

Climate and mobility in the Middle East case study

June 2025

Al-Qadissiya, Iraq



Imagery: ©2025 NASA, map data ©2025

Satellite image of Al-Qadissiya Governorate, Iraq.

Key findings

- The percentage of respondents aspiring to move is higher than the percentage indicating a preference to stay, but few have the resources to move in the short term.
- Climate hazards are the most frequently cited reasons for wanting to migrate, with economic reasons mentioned second (although the two are closely interlinked).
- Those who are migrating are most commonly moving to larger cities in the country, rather than abroad.
- Al-Qadissiya is highly vulnerable to climate hazards, with the majority of survey respondents describing having experienced severe consequences from them. The region's reliance on climate sensitive livelihoods, including agriculture and animal husbandry, appear to be drivers of the high desire to leave.
- Populations who face intersecting vulnerabilities, including those displaced from conflict and climate hazards in other parts of the country, the elderly, children and those without adequate housing, face additional vulnerability to climate hazards.
- Social bonds and adaptation, including investment in alternative livelihoods, could support individuals to stay.







Note on Data Collection

Data collection was conducted between 3 December 2024 and 17 January 2025. A total of 220 household surveys were conducted, with 110 men and 110 women selected from the governorate. (see map)

Six focus group discussions were held with participants from households in the sample area, with two groups of men and two groups of women from the community of origin (divided by age: 18-25 and over 25), as well as two groups of internally displaced persons (IDPs).¹

In addition, 17 in-depth interviews were conducted. This included eight interviews with individuals from the governorate, specifically targeting the four defined mobility outcomes (involuntary mobility, involuntary immobility, voluntary mobility, and voluntary immobility), with two interviews per outcome. Additionally, four interviews were with internally displaced persons (IDPs) to understand their unique experiences. To gain broader contextual insights, six key informant interviews were also carried out with policymakers, local authorities, community leaders, INGO representatives, and climate change experts.

About This Project

This case study forms part of a wider piece of research examining how climate-related factors influence mobility aspirations, capabilities, and outcomes in four different locations in the Middle East. It examines decision-making at the individual and household levels, drawing insights into how people process and respond to climate challenges through (im)mobility. The research draws on a framework conceived by the Mixed Migration Centre (MMC) to explore the idea of mobility in the context of climate change impacts. The framework delineates mobility outcomes into four categories: involuntary mobility, voluntary mobility, involuntary immobility and voluntary immobility 2 It illustrates how climate-related environmental stressors affect mobility outcomes and how they directly and indirectly impact the aspiration and capability to move. While recognising that these categories are often overlapping and are rarely tidy, it provides a framing for considering the multiple and shifting forms of movement that characterise the region.

The research focused on Aden and Al Maharah governorates in Yemen, Al-Qadissiya governorate in Iraq, and Al-Hasakeh governorate in Syria. These are all areas particularly vulnerable to climate-related stressors and represent a diversity of socioeconomic contexts. One case study was developed for each location, and a synthesis report was produced integrating analysis from the four case studies and highlighting key insights gleaned from the research. Data collection for this research included household surveys, focus group discussions and individual in-depth interviews to shed light on experiences of (im)mobility, connections to climate-related hazards, and the perceived outcomes of mobility. Additional expert interviews were used to address any evidence gaps. See the <u>synthesis report</u> for a more comprehensive overview of the analytical framework and methodology.

MMC carried out this project with funding received from the Foreign, Commonwealth and Development Office (FCDO). It builds on prior research to assess the state of knowledge on climate change impacts on mobility and migration dynamics in the Middle East $^{-3}$

¹ For the purposes of this research, we defined internal mobility as those coming from outside the governorate, excluding movement within it.

MMC (2024) Climate Change Impacts and Mobility in the Middle East What do we know?

³ MMC (2024) Climate Change Impacts and Mobility in the Middle East What do we know?

A Note on Terminology

MMC developed a list of key terms used throughout this project, including:

- Climate change: A change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer (IPCC (Undated) IPCC Intergovernmental Panel on Climate Change).
- Climate-related environmental stressors: Perceived and experienced long-term meteorological impacts on the ecosystem that may affect the functioning of the biological system (e.g. NCBI (2016) National Center for Biotechnology Information).
- Climate-related hazards: Natural meteorological events that pose danger to humans and the environment. These events occur due to deficiencies or excess of precipitation, destructive winds and anomalous temperatures (based on WMO and UNFCCC terminology around climate-related risks / hazards and extreme events).
- Resilience: The ability of individuals, households, communities, cities, institutions, systems, and societies to prevent, resist, absorb, adapt, respond and recover positively, efficiently, and effectively when faced with a wide range of risks, while maintaining an acceptable level of functioning and without compromising long-term prospects for sustainable development, peace and security, human rights and well-being for all (IOM (2019) Glossary on Migration).
- **Vulnerability**: The limited capacity to avoid, resist, cope with, or recover from harm. This limited capacity is the result of the unique interaction of individual, household, community, and structural characteristics and conditions (IOM (2019) Glossary on Migration.)

