIS can proliferate. This dynamic has already started to emerge and highlights the need for better awareness and understanding of the importance of water access and quality, and more timely, integrated, and holistic responses to challenges posed thereon.

Impact of Covid-19 in four Iraqi Governorates

Iraq has been hard-hit by the Covid-19 pandemic, but numbers of cases vary between governorates. Overall, a comparison of confirmed cases per province indicates that Baghdad has had a substantially higher number of confirmed cases than any other region in Iraq, with Basrah and Najaf following in second and third place, respectively (See Figure 5). Anbar province has the lowest number of confirmed cases, followed by Ninewa and Salah Al-Din that also have a relatively low number of confirmed cases. The provincial snapshot presented in Figure 5 is based on the registered numbers of cases on March 16th, 2021.

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Since WPS is focusing its work in Iraq on (inter-)provincial water challenges in Basrah, Dhi-Qar, Wasit, and Missan, the impact of Covid-19 on these provinces are of particular interest and highlighted below.

**Basrah Province**

Basrah is the main oil-producing province of Iraq and has recently seen levels of poverty reaching up to 40%. This poverty spike is linked to the collapse of oil prices due to Covid-19 and the related temporary halt of economic activities. Basrah has been the second hardest-hit province after Baghdad with a total of 61,348 confirmed cases and 939 deaths on March 16, 2021. The number of confirmed cases peaked in March 2021, with a total of 927 cases on March 4th, 2021.

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(See Figure 6). After a rapid decrease at the start of October, cases have remained relatively low throughout the months of November and January and saw a steady increase in March.69

Dhi-Qar Province

Dhi-Qar has also been adversely hit by the Covid-19 pandemic. The global decline in oil prices has hit Iraq hard and the resultant economic downfall in the country has left the governorate unable to pay its public workers. Several protests have taken place in the capital Nasiriyah in the past few months against the government over poor public services and delayed salaries.71 Dhi-Qar is the sixth hardest hit province in Iraq with 31,089 cases and 891 deaths on March 16, 2021. Three peaks in the number of confirmed cases can be observed in July and October 2020 and March 2021 (See Figure 7). At the highest point on October 1st, the number of confirmed cases reached 427.72

![Figure 7 The number of confirmed cases in Dhi-Qar as of March 16th, 2021 (Source: World Health Organisation)](image)

Wasit Province

Wasit province has seen several protests during the Covid-19 pandemic over the past few months due to the economic impact on the population.74 Wasit is the fifth hardest hit province in Iraq, with a total of 40,497 confirmed cases and 486 deaths on March 16, 2021. The number of cases


started to increase in June 2020, reaching a peak on July 10th with a total of 496 confirmed cases. The number of cases remained between 55 and 307 in July and August and increased briefly in October to reach 446 cases (See Figure 8). The cases have remained relatively low between November 2020 and January 2021 and increased again in February and March 2021.  

**Missan Province**

Missan province has seen an increase in narco-trafficking over the last years. The decline in global demand for Iraqi oil has further raised concerns of a possible increase in narco-related crime. Missan recorded 21,362 Covid-19 cases and 471 deaths on March 16, 2021. The number of confirmed cases started to increase in June 2020 to reach a peak of 215 cases on June 26 (See Figure 9). After a brief decline in July, numbers peaked in September to reach a total of 242 cases on September 27. Since then cases have maintained low from November 2021 to the start of February 2021 when the number of confirmed cases increased rapidly.

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Conclusion
The Covid-19 pandemic has had a substantial impact on the health, economic, socio-political, and security situation in Iraq and has exacerbated trends that already present a challenge to Iraq’s fragile stability. These trends are likely to have long-term implications, even after the peak of the Covid-19 pandemic subsides. The recent emergence of a vaccine is likely to improve the health situation in 2021 and relieve some pressure on the overburdened and fragile health care system. However, due to shortages in medical equipment and services and the evolving socio-political and security situation, it is likely that the Covid-19 pandemic will continue to take lives into 2021. The declining productivity of critical sectors including the oil and agriculture industries will have a long-term impact, increasing unemployment and poverty levels. The dire economic situation and the inability to sustain livelihoods may lead people to dismiss mitigation measures in search of work opportunities. The population’s distrust in the government’s mitigation measures further exacerbate this trend and has already led to popular unrest and protests across the country. The withdrawal of foreign troops and (re)emergence of ISIS in Iraq further adds to the growing instability, in turn exacerbating people’s sense of insecurity and frustration. If Covid-19 cases remain high, it is likely to temporarily halt the operation of international peacebuilding and training missions in the country, thus putting additional pressure on the government to control the security situation.

“\textit{The compounding health, economic, socio-political, and security challenges underline the need for an integrated and multi-disciplimacy approach to addressing Covid-19, water and security in Iraq}”

and further exacerbate its negative impacts. The first step in this direction is that various stakeholders active in government, the private sector, and civil society develop a shared understanding of each others’ perspectives and challenges. A shared understanding provides the foundation for stakeholders with different backgrounds to engage in more constructive and solution-oriented dialogue and develop joint approaches for action to prevent and/or mitigate security risks and related vulnerabilities. This briefing paper supports this broader effort to better understand the linkages between Iraq’s various challenges and engage in evidence-based dialogue.

The WPS Partnership
The WPS partnership recognizes the complex nexus between water and security and the critical importance of taking an integrated approach to facilitate the development of a shared understanding of the many pathways that link water and security. To this end, it develops innovative early warning tools that provide local stakeholders with evidence-based information (e.g. through information dashboards, analysis, scenario planning) to encourage more neutral and constructive dialogue. It also supports the negotiation of interests and trade-offs and exploration of alternative solutions. These innovative early warning tools utilize big data and remote sensing to support the identification of specific hotspot areas of risk and
also support the more granular assessments of the impact of hydrological, social, economic, and political factors on local and regional communities. A better and more informed understanding of the complex water-security nexus moreover creates an enabling environment to raise awareness and encourage others to partake in a wider dialogue process. While this approach is time consuming, it is more likely to have impact and enable Iraq to build long-term solutions to the complex, water-related challenges in Iraq.

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