

# BRIEFER

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## CLIMATE, WATER AND MILITIAS: A FIELD STUDY FROM SOUTHERN IRAQ

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When recruiters for Iraq's various militias came to the North Abu Zarag Marsh near Nasiriyah in southern Iraq in August of 2014, it didn't take them long to empty the surrounding villages of most of their young men. For weeks before, locals had watched in horror as the Islamic State (also known as IS or ISIS) had surged across the country's north and west. And for those weeks, they had been electrified by religious clerics' call to arms against the jihadists. A good number of the community's most committed fighters had answered that appeal, dusting down old weapons and heading to the front. But the real exodus didn't begin until the worst of the summer heat set in and water flow through the marsh fell to its lowest level in years.

Haidar Salim, a buffalo farmer, signed on with the Badr Organization, one of the largest and most powerful of the militias. His income had all but disappeared as his animals' milk yields withered in the now shallow, knee-deep waters—some four meters lower than they can be. Then came his unemployed twin, Mohammed, later to die in a suicide bombing during the battle for Ramadi. The brothers were followed in quick succession by no fewer than 50 fishermen, each of whom had long since given up hope of making their nets bulge. Vendors at three marsh fish markets estimate that the local catch has fallen by at least 50 percent since 2003 due to low and excessively saline river flow. "After the summer we were all women and old men and children here," said Sayyid Mehdi Sayyid Hashem, a community leader and overseer of an important local shrine. "After the groups came through, the marsh went with them."

In marching off to war, many of these men invoked their patriotism and piety—and they undoubtedly meant it. But with that diminished water flow in a community where almost every profession is dependent on the Tigris and Euphrates’ irrigation of the marshlands, few could conceal the undercurrent of desperation. Bit by bit, water quantity and quality had deteriorated over the previous decade, plunging residents deeper into penury. Here at last was a chance to make at least something of a living. “When you’re hungry, when you have a family to feed, you’ll do anything,” said Salim. “I didn’t see myself as a fighter, but sometimes it’s your only option.”

## A RURAL ECONOMY RUNNING ON EMPTY

This is what environmental disaster can look like, and among crumbling parts of rural southern Iraq, it is directly fueling the militarization of society. Years of escalating climate and water woes have gutted agriculture, fishing, and buffalo breeding, the bedrocks of the countryside economy, amid multiple oil price crashes that hobbled that industry and the public sector hiring which it supports. Since the early 2000s, Iraq has been mired in varying degrees of water crisis, the worst of which has struck the country’s far south, which receives little rain, boasts an extensive agrarian population, and stands at the end of the dirtied and drained rivers.<sup>1</sup> Through conflict with the Islamic State, in which the militias played an important role in defeating the jihadists—and amid enduring insecurity since the group lost its last territory in Iraq in 2017—many of these recently jobless or underemployed villagers have come to form the basis of a new and controversial fighting force.<sup>2</sup>

Responses to environmental shocks vary enormously, of course, and there’s much more to them than taking up arms. Some families have migrated to cities near and far, swelling the outskirts of Basra, Baghdad, and Nasiriyah, among others. There, they’ve competed for day labor with longstanding residents, sometimes driving down wages and sparking resentment. Plenty have remained in place, adapting and even prospering on occasion. Many more have stumbled on with no other options. “Every year, we pray to God for things to get better,” said Jabar Musa al-Sharanbi, a buffalo farmer near Amarah. “But they don’t. Every year, we get poorer and poorer.”

There’s significantly more to these groups than environmental disaster, too. Emerging, in most instances, as the hollowed out Iraqi army collapsed during the Islamic State’s 2014 surge and in response to Grand Ayatollah al-Sistani’s appeal to Iraqis to defend their homeland and holy sites, the militias may have saved Baghdad from the jihadists.<sup>3</sup> Many militiamen abandoned established jobs and cozy lifestyles to sign on. Though largely drawn from Iraq’s Shiite Muslim majority, which is concentrated in the south and center of the country, the 40 or so militias (or Popular Mobilization Units, as they are officially called) include Iraqis of other faiths and denominations.