A Note on Limitations

This is a comparative project looking in-depth into people's perceptions across a range of locations. However, the scope and timeframe were limited to specific areas within the case study governorates at a particular moment in time. As a result, the findings from these areas may not reflect the full range of experiences and responses to climate change and mobility across the governorate, and conditions and responses could vary in other areas. In addition, while the findings offer insights into perceptions of climate-related environmental stressors and adaptation, the research represents a snapshot in time, and so provides limited insights into how perceptions and attitudes develop over time. Finally, given the adoption of non-probabilistic sampling, the findings should be considered indicative.

Al-Qadissiya, Iraq and climate risks



Irrigated farmland in
Al-Qadissiya Governorate,
intersected by one of the region's
main water channels, the
Dagharah canal. Agriculture in
this part of Iraq depends heavily
on controlled irrigation from the
Euphrates River system, which is
increasingly under stress due to
reduced water flow and climate
variability.

Photo credit: © Ali canon/Flickr (2024)

Geographic and demographic context

Al-Qadissiya governorate, also known as Al-Diwaniyah governorate, is located in central Iraq and encompasses a diverse range of landscapes, including the Euphrates River floodplain, desert areas, and agricultural lands. The governorate remains predominantly rural, with agriculture and livestock rearing serving as the main sources of livelihood. According to the Director of Agriculture in the governorate, approximately 76% of the governorate's population depends on these sectors. Al-Qadissiya also includes urban centres such as the city of Al-Diwaniyah, home to about 1.3 million residents. With its combination of rural livelihoods and urban settlement, the governorate offers a microcosm for understanding the impacts of climate risks across different settings in Iraq.

Context of climate risks

Over recent decades, Al-Qadissiya has been increasingly affected by a range of climate hazards, including:

- Extreme heat: The governorate regularly experiences extreme heatwaves, with temperatures often exceeding 50°C (122°F). These conditions pose serious health risks for vulnerable populations and exacerbate water scarcity through increased evaporation.⁷
- **Droughts**: Al-Qadissiya faces frequent and prolonged droughts driven by low rainfall and extreme temperatures.⁸ There have also been alarming falls in the level of the Euphrates River in the region, due to upstream damming and reduced rainfall, which exacerbates drought and has a significant impact on agriculture and other sectors.⁹ The impact has been severe and intensified in recent years¹⁰: an estimated 70% of arable land¹¹ has been affected, significantly harming farmers and herders.¹²
- Water scarcity: Drought conditions have not only jeopardised agricultural production but have also led to serious shortages of water for domestic use. Water reserves have fallen sharply, with Iraq's Ministry of Water Resources warning in 2022 that national water reserves had halved compared to the previous year.¹³
- Sand and dust storms: The governorate has seen an increase in sand and dust storms, linked to drought, desertification, and changing land

⁴ Shafaq news, Al-Diwaniyah faces dire consequences of prolonged drought," September 11, 2023, https://shafaq.com/en/Report/Al-Diwaniyah-faces-dire-consequences-of-prolonged-drought

^{5 2018} estimate, City Population, Iraq.

⁶ Key informant interview, Climate expert.

⁷ Berghof Foundation (2023) <u>Climate security challenges in Iraq - Entry points for local-level dialogue</u>; WHO (2022), Health and climate change: country profile 2021: Iraq.

⁸ Key informant interview, Climate expert.

⁹ MMC, Climate Change Impacts and Mobility in the Middle East: What do we know? (2024); The World Bank, Iraq – Country climate and development report (2022).

¹⁰ Berghof Foundation (2023) <u>Climate security challenges in Iraq - Entry points for local-level dialogue</u>.

¹¹ Key informant interview, Climate expert.

¹² The World Bank (2022) <u>Iraq – Country climate and development report;</u> Zeki Gokalp & Jawad Hassan Humaidy (2022) <u>Impacts of climate change of paddy farming in four Iraqi rural communities: The case of Al Najaf, Al Qadisiyah, Al Muthanna and Thi Qar, Springer.</u>
13 Ibid.

use patterns. These storms, often accompanied by strong winds, pose respiratory health risks, cause physical damage, and disrupt daily life. 14

• **Desertification**: The cumulative impact of extreme heat, drought, and water scarcity has accelerated desertification in Al-Qadissiya. Nationwide, 71% of Iraq's arable land has been affected by desertification, with an additional 10,000 hectares lost each year, according to the Iraqi Ministry of Environment. This degradation has reduced the amount of cultivable land to just 1.4 million hectares and has led to a 70% decline in agricultural output. Notably, the International Organisation for Migration (IOM) identified Al-Qadissiya as the third largest source of drought-induced internal displacement in Iraq in 2024.

