Climate Motivated Displacement Baseline: Preliminary Findings on Marshland Residents

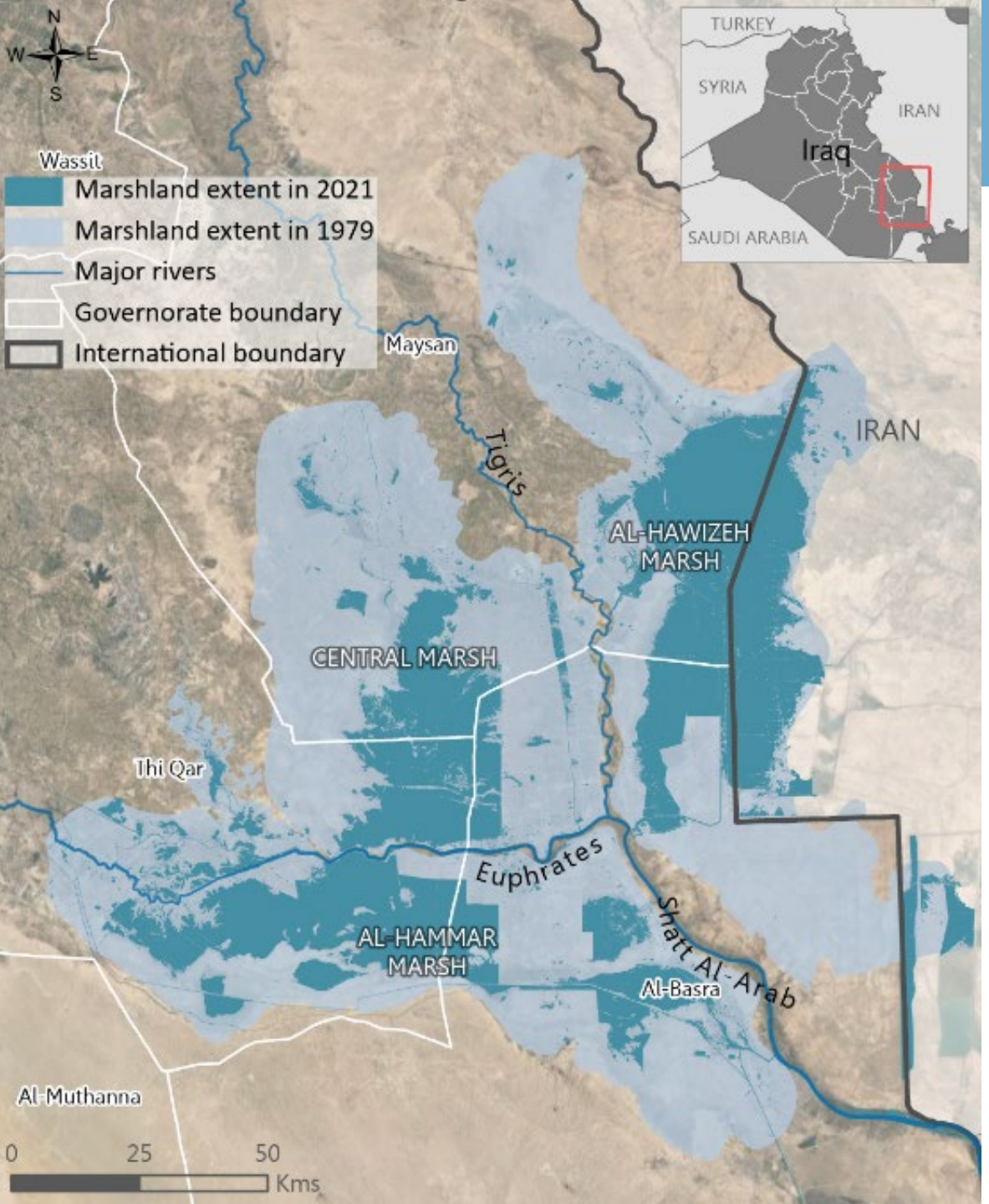
30/03/22

Objective

To provide information on climate motivated displacement in Southern Iraq, specifically in **Al-Basra, Maysan** and **Thi Qar governorates** where the marshlands have been a critical source of livelihoods for the community.

