



“IF I LEAVE... I CANNOT BREATHE”:

Climate Change and
Civilian Protection in Iraq

RECOGNIZE. PREVENT. PROTECT. AMEND.

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Cover: *Speaking with farmers in Basra Governorate. Credit: CIVIC/Mostafa Altawre*

ORGANIZATIONAL MISSION AND VISION

Center for Civilians in Conflict (CIVIC) is an international organization dedicated to promoting the protection of civilians in conflict. CIVIC envisions a world in which no civilian is harmed in conflict. Our mission is to support communities affected by conflict in their quest for protection and strengthen the resolve and capacity of armed actors to prevent and respond to civilian harm.

CIVIC was established in 2003 by Marla Ruzicka, a young humanitarian who advocated on behalf of civilians affected by the war in Iraq and Afghanistan. Honoring Marla's legacy, CIVIC has kept an unflinching focus on the protection of civilians in conflict. Today, CIVIC has a presence in conflict zones and key capitals throughout the world, where it collaborates with civilians to bring their protection concerns directly to those in power, engages with armed actors to reduce the harm they cause to civilian populations, and advises governments and multinational bodies on how to make life-saving and lasting policy changes.

CIVIC's strength is its proven approach and record of improving protection outcomes for civilians by working directly with conflict-affected communities and armed actors. At CIVIC, we believe civilians are not "collateral damage" and civilian harm is not an unavoidable consequence of conflict — civilian harm can and must be prevented.

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I. EXECUTIVE SUMMARY

Climate change is set to cause unpredictable weather patterns, including droughts and flooding, desertification of once arable lands, and increased water shortages. Over the next thirty years, the temperature across Iraq is expected to rise by an unprecedented 2 degrees Celsius on average, exceeding the point that climate scientists believe is critical for stemming the negative effects of climate change.¹ These effects will occur in tandem with low water levels resulting from drought and international resource conflicts, chronic domestic mismanagement of natural resources, and environmental degradation and pollution from myriad conflicts over the past several decades.² Iraqi society, which is already in a fragile post-conflict state recovering from the high intensity combat operations against the Islamic State (ISIS) in 2014-2017, stands to suffer from intensified outbreaks of violence, increased protection threats, and inter- and intra-communal tensions as a result of the multiplier effect of climate change.³ While much has been written about the first-order effects of climate change and environmental degradation, this paper examines potential conflict drivers and specific security vulnerabilities for civilians and their communities that may result from the immediate effects of climate change—most notably, changes in livelihoods and migration patterns.

The Center for Civilians in Conflict (CIVIC) engaged with communities in Basra and Nineveh governorates through semi-structured interviews in order to understand the impact of climate change for civilians, their protection concerns, and the way in which resource scarcity and environmental degradation threaten security throughout Iraq. In addition, CIVIC spoke with academics, government leaders, representatives of international non-governmental organizations and local civil society organizations, and members of security forces regarding the relationship between climate change and the protection of civilians. In all, CIVIC conducted over twenty interviews and two focus group discussions as well as an extensive literature review to support this research.

Basra and Nineveh governorates exemplify pastoral and agricultural societies, which are dependent on river water in the south of the country and a mix of rain and river water in the north. By conducting research in these different locations, CIVIC was able to compare and contrast the experiences of communities in South and North Iraq, and in areas that are rainwater dependent and river water dependent. The result is a broader understanding of the ways that climate change can affect communities. CIVIC also conducted this research with a particular focus on unique vulnerabilities among groups such as women and girls, youth, and minorities. These groups experience conflicts in unique ways and are susceptible to a broader variety of protection threats.

Iraqi society, which is already in a fragile post-conflict state ... stands to suffer from intensified outbreaks of violence, increased protection threats, and inter- and intra-communal tensions as a result of the multiplier effect of climate change.



Credit: CIVIC/Mostafa Altawre

Sheep graze in a dry field, Basra Governorate.