Population profile and perceptions

Profile of survey respondens

220 individuals interviewed

Gender:

45% men and 55% women

Age:

18-25: 7%; 26-64: 90%; Over 64: 2%

Average household composition:

8 members, 1.5 financial contributor, 2.5 children

Education completed:

5% university or higher; 1% vocational; 18% secondary education; 45% primary education; 32% none

Remittances:

Only 11% received remittances.

Economic activities and livelihoods

The governorate is highly dependent on agriculture and animal husbandry, both of which are extremely climate sensitive. Both local communities and IDPs in Al-Qadissiya primarily rely on growing crops such as wheat, barley, chickpeas, lentils, and vegetables, alongside livestock rearing. Respondents most commonly reported being self-employed (27%) or casually employed (25%), reflecting the often seasonal and informal nature of agricultural work. Others reported being engaged in household or family responsibilities (18%), not engaged in work (13%), retired (7%), or studying (2%), while only 7% had regular salaried employment.

Although agriculture was the main livelihood for the majority of respondents, there were also diversified sources of income. Among those engaged in work of any kind (n=131), 49% worked in agriculture and 10% in pastoralism. Focus group discussions also highlighted the importance of government employment. While this was not listed as a specific sector per se in the household survey, 7% of respondents reported working in police, military, and defence, and a further 7% in education, both sectors likely dominated by government jobs. However, access to government employment was reportedly controlled by influential members of the community, making it difficult for displaced or marginalised groups to secure these opportunities.¹⁸ Trade and craft work were also noted as important income sources in focus groups.¹⁹ Remaining respondents reported working in domestic work (8%), construction (7%), trade (3%), transportation (2%), and accommodation and food services (2%).

Nearly half of respondents (47%) reported obtaining some of their household food through farming, with one quarter (25%) receiving all their food from agricultural production. Meanwhile, 28% reported no reliance on farming for food. These findings highlight the continued dependence on agriculture for food consumption despite the growing environmental pressures. The impacts of hazards such as drought, extreme heat, and desertification exacerbate the vulnerability of many households and jeopardise their food security.

¹⁴ Berghof Foundation, Climate security challenges in Iraq (2023) Entry points for local-level dialogue; UNCT Iraq (2013) Sand and dust storm fact sheet.

¹⁵ Asst. Prof. Dr. Haider Aboud Gzar AL-Karaawi (2021) <u>Environmental and Demographic Effects of Desertification in Al-Qadisiyah Province</u> University of Al-Qadisiyah, College of Arts, Geography Dept

¹⁶ Hisham Allam (2024) <u>Iraq chokes on dust; Desertification ravages land and lives</u> DevelopmentAid 17 IRAQ MISSION, Displacement Tracking Matrix | DTM, <u>https://iraqdtm.iom.int/Archive/Drought.aspx</u>

¹⁸ Interview with Iraqi man.

¹⁹ Focus group discussion, young men 18-25.

Basic needs, access to services, and future outlook

Basic needs remain unmet for a significant proportion of households. Roughly half of respondents (43%) reported that their household was able to meet their basic needs, while 45% said that they could not. In the case of the latter, interviewees and focus group participants clearly identified climate change as a major contributing factor. As one participant stated, "With changing climate conditions, increasing droughts, and rising temperatures, our income was drastically affected. We lost about 90% of our income due to dry lands and deteriorating crops. Rivers dried up, making it impossible to fish, and the ecosystem changed significantly, causing the disappearance of birds and animals we used to hunt in the past."²⁰

Access to, and quality of, services remain a significant challenge. Although 65% said that services were at least somewhat accessible, about one-third (35%) described services as difficult to access. For instance, almost all respondents mentioned that their household has to fetch water at some point and around half (53%) reported that they had to do so on a regular basis. Several key informants described services as inconsistent, inadequate, and poorly maintained.

Housing conditions reflect similar vulnerabilities. Only 33% of respondents reported living in a shelter they considered adequate. Others reported residing in substandard housing, including destroyed or damaged homes (26%), shelters not intended for residential use (19%), prefabricated houses (9%), unfinished or abandoned buildings (5%), makeshift or improvised housing (5%), and public buildings (2%). Challenges are particularly acute among displaced communities. As one interviewed internally displaced man explained, "Most displaced families live in informal settlements, where they live in houses built of mud, block, metal or wood."²¹

Reflecting the scale of challenges faced, many respondents expressed uncertainty about the future. When asked to reflect on whether their household would be able to provide for its members in five years' time, 38% were unsure. An almost equal proportion expected their situation to remain about the same, while 16% anticipated their situation worsening. Only 9% were optimistic about future improvements.



Al-Diwaniyah, the capital city of Al-Qadissiya Governorate, is known for its agricultural role and location along a branch of the Euphrates River. Droughts have severely affected the area, both in terms of water supply and livelihood insecurity.

Photo credit: © SaFi2266/Wikimedia Commons (2016)

²⁰ Interview with returnee.

²¹ Interview with IDP man.