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1 Human Rights Watch (HRW). ‘Basra is Thirsty. Iraq’s Failure to Manage the Water Crisis.’ HRW, 2019. <https://www.hrw.org/report/2019/07/22/basra-thirsty/iraqs-failure-manage-water-crisis>

2 The Wilson Center. ‘Timeline: The Rise, Spread, and Fall of the Islamic State.’ The Wilson Center, 2019. <https://www.wilsoncenter.org/article/timeline-the-rise-spread-and-fall-the-islamic-state>

3 *Al Jazeera*. ‘Iraq Cleric Issues Call to Arms Against ISIL.’ *Al Jazeera*, 2014. <https://www.aljazeera.com/news/2014/6/14/iraq-cleric-issues-call-to-arms-against-isil>

These groups—and their payroll—were formally amalgamated into the federal armed forces in 2016, but have retained considerable autonomy from the state, and are aligned, in the case of the most powerful, with neighboring Iran. Others take their cues from Sistani and are much more overtly Iraqi nationalist in orientation.

## **“WE CAN ALWAYS RELY ON THEM”**

But in interviews conducted across southern Iraq between 2014 and 2018, villagers, tribal leaders, and some of the men who joined these groups repeatedly stressed the extent to which deteriorating water and other environmental conditions had directly contributed to many farmers’ and fishermen’s decision to join militias. As residents of impoverished, often poorly connected communities, these rural Iraqi recruits had few prospects of securing jobs with the generally better salaried army and police forces, both of which can require social capital to join, but also no wherewithal to hold out for better offers. With little oversight of their finances, senior militiamen are reputed to skim their foot soldiers’ wages. And by deliberately enticing the most desperate and disaffected youth with signing bonuses, leaders of some of the newer, less affluent groups were able to fill their ranks in ways that their lack of name recognition might otherwise have stifled.

According to one interviewee, recruiters went so far as to exploit isolated villages’ geographical ignorance by suggesting that the extremists had penetrated much further south than they had. “They told these fishermen that the war had reached Karbala,” said Abu Hamad al-Asadi, a shopkeeper in Nasiriyah, referring to a holy city to the southwest of Baghdad. “And they believed this. They thought the Islamic State would be in the village soon.”

Data on militia groups are limited, not least because of their contentiousness. Some of them have been accused of sectarian violence, and/or deemed terrorists by the U.S.<sup>4</sup> However, senior figures from two of the biggest organizations, Saraya al-Salam and Badr, estimate that at least 55-60% of their fighters hail from rural areas, more than double their share of the overall population, with disproportionate concentrations from the most battered marsh areas, in Badr’s case. More than 400 residents of the tiny Abu Zarag marsh went to war against the Islamic State, according to Seyyid Mehdi Seyyid Hashem. At least 50 of them never returned. “The reality is that these [farming] areas have an intense love for their homeland, so they fight,” said Sheikh Abu Samir al-Mayahi, then Badr’s head of operations in the Basra area in a 2015 interview. “We can always rely on them to help us.”

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4 *Voice of America* (VOA). ‘US Designates Iraqi Shiite Militia as Foreign Terrorist Organization.’ VOA, 2020. [https://www.voanews.com/a/middle-east\\_voa-news-iran\\_us-designates-iraqi-shiite-militia-foreign-terrorist-organization/6182104.html](https://www.voanews.com/a/middle-east_voa-news-iran_us-designates-iraqi-shiite-militia-foreign-terrorist-organization/6182104.html)

## A HISTORY OF RURAL TRAUMA

Southern Iraq's environmental woes have been a long time in the making and they're intimately wrapped up with the country's traumatic recent past. Starting with the Iran-Iraq war, which raged from 1980 to 1988, the region has been subjected to an almost unbroken series of landscape-altering disasters. First, that war robbed the Basra area of many of its celebrated date palm plantations. Iraqi President Saddam Hussein torched many of the most bountiful ones to deprive Iranian forces of cover around the all-important oil fields. Others were destroyed in the fighting. All told, the number of palms is estimated to have fallen from more than 30 million to fewer than nine million since the 1950s.<sup>5</sup> "They gave us a good life. But not anymore," said Yasar Ali, a farmer in Faw, a town at the end of a now-barren, but previously palm-covered peninsula to the south of Basra. "Just look around you. Nothing can grow here now." Palms thrived in the extreme heat and saline soils in a way that little else does.