CIVIC found that climate change⁴—in tandem with environmental degradation⁵ due to human behavior—is directly influencing critical issues such as resource scarcity (including but not limited to water, arable land, and food sources), pollution, loss of livelihoods, and domestic migration. Human behaviors have had a dramatic impact on the Iraqi landscape. In villages and towns throughout the country, remnants of decades of war remain embedded in valuable farmland and habitable areas. Although the Iraqi government and partners have conducted critical demining work in urban centers, the same efforts need to be extended to agricultural areas and rural communities, or the land will go unused. The demining process requires high levels of skill and funding, which many civilians are unable to afford. Furthermore, “scorched earth” tactics have led to mass deforestation and created prime training and hiding locations for extremist actors.⁶ While these are not the only effects resulting from climate change and environmental degradation, CIVIC identified them as the most critical factors for influencing potential conflict and civilian protection concerns. For example, an estimated 90 percent of the Iraqi Marshlands have gone dry, while the number of vital date palms has decreased from a one-time high of 33 million to just 9 million in 2021.⁷ Many of the issues in interviews and the findings from the literature review point to changes in livelihood opportunities and recent rural-to-urban migration patterns resulting from climate change.

The secondary effects of climate change, linked to loss of livelihoods and migration, have the greatest potential to inflame inter and intra-communal tensions, deepen mistrust of government, and widen security gaps leading to protection concerns throughout Iraq. Civilians, government officials,

and international and local advisory groups all pointed to threats to safety, security, and wellbeing that stand to increase as climate change and environmental degradation worsen throughout the country. For young boys and men, recruitment into informal security sector roles is increasing as traditional livelihoods such as animal herding and farming diminish. For young girls and women, early marriage is rising as families struggle with decreased economic capacity. As evidenced by previous armed conflicts in Iraq, inequalities and protection challenges can be manipulated by armed actors and government agents to stoke violence and instill fear in civilians. In interviews, CIVIC encountered language directed against specific ethnic and sectarian groups when discussing shortages of arable land and potable water.

The ways in which civilians, governments, and security forces seek to address—or capitalize on—these climate change-related vulnerabilities will have a direct impact on civilian protection throughout Iraq. Resource shortages and disparities in allocation can be politicized to exacerbate inter-communal tensions, potentially prompting conflict during growing political unease and gridlock. In the wake of combat operations against ISIS, Sunni communities are already reporting feelings of ostracization and lack of government support for their recovery. As they have in the past, extremist groups might also utilize economic disparity and the lack of access to critical resources (such as water and food stuffs) to attract civilians to their cause.⁸

“You were born somewhere, spend 30 to 40 years there, and then in a blink you have to leave. It’s really difficult.”

However, climate change may also present an opportunity for positive instances of social cohesion, community mobilization, and government–civilian partnerships.⁹ Iraqi society and government may use the threat of impending climate change to cooperate and strengthen social bonds and implement good governance, as has been done by communities in other countries experiencing climate threats and environmental degradation, such as those in Latin America.¹⁰

The sense of loss felt by Iraqis confronting the effects of climate change cannot be overstated. As one farmer said, “You were born somewhere, spend 30 to 40 years there, and then in a blink you have to leave. It’s really difficult.”¹¹ Another interviewee spoke about his reasons for staying in an area plagued by poor agricultural conditions: “If I leave [my area], I feel I cannot breathe.”¹² In part, these families fault the government for the destruction of their way of life and culture, which creates resentment toward officials and policies.

Solving the climate crisis in Iraq and ensuring protection and security for all Iraqi civilians requires both immediate and long-term strategic thinking and problem solving.¹³ Through this research, it is more apparent than ever that in order to ensure stability and prevent the outbreak of future conflicts, the Iraqi government, security actors, and international partners must factor the threat multiplier of climate change into policy and practice. Communities must also be equipped with the tools and knowledge to advocate for themselves and co-design solutions in the face of heightened protection concerns as a result of climate change.

II. RECOMMENDATIONS

In seeking to address the potential conflicts that may arise due to climate change and environmental degradation in Iraq, there are several actors and entities who can have a positive impact on outcomes. Tribal leaders, the government of Iraq, local civil society organizations (CSOs) and non-governmental organizations (NGOs), religious leaders, and the international community can all contribute to policies and practices that anticipate societal shocks due to climate change and try to mitigate the potential harm to civilians, their communities, and their livelihoods. Below are a set of general recommendations through which multiple actors can have a positive impact.