Impacts of climate-related events



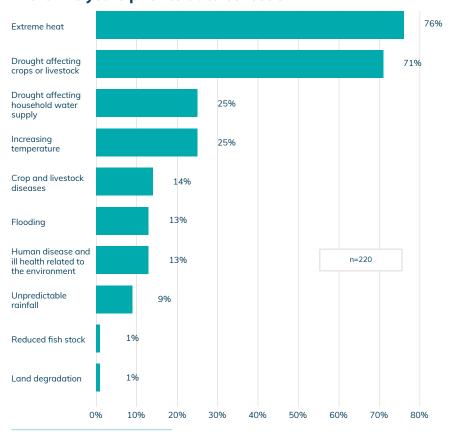
Caption: Flooded street in Al-Diwaniyah city, Al-Qadissiya Governorate, following heavy rainfall. Flooding is becoming more frequent in the area due to poor drainage infrastructure and intensifying rainfall patterns linked to climate change, exposing residents to recurring disruption and health risks.

Photo credit: Ali canon/Flickr (2023)

Respondents reported having experienced a range of climate hazards in Al-Qadissiya, most notably droughts and extreme heat (see Figure 1). Notably, every respondent indicated that at least one climate hazard had occurred in their area in the five years leading up to data collection, underscoring the widespread reach of environmental stressors across the governorate. Additionally, many described significant impacts on their household's lives and livelihoods. For example, respondents who mentioned impacts of extreme heat on their community (n=167), 61% said that their household was severely or very severely affected, 39% said that they were moderately or slightly affected, and none said that they were not at all affected.

Likewise, drought has become an increasingly common and disruptive phenomenon in Al-Qadissiya, with consequences that have grown steadily more severe, including the depletion of household water supplies. Among respondents who reported that drought had affected the community (n=156), 80% said their household had been severely or very severely impacted, 19% reported moderate or slight impacts, and only 1% reported no impact. Every one of these respondents observed a worsening trend over the five years preceding data collection, with 76% stating that drought had become much more severe and 24% noting that it had become a bit more severe. As one interviewee reflected, "Climate risks have impacted our lives dramatically. We had to leave agriculture and sheep farming altogether due to drought and water scarcity."²²

Figure 1. Reported climate-related hazards experienced in the five years prior to data collection²³



²² Interview with Iraqi man.

²³ Respondents could choose multiple options.



The Dalmaj Marsh, situated between the Governorates of Al-Qadissiya and Wasit, has increasingly suffered from drought and declining water levels, threatening both biodiversity and local livelihoods.

Photo credit: © Re1mod/Wikimedia Commons (2016)

Drought, extreme heat, and other mentioned hazards have reportedly led to multiple negative outcomes, including threats to livelihoods, adverse health effects, and increased pressure on social cohesion within and between communities. Respondents who reported at least one hazard affecting their household (n=219) were asked about the types of impacts they experienced.²⁴ The widespread impacts associated with extreme heat, the most commonly cited hazard, are detailed in Figure 2 below.

Livelihood-related impacts, particularly the loss of livelihood assets, were the most commonly reported consequences of climate-related hazards, especially in the agricultural and livestock sectors. This impact was predominantly linked to drought, with 92% of respondents who reported that their household was affected by drought (n=155) listing livelihood loss as a consequence. It was also strongly associated with high temperatures, with 70% of respondents who mentioned impacts of high temperatures (n=168) reporting livelihood damage.

Drought, high temperatures, and increasing salinity have severely affected agriculture, reducing yields and rendering large areas of farmland unproductive. This has caused significant losses for many farming-dependent households in the governorate. Additionally, high temperatures and drought continue to pose a major threat to livestock health, with many animals dying due to worsening environmental conditions, compounded by the emergence of new diseases caused by contaminated water from wells high in sulfur content.²⁵ These impacts have jeopardised both economic stability and food security in the area.

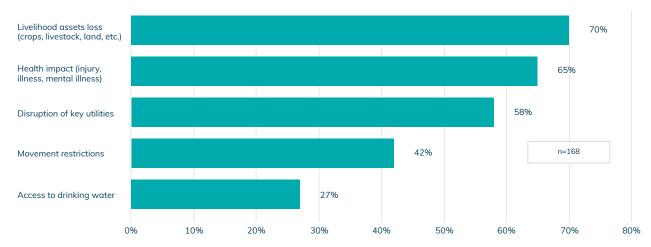


Figure 2. Five most commonly mentioned consequences of extreme heat²⁶

Those most severely impacted by climate-related hazards are often the poorest, with pre-existing vulnerabilities exacerbating the effects of these shocks. Climate-related hazards and extreme weather events interact with and deepen these vulnerabilities, disproportionately affecting communities that lack the resources or capacity to adapt. For example, communities with limited access to education or environmental awareness often struggle to take preventive action or adapt to the impacts of climate change, further amplifying their risks.²⁷

²⁴ Multiple consequences could be associated with each reported hazard.