Then, from the late 1980s, Hussein accelerated the draining of the great Mesopotamian marshes, which had inundated over 20,000km<sup>2</sup> between the Tigris and Euphrates since time immemorial. All half a million or so of their inhabitants—the 'Marsh Arabs'—were displaced, shattering an historic culture and irretrievably damaging the region's biggest wetland, in a move that was largely grounded in the dictator's bid to vanquish a longtime rebel hideout.<sup>6</sup> The marshes were reflooded after 2003 and up to half of the area's people returned, according to local NGOs, but marginal areas on the periphery, like the Abu Zarag marsh, have yet to regain anything like their previous lushness.<sup>7</sup>

In the 1990s and through the U.S.-led invasion, a combination of sanctions that were imposed partly in response to Hussein's invasion of Kuwait, and a steady breakdown in governance and law and order fueled a collapse of domestic wastewater and irrigation infrastructure that continues to this day. That damaged riparian fisheries, which were already reeling from saline agricultural runoff, and hurt buffalo farmers, whose animals continue to suffer from frequent skin diseases and lower yields in the dirty water. "The buffalo are like people in this way," said Sayyid Mehdi Sayyid Hashem. "They can't manage bad water either." Desperate for money as their stocks decline and as fish farms proliferate, many fishermen have taken to stunning fish with electricity, a self-destructive practice which is hastening the shrinking of the fisheries.

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5 Sinan Mahmoud. 'Inside the Fight to Save Iraq's Date Palm Industry.' *The National*, 2021. [https://www.voanews.com/a/middle-east\\_voa-news-iran\\_us-designates-iraqi-shiite-militia-foreign-terrorist-organization/6182104.html](https://www.voanews.com/a/middle-east_voa-news-iran_us-designates-iraqi-shiite-militia-foreign-terrorist-organization/6182104.html)

6 Peter Schwartzstein. 'Iraq's Famed Marshes are Disappearing Again.' *National Geographic*, 2015. <https://www.nationalgeographic.com/science/article/150709-iraq-marsh-arabs-middle-east-water-environment-world>

7 David Biello. 'Reflooding Restores Wildlife to Iraqi Marshes.' *Scientific American*, 2006. <https://www.scientificamerican.com/article/reflooding-restores-wild/>

## STATE NEGLECT

All the while, the Iraqi state's fixation on energy revenues battered farmers in ways large and small. Roughly 90% of the country's oil is extracted from under the fields, marshes, and deserts of southern Iraq, and farmer welfare—and farmer employment—has seldom been a consideration in its exploitation. Great puddles of sticky black crude glisten across farmland.<sup>8</sup> Even more damaging, perhaps, has been successive governments' inattention to agriculture—and water planning in general—as its coffers have filled with oil wealth. In recent years, Iraq's farming policies have ranged from neglectful, with farmers waiting up to two years to be paid for crops they've delivered to state silos; to damagingly generous, in sometimes paying up to three times the international market price for crop staples and thereby incentivizing the cultivation of marginal land; to outright cruel, in arguably subjecting farmers to even more corruption than other Iraqis.

In addition to continuing pollution, inefficient water use, and deepening drought (interspersed with occasional extreme flooding) at home, events upstream in Turkey and Iran have compounded the crisis.<sup>9</sup> Both countries have built dozens of large dams within the Tigris and Euphrates basins over the past few decades, and although the total reduction in the rivers' volume is disputed, all observers agree that significantly less water is passing into Iraq and through to the largely rain-deprived southern farming communities at the end of the supply. Once upon a time the Shatt al-Arab, the waterway formed by the confluence of the Tigris and Euphrates, propelled freshwater several miles out into the Persian Gulf, yet now the sea can barrel up to 80 kilometers (50 miles) upstream during times of severe drought, according to a former Iraqi water minister. This is magnifying the crop-killing impact of intensely saline water, particularly across Basra governorate.

All of these factors have collectively fueled an extreme shortage in usable water that the thirsty farmers and fishermen of southern Iraq have been particularly poorly placed to withstand. 'Our jobs are all connected to water,' said a fisherman in the Hammar marsh who gave his name as Sajad. "So what do you think happens when it looks like this?"

## VOTING WITH THEIR FEET

The Marsh Arabs are a hardy lot, and some have managed to make the most of rural turmoil. Having decided that fishing was no longer viable, Mohammed Wael Abdellatif, a spiky haired 20-something, used his experience in reviving troublesome boat engines to establish himself as a car mechanic. His neighbor in Chibayish, one of the largest towns within the marshes, bought a minibus with the last of his savings and converted it into

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8 U.S. Energy Information Administration (EIA). 'Iraq's Oil Production Has Nearly Doubled over the Past Decade.' EIA, 2019. <https://www.eia.gov/todayinenergy/detail>

9 Paul Hockenos. 'Turkey's Dam-Building Spree Continues, At Steep Ecological Cost.' *Yale 360*, 2019. <https://e360.yale.edu/features/turkeys-dam-building-spree-continues-at-steep-ecological-cost>

a private ambulance. He now makes a good living transporting villagers to urban medical facilities. “We’ve had to be smart to survive,” Abdellatif says.