- The Government of Iraq, with support from the international community, must continue negotiations with upstream water neighbors (Iran and Turkey) to ensure continued river flows and preempt the outbreak of international conflicts over resources.
- International partners seeking to support good governance, peacebuilding, development, and humanitarian assistance in Iraq through programming and funding must need to partner these interventions with climate change-responsive policies.
- Local governments and community leaders should be provided with education and resources about the perils of climate change and work to eradicate bias against discrete communities within governing bodies and security forces.
- The preparedness of urban areas is critical as they experience rural-to-urban migration stemming from climate change. More funding and programming should be implemented in order to enhance social cohesion and to build community resilience to resource scarcity, the merging of cultures, and higher demands on services.
- Progress to decontaminate areas with remaining remnants of war and unexploded ordinances should be continued by the Government of Iraq, in coordination with CSOs, NGOs, and international partners.

III. BACKGROUND: CAUSES OF CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION IN IRAQ

2022 marks the five-year liberation of Iraq from ISIS control. The conflict, which displaced thousands of Iraqis and destroyed agricultural and pastoral lands, continues to affect civilians today. The legacy of the anti-ISIS campaign is coupled with the legacy of the Iran-Iraq war (1980–1988), the Gulf War (also known as “Operation Desert Storm,” 1990–1991), and the United States’ invasion of Iraq, which began in 2003, as well as years of sectarian violence and the rise of Al-Qaeda. Each of these armed conflicts inflicted scars upon the Iraqi people and their lands, and they weakened the ability of successive national governments to address large-scale, ongoing, and emerging threats to Iraq’s future success or the country’s resiliency to shocks.

Repairing the damage to the natural environment resulting from the use of harmful chemicals, the destruction of water infrastructure, and tactics such as the burning of orchards and cutting down trees will take years, if not decades, and will require influxes of funding and good governance.¹⁴ Sadly, however, little attention has been paid to the environmental aspect of post-conflict reconstruction and recovery. This oversight creates resource gaps for farmers and civilians who depend on infrastructure and resources such as water; leads to tensions over limited supplies; and is actively changing demographics throughout the country as many rural farming and pastoral families make the difficult decision to move to urban areas in search of work and a better life.

“Each year it gets hotter, summer is longer and winter is shorter”

– A farmer

In 2019, the UN found that Iraq is the fifth most vulnerable country in the world to climate change, indicating that temperatures will rise more quickly, weather patterns will become more erratic, and human migration will increase at rates far greater than other countries around the world.¹⁵ It is estimated that by 2050, temperatures will rise by 2 degrees Celsius, rainfalls will decrease by 9 percent, and severe weather events—including droughts, floods, and dust storms—will increase.¹⁶ As of this writing in 2022, there have already been more than ten dust storms, leading to the closure of government ministries and schools, the cessation of ground and air travel, mass hospitalizations, and an impact on crops.¹⁷ Other effects of climate change can be seen and felt throughout Iraq, with low water levels evident along the banks of the Euphrates and Tigris Rivers, the disappearance of lakes, and the loss of predictable weather patterns in urban and agrarian communities.¹⁸ As one farmer shared with CIVIC, “Each year it gets hotter, summer is longer and winter is shorter.”¹⁹ Another farmer noted that he had lost all of his previous year’s tomato crop because “the rain was very sudden and we couldn’t predict [it].”²⁰ Desertification is also rapidly increasing, due in part to the effects of climate change.²¹ In a country that already suffers from low levels of rainfall and extremely high temperatures, these developments are worrying for the environment and its people.

The effects of climate change are further compounded in Iraq by environmental degradation due to human activities in agriculture and oil production, pollution, and war. The Iraqi economy has always been driven in large part by agriculture and animal farming. Although oil revenues and production now account for the vast majority of Iraq’s gross domestic product and government incomes, agriculture and farming still supported 25 percent of Iraqi families as of 2017.²² However, government



Soccer stadium during dust storm near Tikrit, Iraq.

mismanagement and poor education about modern agricultural practices that protect inputs such as soil and water are contributing to climate change.²³ Farming practices in many parts of the country have not been updated in the past several decades despite the rapidly changing environment and available resources. For example, the agricultural association in Basra's Zubayr subdistrict noted that farmers in their area are not being provided with information about farming practices that promote regeneration of nutrient-depleted soil. The association also noted that there is limited government assistance for tools such as environmentally conscious fertilizers—a lack that leads agriculturalists to continue using harsh chemicals and techniques that strip the soil of its vital mineral compounds.²⁴