²⁵ Key informant interview, INGO worker.

²⁶ Respondents could select more than one answer.

²⁷ MMC (2024) Climate and Mobility in the Middle East.

In Al-Qadissiya, internally displaced persons (IDPs) constitute a particularly vulnerable group. This governorate received large numbers of IDPs fleeing the advance of the Islamic State in 2014-2015, 28 primarily from Nineveh, Anbar, Kirkuk, Salah al-Din, Baghdad, Babylon, Diyala, and Wasit to the north. Those displaced brought with them significant cultural and ethnic diversity. More recently, drought and heat challenges in other parts of the country, including Babylon (Babil) to the north, and Dhi Qar and Samawah in Al Muthanna governorate to the south, have driven additional displacement to Al-Qadissiya. According to displaced Focus group discussion participants, IDPs in the governorate have faced significant difficulties accessing housing and employment, which has further exacerbated their vulnerability to climate-related hazards.

Responses to climate-related impacts

In the face of escalating climate hazards, Al Qadissiya communities appear to have demonstrated notable resilience, but the road to sustainable adaptation remains fraught with challenges. While local efforts to cope with drought, extreme heat, and water scarcity are underway, the need for long-term solutions was reportedly urgent. Findings show that, despite the reliance on immediate coping strategies like extended working hours and shifting agricultural practices, there is a clear call for external support to foster sustainable resilience.

Community resilience and adaptation

Participants in focus group discussions highlighted both existing strengths and significant gaps in communities' ability to cope with climate hazards in Al-Qadissiya. Communities in the governorate were reportedly actively engaging with the challenges posed by climate change. Findings highlight that while coping strategies are varied, the focus is largely on resilience-building and adaptation to long-term climate stressors such as drought, extreme heat, and water scarcity.

Community solidarity is a central pillar in coping with the compounded challenges of climate impacts. Participants emphasised how shared resources and collective efforts play a key role in helping families survive. One participant shared, "We are stronger together. When one family struggles, others pitch in, either with water or food, or even labour for farming." This sense of community support is critical, particularly for those with fewer resources to adapt independently.

Beyond community efforts, individuals are also employing specific adaptation practices to reduce the vulnerability of their livelihoods. These include switching to drought-resistant crops and adopting no-till farming methods that preserve soil moisture and improve productivity despite the harsh climatic conditions. As one participant noted, "Using different crops that can survive the heat helps us stay afloat. Our land used to fail with traditional crops, but now we're seeing some success with drought-resistant seeds." Water management was another commonly mentioned adaptation strategy. Farmers in the region are shifting to water-saving irrigation techniques, such as drip irrigation, which allows them to use water more efficiently. This was described as essential for both agriculture and personal water supply. One participant explained, "Without proper water management, we wouldn't have survived the last drought. The irrigation system we have now has saved us."

Another critical response to climate stress was the adjustment of working hours. Respondents in rural areas are reportedly increasingly choosing to avoid working during the hottest parts of the day to reduce heat stress, and many are shifting their work schedules to early mornings and late evenings. One participant shared, "We've learned to work around the heat. It's tough, but we try to get as much done before noon and after the sun sets."

Despite these efforts, there is a strong call for more sustainable solutions. Many respondents expressed that while immediate coping strategies (like adjusting work hours and changing crops) have helped, these measures are not long-term solutions. One participant voiced, "We need more than just coping; we need the tools to build long-lasting resilience." As highlighted in the discussions, many communities are looking to external support for assistance in implementing these sustainable solutions. The need for more support in the form of technical knowledge, access to better seeds, and climate-resilient infrastructure was frequently mentioned.

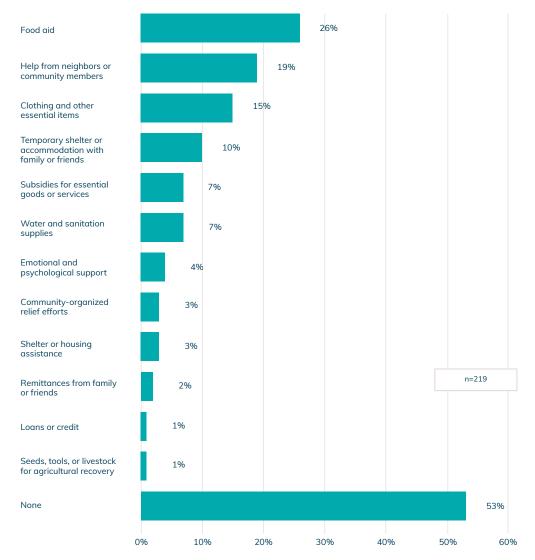
²⁸ International Organisation for Migration (2018) <u>Iraq Displacement Crisis 2014-2017.</u>

External support for responding to climate hazards

Corroborating what emerged from the focus group discussions, more than half of the respondents who were impacted by climate hazards (n=219) received any assistance to adapt or respond to the consequences of climate hazards. (see Figure 3.)

