

# Impact of Climate Change and Water Scarcity on Returns and Durable Solutions

**Thematic summary of findings from the Returns and Durable Solutions Assessment (ReDS) for Al-Atheem, Al-Rayhana, Markaz Hawiga, Al-Amerli and Zummar Sub-districts**

09/2022



# ReDS Assessment Methodology

- **Multi-sectoral** assessment tool, which combined **qualitative and quantitative** data. For more information on the methodology and analysis, see the [ToR](#).
- Methodology based on **key informant interviews** (KIIs) that took place between 7 May and 7 September 2022 in Al-Atheem, Al-Rayhana, Markaz Al-Hawiga, Al-Amerli, and Zummar sub-districts.
- **Purposive sampling** methods were employed to identify KIs. Findings should therefore be considered as **indicative**.

## ↓ ↓ 👤 KI Profiles in Assessed Sub-districts

IDPs from assessed sub-districts	44 KIs	████████████████████
Returnees (returned more than 3 months ago)	43 KIs	████████████████████
Subject matter experts (SMEs)	36 KIs	██████████████████
Community leaders	34 KIs	██████████████████
IDPs in assessed sub-districts	30 KIs	██████████████████
Remainees <sup>1</sup>	25 KIs	██████████████████
Returnees (returned less than 3 months ago)	22 KIs	██████████████████

**234 KIs**

👤 37 KIs 👤 197 KIs





# Background

In 2022, **Iraq witnessed a second consecutive year of drought** and **record low levels of rainfall** contributing to decreased river levels, limited access to drinking and irrigation water, depleted harvests and incomes, and barriers to food accessibility, among other issues .

[Norwegian Refugee Council](#), October 2022

“Across Iraq, 98% of households are estimated to live in areas with a precipitation deficit in the first quarter of 2022.”

[REACH Initiative](#), July 2022

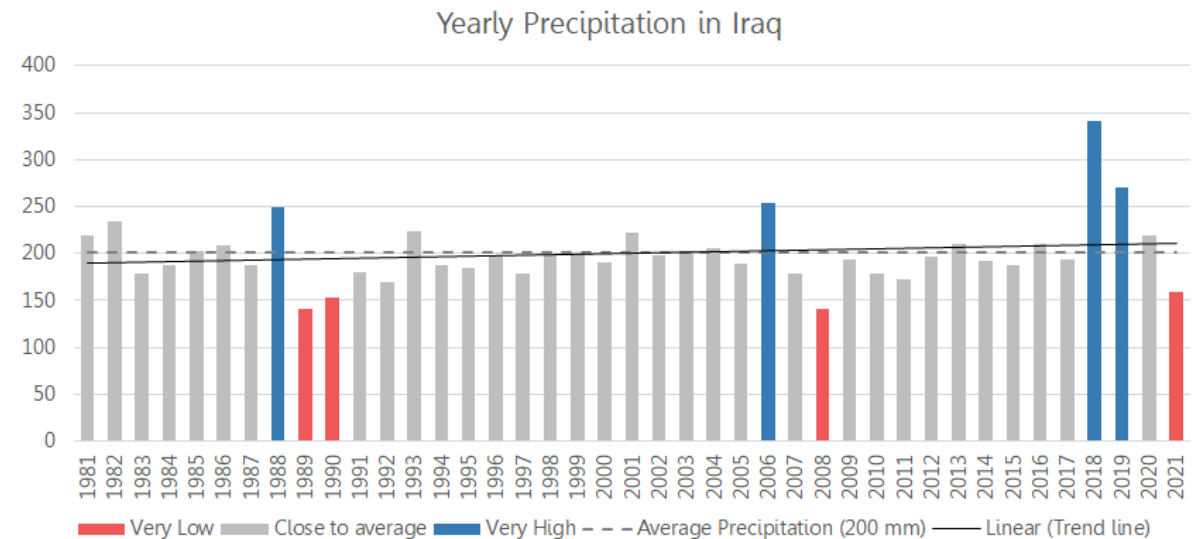
In five out of the six sub-districts that were assessed for the Returns and Durable Solutions Assessments (ReDS) in 2022, namely Al-Atheem, Al-Rayhana, Markaz Al-Hawiga, Al-Amerli, and Zummar sub-districts, KIs reported perceiving that **climate change and water scarcity has a negative impact** on households’ ability to **access sustainable livelihoods** and **sufficient quality and quantity of water**. **This presentation** presents consolidated findings on the **impact of climate change** and **water scarcity on livelihoods** and **access to public water** in these five sub-districts.