In Mosul, a university professor and farmer shared that many farmers are unaware of the harm in using polluted water on their crops or planting in land infused with harmful chemicals.²⁵ Methods for farming crops such as tomatoes and wheat, for example, are outdated and rely on water-intensive practices.²⁶ Due to the latest devastating drought and the overall trend toward less rainfall in Iraq's north, where rainfall-driven agriculture is possible, families have had to rely more on ground water sourced through legal and illegal wells to irrigate their lands.²⁷ In Iraq's southern governorates, famed for the Mesopotamian Marshes, water is increasingly brackish and the salt water is impacting soil quality and crop vitality.²⁸ The same professor in Mosul told CIVIC, "People know this [brackish] water isn't good for agriculture, but there is no other way."²⁹ The production of oil has also significantly contributed to pollution in Iraq, and agriculturalists and others see the impact on the quality of water and soil.³⁰ Notably, health issues have also increased dramatically in areas of oil production.³¹

Warfare has led to devastating environmental impacts in Iraq, as well. Decades of conflict and violence have left scars across the Iraqi landscape. Practices such as cutting down trees for fuel and/or to remove hiding places that could be used by insurgents have devastated once-lush oases and forests.³² According to the World Bank, “Forests slow climate change and increase resilience.”³³ Delicate ecosystems that rely on trees to produce oxygen, attract humidity, and absorb carbon dioxide have suffered. Interviewees told CIVIC that trees used to be a “positive” for the environment—as trees were cut down during the war with Kuwait, the Iraqi Civil War, and the fight against ISIS, affected areas became drier and crops failed due to the change in the atmosphere.³⁴

Another significant pollutant is the estimated tens of thousands of unexploded ordinances (UXOs) and other remnants of war littering the Iraqi countryside and urban centers.³⁵ Over the past five decades, six armed conflicts have been fought on Iraqi soil, leading to the proliferation of mines, bombs, and other weaponry throughout the country. In Iraq’s south, Operation Desert Storm and the Iran-Iraq War littered farmlands with UXOs and other remnants of war. In the north, ISIS was noted for its use of landmines and booby-trapped items such as children’s toys to inflict long-term damage. These remnants of war have tainted prime arable land throughout the country. Today, areas such as Basra and the Old City of Mosul remain contaminated with UXOs, which are both expensive and dangerous to remove. The Iraqi government and INGOs have made some progress in populated areas, but in rural or “less visible” areas, ordinance removal is slow and ad-hoc.³⁶ During a tour of a tomato farm in Basra governorate, a farmer showed CIVIC what appeared to be a bomb fragment next to a now-defunct water well.³⁷ Similar stories were repeated to CIVIC staff time and again. The remaining presence of other chemicals, such as depleted uranium, have also led to disuse of prime farmlands.³⁸

Perhaps the greatest current threat to Iraq’s water supplies and overall environmental health, however, is the reduced water flow from the country’s two major rivers: the Euphrates and the Tigris. The Tigris and Euphrates are expected to decrease their discharge by a shocking 50 percent by 2030 when compared to 1980s levels.³⁹ The two rivers account for 98 percent of the Iraqi water supply used for drinking, sanitation, and irrigation.⁴⁰ Yet the rivers do not originate in Iraq and are thus regulated by neighboring Iran and Turkey. Iraq has accused Iran and Turkey of implementing dam projects that endanger the lives of Iraqis by significantly decreasing water flow, and Iraq has gone so far as to threaten international legal action against the Iranian regime.⁴¹ Since December 2020, Turkey has cut the flow of the Euphrates to foreign countries by some 60 percent with its dam projects.⁴² An official in the Nineveh Governorate Planning Ministry told CIVIC, “In 2000, the water flow from the Tigris was 110 cubic meters per second, and now it is only 40 cubic meters per second.”⁴³

The decreased river flow is largely responsible for the salinization of the water, with silt and other materials contaminating what was once fresh water suitable for crop irrigation and animal grazing.⁴⁴ Water buffaloes in the south of Iraq are suffering dire health consequences due to the contaminated

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water they ingest on a daily basis.⁴⁵ In some cases, farmers are having to buy expensive drinking water to irrigate their farms.⁴⁶