Many others are trucking along in reduced circumstances. Hussein Karaba’s family once ate meat almost every day of the week, but with diminishing crop yields—and hence income—they’ve cut back to small portions on Fridays. In many villages, children have had to forgo everything from pocket money to textbooks to school itself. Students have been pulled from classes by fathers who need their labor in the fields, while some local businesses, like hair salons, have disappeared as disposable income crumbles. On a now dried-up bank of the Euphrates outside Chibayish, a group of unemployed young men routinely play football among the sunken boats and abandoned fishing nets. Poverty rates in southern Iraqi governorates remain higher than northern and western ones, even though the former were spared the direct consequences of the Islamic State’s emergence.<sup>10</sup>

For thousands of rural southern Iraqis, this procession of never-ending disasters has simply proven intolerable. They’ve voted with their feet. Marsh residents who’d returned from exile are moving again, likely for the last time. Residents of outlying areas are joining them in ever greater numbers. Across the south and beyond, cities are reeling from the volume of rural migrants, many of whom have arrived even as urban areas struggle to provide basic services and infrastructure for their longstanding populations. With no signs of any let up in farming woes, recent arrivals expect plenty more to follow them in from the countryside. “Give it five more years and my whole family will be here. I guarantee you,” said Haidar al-Tamimi, a shop assistant in Basra city center, who left his Dhi Qar governorate village ten years ago.

## RECRUITING THE DESPERATE

Yet for many, more migration is unthinkable—or unviable—and it’s among this cohort that the militias have enjoyed much of their success since 2014. By emerging at a time of greatest economic desperation, not least because the Islamic State’s surge coincided with a fall in oil prices, they’ve been able to fill their ranks with ease—even while sometimes offering unattractive salaries. Though difficult to verify, rural Iraqi militiamen allege that they’re paid as little as half of some of their urban or small town peers. And by targeting the most needy communities, like the North Abu Zarag marsh, these groups were able to replenish their ranks at the height of the fight against the Islamic State, despite devastating casualty rates.

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<sup>10</sup> UNICEF. ‘Assessment of COVID-19 Impact on Poverty and Vulnerability in Iraq.’ UNICEF, 2020. <https://www.unicef.org/iraq/media/1181/file/Assessment%20of%20COVID-19%20Impact%20on%20Poverty%20and%20Vulnerability%20in%20Iraq.pdf>.

In some ways, this is ‘normal.’<sup>11</sup> From armed forces in Russia and the U.S. to jihadi groups like ISIS in Iraq, there’s nothing unusual about heavy recruitment among rural or marginalized communities.<sup>12</sup> In southern Iraq, this intensifying overlap between climate and wider environmental stresses and stability is also manifesting itself through increasing—and occasionally fatal—inter-tribal tensions over water, among other disputes.

But as an illustration of the extent to which water and environmental issues are contributing to increased rural poverty, and thereby boosting the attractiveness of employment with militia-like groups, the travails of Upper Zarag and similarly desiccated areas are potent. Significantly more exposed to climate and other environmental stresses than some of their urban peers, many rural Iraqis are more desperate and resentful than ever of the state that they feel has abandoned them to their water-impooverished fate. That increasingly yawning gap between the largely urban haves and agricultural have-nots has served the militias well, many of which initially presented themselves as a counterpoint to the unwieldy, ineffective government—and have consequently been well-placed to subsume some of these ‘left behind’ rural men. “We are smaller, more efficient, and more moral,” Faleh al-Khazali, a politician and leader of the Kata’ib Sayyid al-Shuhada militia, said in a 2015 interview.

## AN UNCERTAIN FUTURE

Iraqi authorities insist they are doing everything they can to address this rural rot, and there have been occasional positive signs. After a few years of improved rains and stronger river flows through much of the Tigris and Euphrates basins, water buffalo numbers were climbing, rising from 285,000 to 385,000 between 2019 and early 2021, before falling again because of poor rains since then.<sup>13</sup> A government scheme to restrict some food imports also appears to be yielding results<sup>14</sup>—though similar previous measures have been short-lived and this initiative could be undermined by water shortages.<sup>15</sup> For the past 20 years, Iraqi farmers have struggled to compete with cheaper Iranian and Turkish products. Amid dramatic oil price fluctuations over the past decade, Baghdad is at least talking a bigger game about diversifying its largely rentier economy, with better and more expansive farming a key plank of that ambition—though politicians have frequently made these pledges before elections and then quietly dropped them in the aftermath.