Three key guiding questions:

- What **effect** has the **reduction in water level/marshland area had on resident livelihood** opportunities?
- Do residents **intend to relocate** from this area in the future? Why or why not?
- What **factors or changes would cause residents to decide to leave** or to stay in the area?



Context

The **marshlands of Southern Iraq account for just under half of the inland waters** for the country and have historically been **a source of livelihoods** for households located in Al-Basra, Maysan, and Thi Qar.

Journal of Physics: Conference Series, 2019.

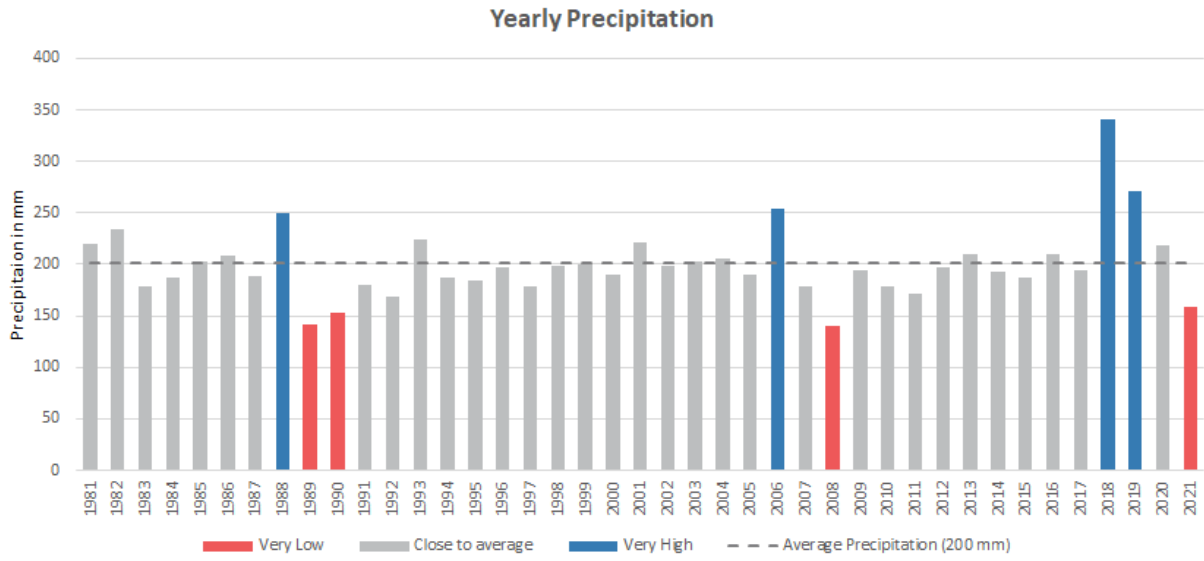
Timeline:

- **1977:** Construction of dam and hydraulic power plant in Turkey
- **1980-1988:** Marshlands negatively affected by Iraq-Iran war
- **1990s:** Marshlands were drained by relevant authorities at the time
- **2001:** Construction of Karkheh Dam in Iran negatively affected quantity and quality of water flowing into Al-Hawizeh marsh.
- **2003:** Rehydration process of the marshlands started
- **2005:** UNEP reported 41% of marsh rehydrated

REACH Iraq – WASH Remote Sensing Activities 2019-2020, 2020

Context

- **Average precipitation level in Iraq reached 200mm**, most of which takes place in northern Iraq.
- Since 2018, **yearly precipitation levels** have been **decreasing in Iraq**.
- In 2021, the **yearly** precipitation was **"very low"**.*



"very low" refers to yearly precipitation less than 20% of 200mm

Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS)

Methodology

The analysis uses qualitative data drawn from 12 FGDs and 8 KIIs conducted in the marshlands of Al-Basra, Maysan, and Thi Qar governorates (Al-Qurna, Mejar Al-Kabir and Al-Chibayish districts respectively):

Governorate	District	FGDs	Participant Profile	KIIs	KII Profile
Al-Basra	Al-Qurna	4	Marshland residents from Al-Basra, Thi Qar, and Maysan	3	Mukhtars from Al-Basra, Thi Qar, and Maysan
Maysan	Mejar Al-Kabir	4		3	
Thi Qar	Al-Chibayish	4		2	

Limitations

There were **limitations attributed to some of the findings**:

- Analysis was based on a small number of FGDs and KIIs to draw broader conclusions of developments at the district level. Therefore, **findings are indicative**.