Of those who received assistance (n=104), the most common source (mentioned by 80% of respondents) was family and friends. Twenty-six percent reported assistance from INGOs and 21% from local organisations. Only 12% mentioned receiving support from the government.

Figure 3. Reported types of assistance received when faced with or in preparation for climate shocks²⁹



Government role and perspectives

The Government of Iraq has initiated actions to address climate challenges, notably with the launch of the National Strategy for the Protection and Improvement of the Environment in 2024. This strategy serves as a broad framework for protecting the environment and adapting to climate change, with a focus on enhancing resilience and safeguarding biodiversity. While Iraq has developed policies related to climate change, their implementation remains limited due to financial constraints and ongoing political instability.³⁰ Climate change has emerged as a significant driver of internal

²⁹ Respondents could select more than one answer.

³⁰ MMC, Climate Change Impacts and Mobility in the Middle East: What do we know? (2024)| RCRC, Iraq climate factsheet (2022).

displacement, with projections indicating that displacement will increase as the crisis worsens.³¹ To address this, the government introduced the National Migration Programme and the Iraqi Workers Abroad initiative, which offer legal support to facilitate immigration procedures and protect workers' rights.

In Al Qadissiya, various sustainable agriculture projects are underway. These include the use of modern irrigation techniques, promoting the cultivation of drought-resistant crops, and the development of drought early warning systems. Local government efforts to encourage investment in renewable energy and awareness-raising programmes to promote environmental protection and climate change adaptation are also underway. One key informant noted, "There are some villages that have been built wells for them to return and practice their lives after they left them due to drought."³²

However, despite these efforts, interviews reveal that substantial investment and coordination are still required to achieve meaningful progress. Several key informants pointed out that the response from both the government and other actors is hindered by resource limitations, poor coordination, and weak implementation capacity, which are exacerbated by bureaucratic inefficiencies and a shortage of qualified human resources. Weak governance frameworks and institutions make this more difficult.³³

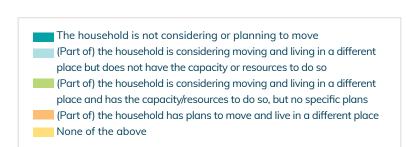
Mobility patterns

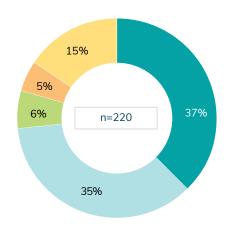
Although Al Qadissiya does not appear to have a strong historical trend of population movement, there was a high level of interest in mobility among respondents at the time of data collection. The majority of respondents said that (part of) their household was planning or considering moving (61%), while 37% did not report such intentions.³⁴ While most of those who were considering or planning to move reportedly intended to remain within the country, resources or means to do so were often described as limited.

Despite mobility intentions being high, the majority of respondents reported that their household did not experience mobility in the ten years prior to data collection. Eighty percent of respondents stated that no member of their household had moved in the past decade. However, among those who mentioned that at least one member of their household moving (n=44), 40% reported that it had occurred in the last five years. This uptick in mobility appears to be linked to the increase in climate-related displacement. In focus groups, participants noted that since 2019, mobility had increased as a result of the drought. One participant reflected, "In the past few years, drought has led to the migration of around half of the population of some villages." 35

Most respondents perceived mobility among the community in Al-Qadissiya as a common occurrence, further indicating that mobility from the region is a growing phenomenon. Thirty-nine viewed mobility as common or very common, as compared to 20% who said that it was uncommon.³⁶

Figure 4: Migration intentions





³¹ IOM DTM, Drivers of climate-induced displacement in Iraq - climate vulnerability assessment (2023); International migration from climate-affected areas in Iraq: exploring the influence of climate change on mobility patterns (2024).

³² Key informant interview with Government actor.

³³ Multiple Key informant interviews.

³⁴ Fifteen percent selected "none of the above" and 1% declined to reply.

³⁵ Focus group discussion with Iraqi men 25+

³⁶ Twenty-eight percent said that it was neither common nor uncommon and 13% preferred not to answer.

Of those who reported that (part of) their household was considering or planning to move (n=101), 76% stated that they did not have the resources to do so.

When asked about the resources/assistance needed to move as desired, respondents who reported mobility intentions within their household with specific plans about this movement (n=88) most frequently cited money, either to cover the journey costs or for settling into the new location, as described in Figure 5.