The twin crises of climate change and environmental degradation in Iraq are having devastating impacts on the land and people, and they serve as mutually reinforcing issues. Yet the Iraqi government has not yet adequately met the challenges. As one member of an international political advisory group in Iraq noted, “political will [on climate change] ebbs and flows.”⁴⁷ Indeed, the Iraqi government seems more concerned with addressing short-term instabilities and securing political nominations than addressing the long-term threat of climate change.⁴⁸ In terms of international water diplomacy, interviewees expressed to CIVIC that the government was “weak” and that the issue of river flow requires a show of strength against neighboring countries.⁴⁹



Credit: CIVIC/Mostafa Altawre



Credit: CIVIC/Mostafa Altawre

Unidentified objects thought by residents to be remnants of war. Basra Governate.

IV. THE IMPACT OF CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION ON CONFLICT DRIVERS

In research on the relationship between climate change and human insecurity (including violent conflict), the Stockholm International Peace Research Institute (SIPRI) asserts that specific insecurity *pathways* are a viable option for examining the unique ways that climate change and environmental degradation can affect civilian populations. Furthermore, the institute notes, “Research shows the impacts and outcomes of climate change on security are different when couched in different social, political and economic structures and dynamics.”⁵⁰ In attempting to draw a clear line between outbreaks or continuations of conflict and climate change and environmental destruction in Iraq, it becomes apparent that this case is an instance of correlation, not causation. As a country in the midst of a transition to stability following half a century of war, conflict triggers and points of insecurity for civilians are bound up in countless issues and cannot be attributed to one singular cause.⁵¹

In order to assess the potential influence of climate change on the protection landscape for Iraqi civilians, it is necessary to look at the primary, secondary, and additional impacts of climate change and environmental degradation on discrete issues like livelihoods and migration. Coupled with knowledge and learnings about previous outbreaks of conflict and violence in Iraq, we can make predictions about potential inflection points and issue recommendations for reducing the overall impact of climate as a conflict driver in the fragile Iraqi context. Using the SIPRI pathways model, CIVIC elected to focus on areas that are clearly impacted by climate change and the changing environment in Iraq and that have also repeatedly impacted conflict and protection for civilians: livelihoods and migration.

Many villages were previously entirely dependent on agriculture-derived incomes, and generations of families practiced and perfected their skills while eschewing other forms of job and livelihood trainings.

Interruptions to livelihoods and agriculture

Agriculture and animal farming/hunting/herding represents the second-largest income-generation source for Iraqis after the oil industry. Many villages were previously entirely dependent on agriculture-derived incomes, and generations of families practiced and perfected their skills while eschewing other forms of job and livelihood trainings. In recent years, however, this traditional way of life and income generation has come under threat as many farming families have become unable to support themselves.⁵²

Farmers in Nineveh and Basra governorates expressed that maintaining an agricultural lifestyle that provides for their families and creates enough revenue to survive has become difficult. In the Basra sub-district of Zubayr, the agricultural association told CIVIC that “previously farmers had a good



Credit: CIVIC/Mostafa Alawre

Water well out of use due to diesel prices, Basra Governorate.

financial situation but now they hardly cover their costs of living.”⁵³ Issues related to water were invoked repeatedly, including: decreased rainfall and river flows; increased salinity of available water; limited numbers of legitimate wells; the high costs associated with gaining permits for and constructing legitimate wells; high costs associated with the diesel-fueled pumps and generators used to access ground water.⁵⁴ Unpredictable rainfalls also pose issues for long-time farmers and pastoralists, while progressively hotter temperatures affect the viability of traditional crops and soil quality. For these and other reasons, many farmers expressed the sentiment that there is no longer a future in agriculture and detailed their moves away from their longtime sources of employment and income. A sheikh in Basra city told CIVIC, “the value of agriculture is below zero [in Zubayr].”⁵⁵

The shift away from agriculture has created a cadre of single-skilled laborers who are now only able to find work as day laborers in fields such as construction or within informal security groups.⁵⁶ Many farmers have low levels of education and literacy, which creates a barrier to entry in the formal job market. A resident of Mosul city whose family had traditionally engaged in agriculture said, “Farmers only know about farming. A farmer can do day labor or open a vegetable stand, but he cannot, for example, open a small business!”⁵⁷ Another Mosuli resident indicated that there were simply not enough jobs and that when villagers immigrated into the city they “do nothing” because there is no infrastructure or market to support them.⁵⁸ Iraqi youth are finding their futures called into question as their agricultural birthrights become obsolete.