- Responses were **not gender balanced**:
  - 5 female FGDs vs 7 male FGDs
  - 1 female KI vs 7 male KIs

- Most of the responses from **FGDs and KIIs were from adult marshland residents** (25-59)
  - 7 FGDs
  - 6 KIs

Community Perceptions on Changes in Marshland

Change in marshland?

Perception on changes to marshland:

"groundwater is salty and not usable"

"marshes threatened with gradual disappearance"

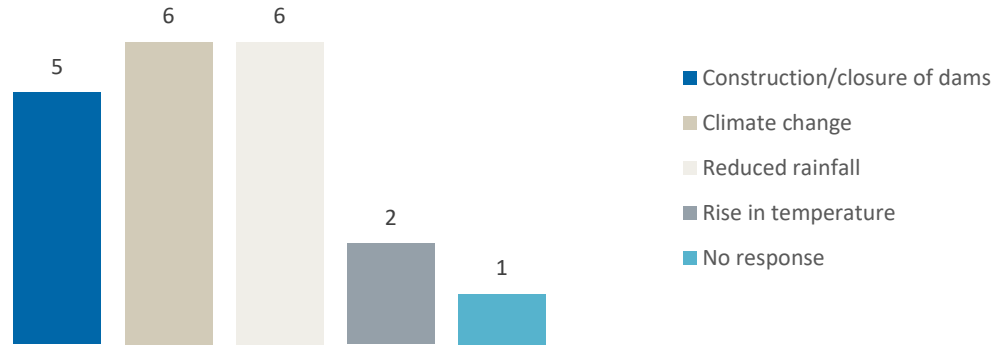
"marshes shrunk dramatically or completely absent"

"nowadays marshes decreased by nearly 50%"

Has level of water changed?

- FGD participants representing marshland residents reported reduced water level in the past 5 years (12 out of 12 FGDs). Additionally, FGD participants in Mejar Al-Kabir also reported fluctuating water levels (3 out of 12 FGDs)

Reported reasons for decreased water level



Frequently reported reasons for decreased water levels in the marshlands in Mejar Al-Kabir, Al-Qurna and Al-Chibayish (from 8 KIs)

Reasons for decreased water level shared by KIs match those shared by FGD participants.

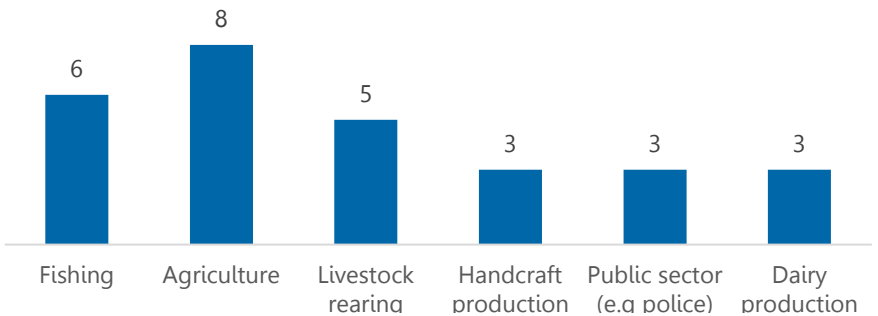
Most frequently reported reasons for decreased water level:

- Climate change (10 out of 12 FGDs)
  - Reduced rainfall (8 out of 10 FGDs)
  - Higher temperature (4 out of 10 FGDs)
- Dam construction (11 out of 12 FGDs)

Livelihoods for Marshland Residents

Top frequently reported **livelihood activities** for marshland residents:

- Agriculture (8 KIs)
- Fishing (6 KIs)
- Livestock rearing (5 KIs)



Frequently reported sources of income by KIs in Mejar Al-Kabir, Al-Qurna and Al-Chibayish (8 KIIs)

Top 3 livelihood activities reported by FGD participants:

- Agriculture (9 out of 12 FGDs)
- Fishing (11 out of 12 FGDs)
- Livestock rearing (11 out of 12 FGDs)

Livelihood activities depend on the natural resources available in the marshlands (8 KIs).