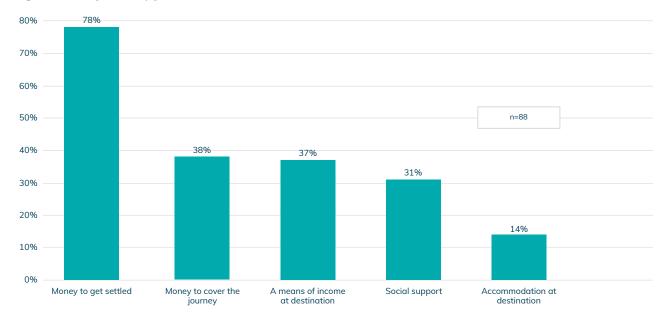


Figure 5. Top five types of assistance needed to move as desired³⁷

While social support was not commonly mentioned by respondents as an assistance need, it featured strongly in qualitative interviews with many emphasising the loss of social capital as a result of migration.

Respondents felt a significant level of urgency in deciding whether or not to migrate. Asked to rate this urgency on a scale of 1 to 10, where 1 is "there is no pressure to move and it is a free choice" and 10 is "it is no choice at all and there is an urgent need to move", those who were considering migration (n=101) most commonly answered 7 (21%), indicating that they felt significant pressure.

For those that had migrated or wanted to migrate, the focus was on staying in Iraq. Respondents whose household members had moved (n=44) reported that 21 had moved to a rural village, 16 to a secondary city, 7 to the capital and none initially to other countries. When asked to reflect on where their household would go, those who were considering moving (n=97) were more evenly split, between a rural village (27%), a secondary city (34%), and the capital (31%). Only 4% cited another country.³⁸

In order to understand the popularity of the capital and secondary cities, it is important to note that climate migration is layered on top of a longer-term pattern of rural to urban migration. In urban areas, "new immigrants face difficulties integrating into urban communities, as they tend to cluster in neighborhoods that suffer from multiple social and economic problems. This exclusion increases their suffering and hinders their access to public services and basic rights."³⁹

Migration patterns were relatively evenly split between individuals migrating alone or with their households, with 24 of the 44 survey respondents whose household members had migrated reporting that the whole household had moved and 21 just part of it.⁴⁰ In situations where households split, household survey respondents whose household members had migrated (n=44) reported that migrants were largely young men and women between 18 and 25, and the genders were evenly split. When asked to reflect on who moved in the community as a whole, those who reflected that only part of the household generally moved (n=48) most frequently said that men aged 26 to 65 migrated (38), followed by men 18-25 (35), women 18-25 (16), women 26-65 (14), children (2), men over 65 (6) and

³⁷ Respondents could select more than one answer.

³⁸ Four percent didn't know or preferred not to answer.

³⁹ Key informant interview with Climate change expert.

⁴⁰ N=44.

women over 65 (6).⁴¹ One community leader explained that younger people, in particular, were forced to leave the governorate to look for work.⁴²

There are various factors that weighed against moving. One displaced woman mentioned that many would prefer to stay if livelihoods were available: "For me, the marshes were a home with many memories and positive aspects such as strong social ties and the rich nature on which we depended for our livelihood. But due to difficult conditions, environmental degradation, drought, lack of economic opportunities, and lack of basic services, moving was an inevitable option."⁴³ In the household survey, it also emerged that those with disabilities and the elderly were often unable to move. No one reported a household member with a chronic illness or disability moving, although many identified persons in this category being left behind. Likewise, of the 48 survey respondents who said that migrants in the community tended to travel individually, 47 reported that older people were often left behind and 20 said that children are also at times left behind.⁴⁴

Most respondents are not currently intent on migrating permanently. When asked about how long they would stay away, respondents who expressed interest in migrating (n=101) most commonly said that they were unsure or did not know (49%), followed by a few years (21%), a season or less (19%), and permanently (12%).⁴⁵ In many cases, key informants reflected that movements that were intended at the outset to be temporary have become more permanent if conditions do not improve and finding livelihoods at home remains impossible.⁴⁶ Respondents whose family members had migrated (n=44) were relatively evenly split on whether or not they had returned, with 18 saying that all had returned, 7 saying some returned and 19 saying that none had done so. Reflecting on the community as a whole, 20% of household survey respondents (n=174) said that migrants never returned, 30% said that they sometimes did, and only 8% saying that they often or very often did.

Overall, respondents had a positive view of the migration experiences they had observed, and were more than twice as likely to say that it helped than that it did not. Of the 44 household survey respondents whose household members had migrated 30 said that migration had improved the migrant's situation (24 said that it improved their situation somewhat, while 6 were seen to have achieved their aims), while only 14 said that their situation did not improve at all. At the same time, many also recognised risks involved with migration. For example, one woman described how her brother had tried to move to a nearby urban location, but could not find work and therefore could not afford any housing and returned after three months.⁴⁷

⁴¹ N=48.

⁴² Key informant interview with Community leader.

⁴³ Interview with IDP woman.

⁴⁴ N=48.

⁴⁵ N=101.

⁴⁶ Multiple Key informant interviews.

⁴⁷ Interview with Iraqi woman, Al-Qadisiyyah, Iraq.

Impact of climate-related events on mobility

Climate and environmental concerns were the primary reasons why respondents and interviewees reported moving, or wanting to move, from Al-Qadissiya, with economic concerns taking second place - although the two are closely ranked and interlinked.