Marsh bank littered with trash, Basra Governorate.

Climate change-driven migration

A second prominent effect of climate change in Iraq is domestic migration, specifically rural to urban migration in areas with previously high numbers of families engaged in agriculture and pastoralism.⁵⁹ For many Iraqis, migration to urban areas is influenced by the loss of agricultural income and the need for new work opportunities.⁶⁰ A member of the Basra regional government explained, “Farmers have to move to the cities if they can no longer support their families with agriculture.”⁶¹ In 2019, the International Organization for Migration (IOM) estimated that 21,314 people moved from rural, agrarian lands to urban centers as a result of climate change and/or resource scarcity.⁶²

For others in Iraq, climate change and environmental degradation are making some areas simply untenable for human habitation. In the country’s south, temperatures are regularly reaching 55 degrees Celsius during the summer.⁶³ Villages with poor electricity and infrastructure are unable to support life-preserving services such as constant supplies of clean water and air conditioning.⁶⁴ Cities such as Baghdad, Basra, and Mosul offer a chance to live in less harsh environments due to the proximity of these vital services.⁶⁵

In Iraq, domestic migrants driven by climate-change impacts like inhospitable environments and lack of livelihood encounter many of the same barriers as conflict-induced internally displaced persons (IDPs).⁶⁶ Urban centers are increasingly marked by informal slum housing, temporary shelters for migrants, and an overextension of key services such as sanitation and education.⁶⁷ The depopulated rural areas provide prime locations for armed non-state actors to gather and train forces because they are hidden from civilian populations and the reach of the government and police.⁶⁸

V. SECONDARY EFFECTS AND POTENTIAL FOR CONFLICT

Based on previous drivers of conflict and insecurity in Iraq, we can anticipate that the loss of livelihoods associated with agriculture as well as climate change-driven spikes in rural-to-urban migration will impact the security of individuals and communities. We can also anticipate that these changes will have unique effects on populations with increased vulnerability, including girls and women, youth, and minorities.⁶⁹

Livelihoods and agriculture

The most immediate impact for families and individuals experiencing the loss of agriculture as a viable livelihood is the loss of income and financial security. Families facing financial hardship may be forced to make decisions around “essential” items and services such as school, health care, and education.⁷⁰ Girl children are often deprioritized in decisions regarding continuation of education, and they may even be subjected to child marriage in order to lessen financial burdens in times of hardship.⁷¹ A community activist in Basra told CIVIC that, for many agricultural families, it is “easier” to marry off girl children because of the economic incentives.⁷²

Meanwhile, youth who are withdrawn from school are more susceptible to various forms of child labor.⁷³ With already high rates of unemployment among youth throughout Iraq, urban centers with influxes of rural migration are seeing more children under the age of 18 engaged in informal labor.⁷⁴ For families continuing to engage in agriculture, children’s utility as farmhands is paramount to their education. A tomato farmer in Basra revealed that he had taken his son out of school due to the costs and because he needed inexpensive labor to drive down his costs of production.⁷⁵

As previously noted, many farmers are trained and educated only in skills pertaining to agriculture and animal herding. This creates a barrier to joining formal labor markets, and many of these migrants end up in unregulated day-labor positions without protections or the promise of job security. Moreover, according to urban residents, the influx of available labor has driven down the wages offered for low-skilled positions.⁷⁶

In addition, the use and trafficking of drugs has expanded rapidly in Iraq over the past decade.⁷⁷ For some civilians, the drug trade offers an appealing way to supplement lost income. It is especially prevalent in areas with permeable borders, such as the regions bordering Syria and the southern marshes.⁷⁸ Worryingly, the drug trade and the influx of available narcotics is increasing at a time of great youth disenfranchisement and apathy. A farmer from the Ba’aj area of Nineveh estimated that half of the young people in his area are now working in the drug trade or using drugs and alcohol.⁷⁹ A youth-focused civil society organization in Basra explained, “Previously they [youth] were able to find jobs in agriculture, but because of environmental change and war effects on farmable land, other [illegal] pathways become more attractive.”⁸⁰