Changes in Community Livelihoods and Income

Livelihood Opportunities

In all but one FGD, participants reported water level changes contributed to **a decrease in livelihoods**.

- In 2 FGDs this decrease was reported to be "significant".

According to participants, this was attributable to **reduced fishing and livestock rearing possibilities.** Particularly in Al-Qurna district, participants also commonly reported **reduced agricultural production** and **increased livestock food prices/decreased fodder availability.**

All KIs reported that changes in water level did affect livelihood, as agriculture production (8 KIs), fishing (6 KIs), and livestock rearing (5 KIs) were affected.

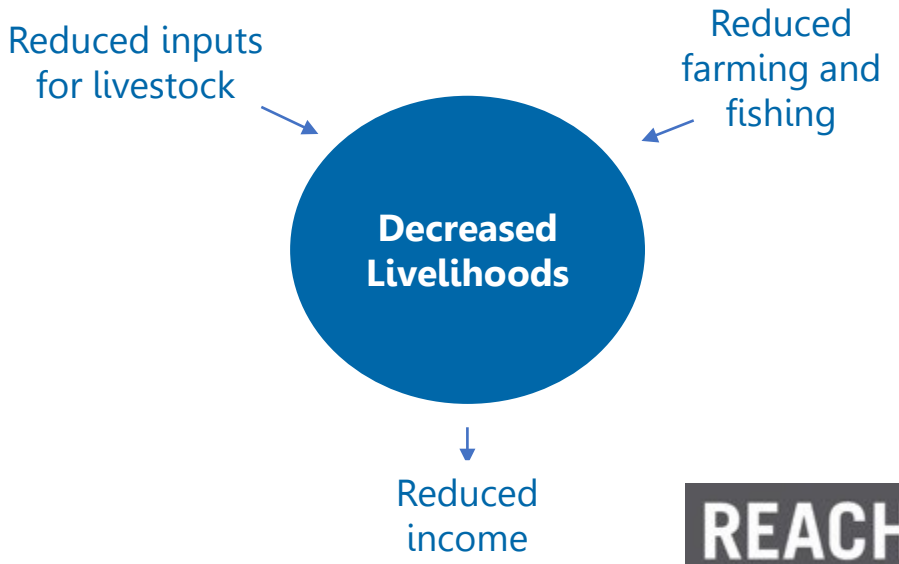
- Changes in salt negatively affected fishing and livestock rearing.

Impact on Income Generation

Marshland households' income was affected in the three assessed districts during the past 5 years.

- Decrease in income level (9 out of 12 FGDs)
  - Considerable decrease in income (4 out of 9 FGDs)
- Income fluctuates (3 out of 12 FGDs)

Frequently reported reasons for reduced income by KIs n Mejar Al-Kabir, Al-Qurna and Al-Chibayish (8 KIIs)



Changes in Community Daily Life: Food

In 7 FGDs, participants reported ***access to sufficient quantity and quality food*** *had worsened among households in the marshlands in Al-Qurna and Al-Chibayish districts. This is reportedly due to an* ***inability to afford food****. In 4 FGDs, all in Mejar Al-Kabir, participants thought* ***it had remained the same****.*

FGD participants on access to food:

- *"They used to buy all kinds of fruits and vegetables, [and meat] now they cannot…"*
- *"There is no sufficient quantity and quality of food that the households can access."*
- *"Obtaining food remained the same because it is available in the market or cultivated"*

Changes in Community Daily Life: Water

Participants reported **worsening access to quantity and quality of water** for drinking and domestic purposes (8 FGDs) **in Mejar Al-Kabir and Al-Chibayish** districts. Some participants and KIs contributed this to increased salinity of the water.

Participants from FGDs **in Mejar Al-Kabir** reported **no change** in access to quantity and quality of water for drinking and domestic purposes. This was also reflected in 3 KIs' responses in Mejar Al-Kabir.