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11 The Moscow Times. ‘Poor Russian Regions Conscripting More Soldiers, Investigation Says.’ *The Moscow Times*, 2022. <https://www.themoscow-times.com/2022/10/06/poorer-russian-regions-conscripting-more-soldiers-investigation-says-a79002>

12 Peter Schwartzstein. ‘Climate Change and Water Woes Drove ISIS Recruiting in Iraq.’ *National Geographic*, 2017. <https://www.nationalgeographic.com/science/article/climate-change-drought-drove-isis-terrorist-recruiting-iraq>

13 Alice Fordham. ‘In Iraq, Herding Water Buffalo Is Once Again A Growing Industry.’ NPR, 2021. <https://www.npr.org/2021/04/12/986365929/in-iraq-herding-water-buffalo-is-once-again-a-growing-industry>

14 Simona Foltyn. ‘Iraq Government Bans Imports to Support Local Farmers.’ *Al Jazeera*, 2021. <https://www.youtube.com/watch?v=BXZO0FIZahE>

15 Moayed Kenany, ‘Iraq to reduce winter crop area by 50% due to water shortage—ministry statement.’ *Reuters*, 2021. <https://www.reuters.com/world/middle-east/iraq-reduce-winter-crop-area-by-50-due-water-shortage-ministry-statement-2021-10-17/>

Among local NGOs, too, there's more awareness of rural needs—and some additional help. From deploying drip irrigation technology, as opposed to wasteful flood irrigation, to persuading marsh fishermen to discard stunning devices, Iraqi civil society is stepping up in ways that neither the Iraqi nor foreign governments are. Having escaped recent conflict, rural southern Iraq has attracted many fewer foreign and domestic donor funds than governorates hammered by ISIS, which are themselves receiving significantly less than they require.

But few rural Iraqis harbor much hope of a change in fortunes, for understandable reasons. State capacity is limited, particularly with those yo-yoing oil prices, and governance is failing, in part due to the additional dysfunction that these empowered militias have unleashed as they've emerged as a kind of state within the state (and as the most ardent upholders of the status quo, taking the lead in crushing the 2019 protest movement). Many of these groups are so intent on preserving their recently won clout that they've even taken to killing off their critics.<sup>16</sup> Indeed, the challenges look set to mount in ways that may only deepen villagers' misery. 2021 and 2022 were dreadful water years, with little rain and meager snowpack in the mountains of Turkey, Iran, and Iraq limiting river flow, at the same time as temperatures spiked.<sup>17</sup> Southern Iraq, along with nearby parts of Iran and Kuwait, is now almost routinely posting record summer highs, and all without the regular electricity to subsist on air-conditioning.<sup>18</sup>

In the Upper Zarag marsh, residents are already seeing plenty of additional tension, as tribes and governorates go at one another in disputes that are at least partly grounded in water woes. And that makes them fearful. Because having seen firsthand how their environmental troubles left the community reliant on fighting and many of its men dead or maimed, they have little faith that much good can come of their lives unless water flow stabilizes. “We want peace,” says Haidar Salim, the buffalo farmer who went to war. “But right now there's no water, and that's bad for anyone.”

## ABOUT THE AUTHOR

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16 Louisa Loveluck et al. 'In Iraq, Powerful Militias Assassinate Protesters with Impunity.' *The Washington Post*, 2021. [https://www.washingtonpost.com/world/iraq-militia-assassinations-fear/2021/05/12/501474c0-b1cc-11eb-bc96-fdf55de43bef\\_story.html](https://www.washingtonpost.com/world/iraq-militia-assassinations-fear/2021/05/12/501474c0-b1cc-11eb-bc96-fdf55de43bef_story.html)

17 Norwegian Refugee Council (NRC). 'One in two families in drought-affected Iraq need food assistance.' NRC, 2021. <https://www.nrc.no/news/2021/december/one-in-two-families-in-drought-affected-iraq-need-food-assistance/>

18 Jason Samenow. 'Iranian city soars to record 129 degrees: Near hottest on Earth in modern measurements.' *The Washington Post*, 2017. <https://www.washingtonpost.com/news/capital-weather-gang/wp/2017/06/29/iran-city-soars-to-record-of-129-degrees-near-hottest-ever-reliably-measured-on-earth/>