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Migration

Climate change-induced and driven migration is increasingly removing families from their traditional homelands and placing them into unfamiliar contexts without social safety nets like trusted neighbors and tribal networks.⁸¹ Services are being strained under the weight of population growth, and disparate communities are being thrown into competition for basic resources such as electricity and potable water. Xenophobia among “host” communities in cities is prevalent.⁸² As a former farmer from Ba’aj told CIVIC, “The city people say ‘you’re from the village, why did you come here to create problems?’”⁸³ CIVIC observed the scapegoating of migrants, minority groups, and along ethno-sectarian lines in response to shortages of government services, jobs, and housing. An activist representing religious minorities indicated that tensions toward minorities had increased dramatically since 2003 in areas where minority groups had previously been able to live freely.⁸⁴

CIVIC spoke with migrants about bias from city officials and security actors. In all interviews, however, civilians and officials described conflict-resolution processes as fair and without pre-judgement. This response may have been influenced by fear of reprisal, and it may also reflect the largely tribal nature of conflict adjudication still practiced in many communities.⁸⁵

Women and girls face unique vulnerabilities due to migration, whether they remain in rural communities or move to urban centers. For example, as job loss in agricultural areas has led to the migration of male family members to cities for new work opportunities, it has created many more female-headed households.⁸⁶ CIVIC’s research in Iraq indicates that female-headed households face myriad protection concerns and are, in general, more vulnerable to security threats and have less ability to respond to domestic conflict.⁸⁷

Climate change and environmental degradation as a threat multiplier

By looking at the second-order effects of climate change and environmental degradation on livelihoods and migration, themes and concerns emerge that have previously impacted civilian protection in Iraq and that may, if left unaddressed, contribute to or inspire future outbreaks of conflict and violence.

Intra- and inter-communal tensions are rising, creating a space for manipulation by powerful actors.⁸⁸ Indeed, Iraq is still healing from decades of leaders pitting Iraqis against Iraqis, demonizing minorities, and blaming migrants for a host of domestic problems. In interviews, CIVIC observed these tensions with specific regard to water and other natural resources. For example, a government representative in Basra said plainly that “the North” (referring to the Kurdistan Region of Iraq) was taking too much water due to their upstream position. He further insinuated that this was a deliberate tactic meant to punish southern Iraqis, most of whom identify as Arab.⁸⁹ Communities are also being forced to compete for jobs, and excess supply is driving down wages for informal labor. A government official in Nineveh told CIVIC, “People in cities don’t realize that the villagers have no choice, but they see competition and the government doesn’t have plans to address these issues.”⁹⁰

This lack of national unity has plagued Iraqi society before. The scars of Sunni-Shia, Arab-Kurd, and other ethno-sectarian violence are still carried by civilians.⁹¹ Given the current political deadlock in Baghdad, it is possible that politicians will attempt to manipulate these communities and use their grievances to ostracize others.⁹² The fragility of social cohesion in cities previously affected by armed conflict will likely not be improved by new migration patterns, and new migrants have reported a lack of trust that security actors will treat them fairly in the case of conflict.⁹³



Credit: CIVIC/Mostafa Altawre

Walking through an abandoned tomato field, Basra Governorate.

Iraqis are increasingly citing feelings of diminished personal security, with one activist telling CIVIC that she “carr[ies] around a personal pistol for [her] security; each year the security situation is growing worse.”⁹⁴ It is estimated that there are over one million unregistered weapons in Iraq due, in part, to the arming of civilians by non-state armed groups and the rapid expansion of the drug trade in insecure areas.⁹⁵ Not only does the proliferation of unregistered weapons increase the risk of violent conflict, but, as drug trafficking increases in vulnerable areas, civilians are at risk of getting caught in the crossfire. The drug trade has brought increased surveillance and security force presence to communities, and the increasing contact between security actors and civilians has the potential for conflict outbreak. Indeed, security actors have clashed with civilians over the past several years, and hasty operations have resulted in civilian casualties.⁹⁶