Respondents who expressed an interest in migration (n=101) most frequently mentioned climate related reasons: 66% mentioned drought, 52% water shortages, and 46% extreme temperatures.⁴⁸ Likewise those whose household members had migrated (n=44), 30 mentioned drought as the reason and water shortages were cited by 19 as a reason that a household member had moved, and extreme temperatures by 12 of respondents.

Economic concerns were also frequently mentioned as a reason for wanting to, or having, moved. Among those who were interested in migrating (n=101), 57% mentioned loss of livelihoods as a reason, 48% mentioned the need for additional income, and 40% mentioned livelihood opportunities elsewhere. Similar results were mentioned in response to queries about why household members migrated previously and why the community as a whole did so.⁴⁹

There was also a reluctance to move, as survey respondents indicated that they would only consider moving when the consequences of the factors pushing them were severe: Of those who were not considering migration (n=72), 31% said that they would have to experience an irreparable loss to leave, while 26% said that push factors would need to constitute a threat to household members' survival. Of course, some needed less of a push: 24% said that loss or damage that could be repaired would be sufficient and 18% cited just damage to aspirations.⁵⁰

Family and community support was mentioned by key informants as a reason for people to remain. As one key informant put it, "Anyone who belongs to a clan or family that supports him feels strong and can continue living here even in difficult living conditions." In addition many key informants noted a strong attachment to the land which acted as a counterweight to the migration pressures discussed above. However, it was also noted that as more people start moving away from Al-Qadissiya, this cohesion is being jeopardised.

The majority of those who expressed an interest in migrating also lacked the resources to do so. In some cases, this was due to the very climatic hazards that impelled people to leave. One woman said: "we no longer have the capacity to migrate or open new projects outside the region, forcing us to remain in the region and rely on agriculture with only small areas to meet our basic needs."⁵³

At the same time, qualitative interviews suggest that investments in the region could act as a counterweight to the pressures exerted by climate hazards. For example, a man who moved with his family from Al-Qadissiya to Karbala said: "I would have preferred to stay if good and stable job opportunities were available in Al-Qadissiya, such as government support, factories, or new development projects. A strong economic environment could provide my family with a better standard of living and reduce the need to move." ⁵⁴

⁴⁸ Those whose household members had migrated most frequently mentioned drought as the reason for a household member migrating most frequently mentioned by household survey respondents (68%) and 57% cited it as a reason why people in the community generally had moved. Water shortages were cited by 43% as a reason that a household member moved, and 42% as a reason that community members generally had moved. Extreme temperatures were cited by 27% and 40% respectively.

⁴⁹ Failed livelihoods were cited by 36% of household survey respondents as a reason that a household member left and by 49% as a reason that people in the community generally left. Securing livelihood opportunities elsewhere was cited as a reason by 32% that household members moved and by 41% as reasons that the community as a whole did so.

⁵⁰ N=72

⁵¹ Key informant interview.

⁵² Focus group discussion with Iraqi young men.

⁵³ Interview with Iraqi woman.

⁵⁴ Interview with Iraqi man.

Summary

Most in Al-Qadissiya are suffering the ill effects of climate hazards, and characterised these impacts as severe. This seriousness of climate impacts in this region have combined with poverty and insecurity to drive a high level of interest in migration, primarily to nearby cities within Iraq, and seldom across borders. Despite high intentions to move, however, few appear to have the resources to do so, and instead remain in situations of involuntary immobility.

While migration intentions are high, community members interviewed also cited strong community and family ties as reasons to stay. Supporting communities with adaptation strategies could mitigate the desire to move. Indeed, communities asked for more information and training on adaptation strategies that will be effective, evidence that they want the tools to remain.

However, climate hazards in Al-Qadissiya will likely become more frequent and the impacts more severe into the future. If the population begins to move in larger numbers, they are likely to continue existing patterns of movement to nearby cities. It is unclear, however, on what time scale that might happen and whether urban areas, many of which already struggle to provide basic services, will be able to provide a viable alternative.

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About MMC

MMC is a global network engaged in data collection, research, analysis, and policy and programmatic development on mixed migration, with regional hubs in Africa, Asia and the Pacific, Europe and Latin America, and a global team based across Copenhagen, Geneva and Brussels.

MMC is a leading source for independent and high-quality data, research, analysis and expertise. MMC aims to increase understanding of mixed migration, to positively impact global and regional migration policies, to inform evidence-based mixed migration responses for people on the move and to stimulate forward thinking in public and policy debates on mixed migration. MMC's overarching focus is on human rights and protection for all people on the move.

MMC is part of the Danish Refugee Council (DRC).

While its institutional link to DRC ensures MMC's work is grounded in operational reality, it acts as an independent source of data, research, analysis and policy development on mixed migration for policy makers, practitioners, journalists, and the broader humanitarian sector.

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