# Background: Precipitation Level

- Average precipitation level in Iraq is 200mm, most of which falls in northern Iraq.
- In 2021, the yearly average precipitation was “very low” compared to the historical average (1981-2021)

[Action Against Hunger, REACH Initiative](#), April 2022



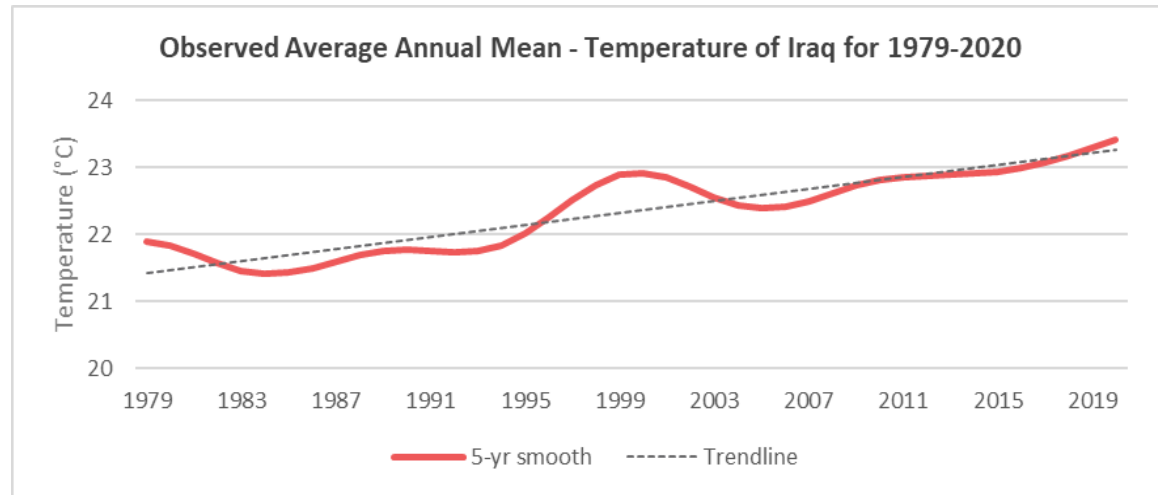
Source: Climate Hazards Group Infrared Precipitation with Station data (CHIRPS)





# Background: Rising Temperature

From 1979 to 2020, the yearly average temperature in Iraq increased at a rate of around  $0.045^{\circ}\text{C}$  per year, resulting in an increase in the yearly average temperature of just under  $2^{\circ}\text{C}$  during this period.



Source: Climate Change Knowledge Portal, World Bank

Increased temperature is one of the contributing factors to land degradation and desertification in Iraq.

[Planetary Security Initiative](#), May 2021





# Importance of the Agricultural Sector

## Potential for Sectoral Growth

Community leader and SME KIs in the five assessed sub-districts reported that the **agricultural sector** showed the **highest potential for growth** in the 12 months following data collection.

The agriculture sector in these sub-districts mostly produce grains, primarily wheat and barely.

## Livelihood Sectors of Interest for Returnee and IDP Households

**Agriculture** was the most commonly reported sector which KIs perceived IDPs and returnees in the five assessed locations were interested in working in.

# Impact of Climate Change and Water Scarcity on the Agricultural Sector

## Challenges

In all five assessed sub-districts, KIs reported perceiving a **general lack of support** to revitalise the agricultural sector.

Reported challenges affecting farmers included:

- Lack of support to purchase seeds, fertilizers, and equipment, and
- Environmental conditions negatively affecting land irrigation.

## Climate Change

Almost half of the KIs reported perceiving that **climate change impacted the agricultural sector**.

This was reportedly due to water scarcity and drought affecting:

- Land irrigation,
- Crop cultivation, and
- Reduced water levels in the Tigris and Euphrates rivers for aquaculture activities such as fishing, especially in Al-Rayhana Sub-district.

## Impact

As a result of climate change impacts and related challenges to accessing livelihoods, KIs reported that IDP, remainee, and returnee households resorted to:

- Household members leaving their AoOs to find work elsewhere and
- Farmers leaving the agriculture sector.





# Challenges in Accessing Water

## Access to Public Water

Some KIs in the five assessed sub-districts reported that most households faced challenges in accessing public water services.

It was frequently cited that the **quality and quantity of water was a concern** for communities in the assessed sub-districts. This was reportedly due to:

- **Public water infrastructure conditions** e.g., damage to public water networks, coverage of public water networks, and
- **Low water levels** in **Euphrates** and **Tigris rivers**.

## Coping Mechanisms

The most frequently reported coping mechanisms adopted by affected households included:

- Purchasing drinking water,
- Relying on water trucking, and
- Digging illegal/unplanned wells.

## Recommendations

The most commonly reported KI recommendation across assessed locations was **rehabilitating the public water infrastructure**, such as water networks and treatment plants.





# Returns Barriers and Family Separation

## Return Barriers

The most commonly reported barriers for displaced households to return were:

- Damage/destroyed homes in AoOs,
- **Lack of job opportunities in AoOs**, and
- Lack of access to basic services, such as a **lack of public water**.

In **Al-Atheem, Al-Rayhana**, and **Zummar** sub-districts, the **lack of job opportunities was the most frequently reported barrier for return**.

## Family Separation

Thirteen KIs in four out of five assessed sub-districts reported being aware of cases of family separation.

Findings suggest that, among returnees, family separation could be due to **adult men not returning** with their households due to the **lack of work opportunities** in their **AoOs**/the availability of jobs in their AoDs, which was commonly reported by those KIs who reported family separation in their communities.



# THANKS FOR YOUR ATTENTION



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Upon request



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Returns Working Group

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