In conversation with CIVIC, a civilian speaking about worsening security conditions due to the prevalence of firearms, increased drug trafficking, and ongoing tribal tensions stated that “anyone in Basra, whether Christian or Muslim, can’t feel safe in Basra right now because of the issues.”⁹⁷ Meanwhile, the worsening security situation is preventing IDPs in cities from returning to their villages, thus reigniting the cycle of xenophobia and competition for limited resources in urban settings. Moreover, villagers are still fearful of a resurgence of ISIS and feel that there is inadequate security to support them against the terrorist group.⁹⁸ Indeed, as once-populous rural zones become devoid of human activity, ISIS has the ability to occupy mountainous areas and tree groves to carry out guerrilla attacks—as they have already done in governorates such as Diyala.⁹⁹

Recruitment into formal and informal security groups has expanded dramatically due to the decrease in agriculture and pastoralism. In some cases, armed non-state groups such as ISIS are able to prey on the desperation of young people from farming families; in other cases, families will bribe security actors like police or units of the Iraqi security forces for employment in order to receive a steady salary.¹⁰⁰ This uptick in recruitment increases the number of weapons in communities and increases the chance of violence.

A lack of faith in the government colored the majority of CIVIC's interviews during this research process. Not only did civilians feel that the government and security actors were unable to protect them, many farmers and former farmers felt that the government had abandoned them in favor of the oil industry.¹⁰¹ In Nineveh, a member of an agricultural family reflected, "The government doesn't care about this way of life, and oil is more important than anything to the government."¹⁰² These civilians expressed a desire for support in the form of irrigation, diesel to run water pumps, subsidized drought-resistant seeds, and farming equipment such as tractors and plastic tarps.¹⁰³ There were also calls for the government to be stronger on international water and trade policy. For produce farmers, in particular, trade arrangements with neighboring Iran and Turkey render imported produce cheaper for Iraqis than the goods produced domestically.¹⁰⁴ A tomato farmer told CIVC that he would only plant his fields for the next year if trade policy changes, as now "there is no market for local tomatoes."¹⁰⁵

These vulnerabilities have been exploited by extremist groups and political leaders in Iraq before. Extremist groups have been able to manipulate the sheer scale of need in Iraq when the government is unable to provide.¹⁰⁶ ISIS, for example, famously preyed on drought-stricken farmers in Nineveh, supplementing their lost incomes until the civilians had no choice but to join the group's terrorist activities.¹⁰⁷ Meanwhile, Saddam Hussein capitalized on xenophobia in the face of resource scarcity, and today the government is perceived as withholding aid from Sunni families trying to rebuild their lives after the defeat of the Islamic State. As a local journalist told CIVIC, "The government prioritizes giving resources to populations who they think will support them in elections."¹⁰⁸ Indeed, the lack of trust between Iraqi civilians and the government leaves a power vacuum ripe for exploitation by political parties, armed actors, and even international forces seeking to gain control within Iraq.

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VI. CONCLUSION

There have been notable commitments and achievements made by the Iraqi government and local CSOs to combat the negative effects of climate change and reduce environmental destruction. In 2021, Iraq has ratified the Paris Agreement and instigated a National Adaptation Plan with the UN Environment Programme to enhance resiliency to climate change.¹⁰⁹ Organizations such as the Save the Tigris Foundation have drawn international attention to the need to protect Iraq's fragile water resources, and youth groups have embarked on clean-up campaigns to protect areas from pollution.¹¹⁰ These efforts are step in the right direction but more is needed to build community resilience and cooperation in the face of the threat of climate change.

Iraqi youth will bear the brunt of climate change-related conflicts, as their generation matures in a country entirely different from that of their forebears. Already, girls are facing heightened risk of child marriage and the curtailment of education. Child labor is also on the rise. Young boys and men are at an increased risk of recruitment by state and non-state armed groups, potentially exposing them to violent ideologies and paving the way for trauma-afflicted adolescence. Time for more action is now.

It is clear that climate change and environmental degradation are on track to dramatically impact the lives of civilians throughout Iraq. While impacts such as the loss of livelihoods or migration are more immediately visible, additional consequences like increased intra-communal tensions and a lack of faith in government and security actors must be carefully monitored. These issues have previously foreshadowed or instigated conflict in Iraq—without attention through policies and actions, they may again. What is more, climate change is exacerbating the precarious security of specific groups in Iraq such as minorities and girls and women.

While climate change may not yet be a conflict driver in Iraq, it is certainly a threat multiplier.

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Low water levels along the Tigris river exposing trash, Nineveh Governorate.

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