FGD participants on access to water:

- *"We buy drinking water, but washing water we get from the river near the village and from the marshes"*
- *"Quantities of drinking water and domestic purposes remained the same"*
- *"The possibility of obtaining drinking water has improved after installing the stations.*
- *We buy water for… the buffalo because the salinity of the water kills the buffalo causing a great loss to all families"*

Changes in Community Daily Life: Education

6 FGDs reported that children in their households or households like theirs go to school. However, it was also reported in 7 FGDs that children do not go to school. Top three frequently reported reasons for children not to go to school:

- Work to support the family
- School being to far
- Lack of money for clothes/stationary

FGD participants on challenges to educate children:

"If the child completes primary school, we remove/discontinue their education because the middle school is far from the village... about 5 km away... Children need expenses and transportation fees"

Coping Strategies

Commonly reported coping mechanisms being considered/used by marshland households in Mejar Al-Kabir, Al-Qurna, and Al-Chibayish included:

- **Multiple individuals working within the same household** to support with expenses (12 FGDs)
  - **Child labour** (8 FGDs)
- **Working multiple jobs** (11 FGDs)
- **Relocation** (9 FGDs)

Participants in the FGDs reported that marshland households faced **challenges to implement coping strategies related to working multiple jobs/alternative jobs and relocation**:

- **Lack job opportunities** (5 FGDs)
- Marshland households **do not have the needed skills/experience to find other jobs** (4 FGDs)
- Marshland households face **financial constraints to relocate** (4 FGDs)
- Marshland households are **worried about leaving their land, property and livestock** (3 FGDs)

Community Movement Intentions

FGD findings from all locations suggest that many households **intended to relocate to other areas** (11 FGDs). However, there are also some who have no intention to move (8 FGDs).

The most commonly reported reasons to relocate included: lack of **job opportunities** (8 KIs), changes in marshland negatively affecting **livelihoods** (6 KIs), **drought** (3 KIs), **tribal conflict** (2 KIs), and **food shortage** (1 KI).

KIs on community movement intentions and motivations:

- *"There are more than 500 households who migrated to the major cities, especially to Basra."*
- *"Families have left the marshlands because of drought, livestock deaths, food shortages and lack of livelihood and income"*

Reasons to Stay

Despites their intention to relocate, FGD participants reported that households may stay in their current locations due to:

- Difficulty adapting to the lifestyle in urban areas (4 FGDs)
- Difficulty leaving their lands (4 FGDs)
- Difficulty finding jobs elsewhere (3 FGDs)
- Lack of financial resources to relocate (3 FGDs)

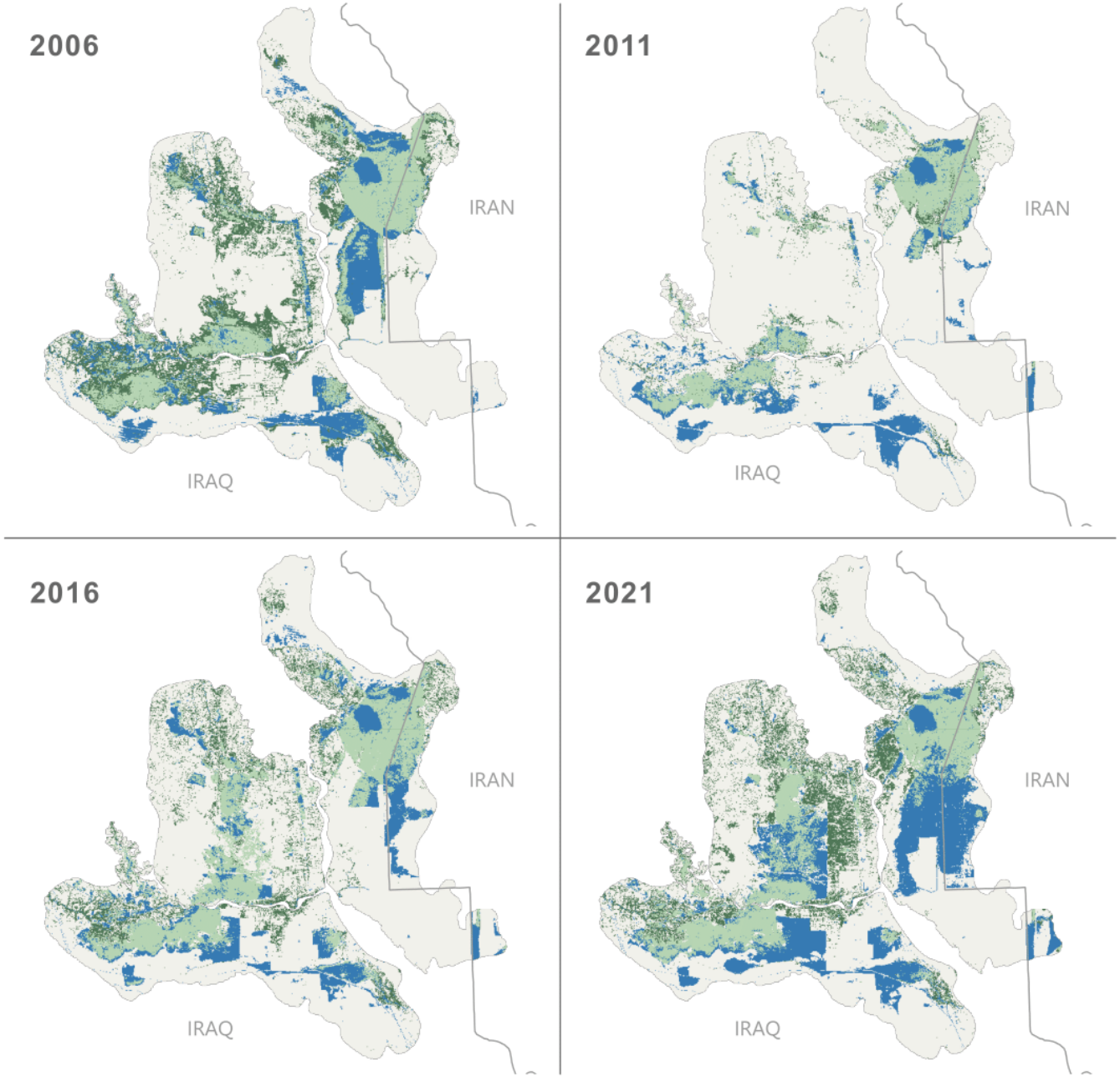
Basic goods and services needed by marshland households to stay:

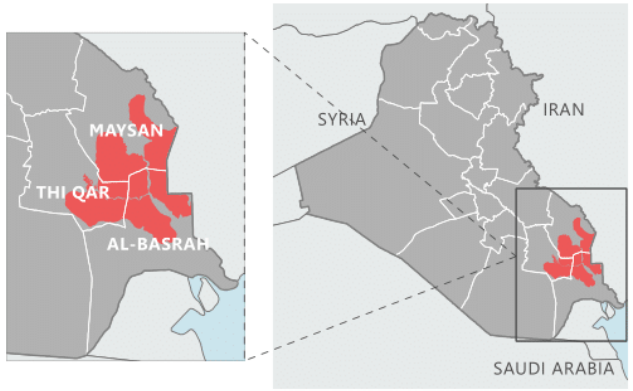
- Access to loans (11 FGDs)
- Support to farmers, livestock owners, fishermen with resources/inputs (11 FGDs)
- Establish facilities for dairy products (5 FGDs)
- Construct schools and hospitals (4 FGDs)

FGD participants on what factors would make those who intend to leave stay:

- *"We need government support in case of drought... loans to affected families and businesses... Support for livestock owners and farmers."*
- *"Water in the village"*
- *"Water, food, factories for dairy products."*

Land cover change in Iraq marshland: 2006 - 2021





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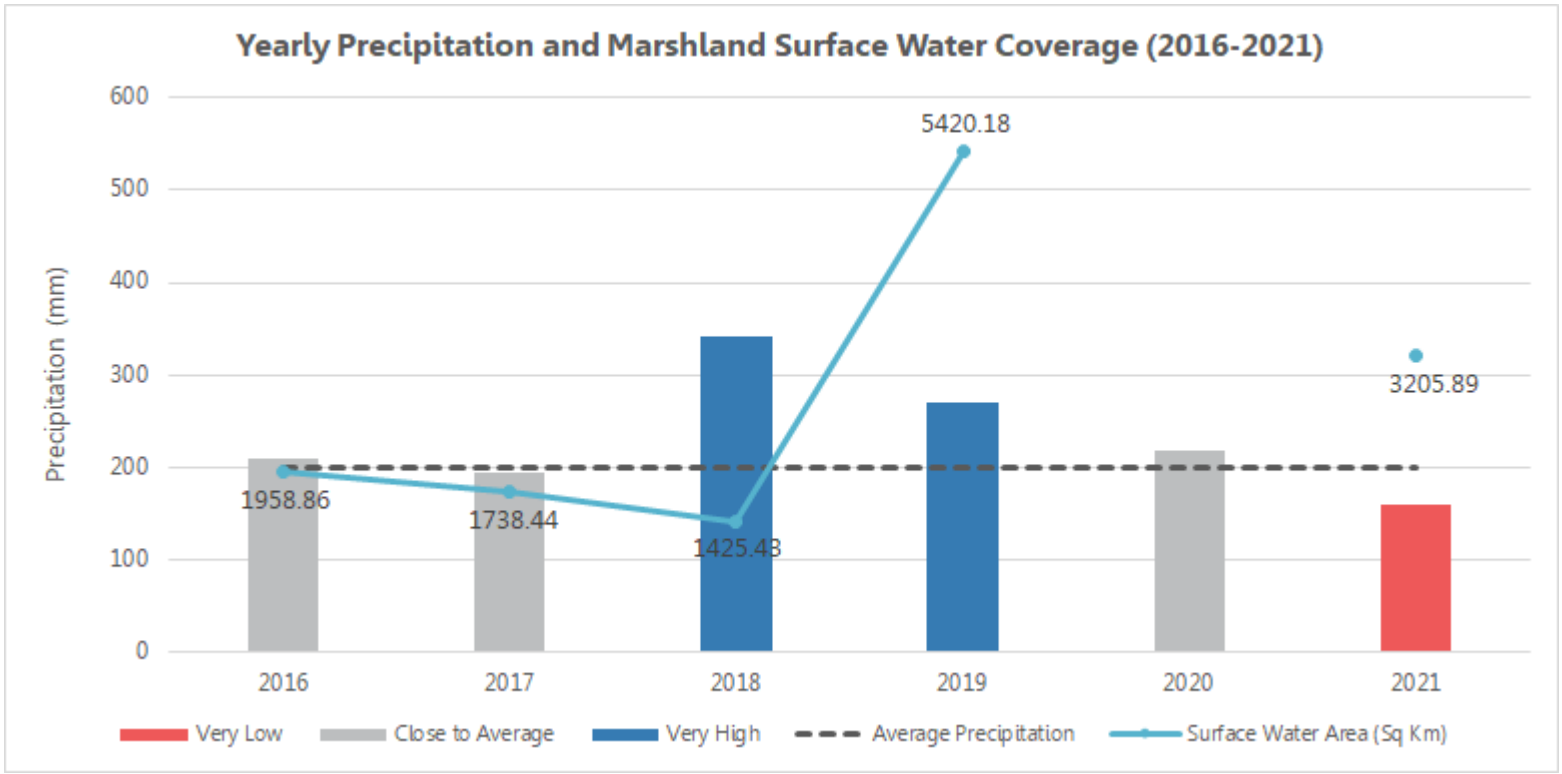
Land cover
- Terrestrial vegetation
- Marsh vegetation
- Barren land
- Surface water
- International boundary

0 30 60
Km

Since 2011, surface water levels, marsh vegetation, and terrestrial vegetation have increased. The geospatial system (GIS) of the marshlands seems to contradict reports shared by marshland FGD participants and KIs that water level has decreased over the past 5 years.

Marshland Community Perception Explained?

One possible explanation for FGD participants and KIs reporting a decrease in water level in the marshland over the past 5 years can be attributed to the decrease in yearly precipitation since 2018, as seen in the graph below.



Precipitation Datae: Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS)

Key Findings

Situation in the marshlands:
FGD participants and KIs in the marshlands commonly reported having perceived a decrease in water level in the marshland despite an increase in water level over the past 5 years.

Livelihoods, income, and changes to daily life related to changes in water level:
FGD participants commonly reported their livelihoods had changed in the past 5 years, which they commonly contributed to a decrease of water levels in the marshlands.

- Perceptions related to changes in daily life and access to adequate quantity and quality of food and water varied per location.
- Participants/KIs commonly reported believe changes in the daily live conditions were related to water levels (9 FGDs; 9 KIs) and the affect on household income (5 FGDs; 5 KIs).

Relocation from the marshlands:
Some FGD participants identified relocation as a coping strategy for households in the marshlands. Livelihoods-related considerations emerged among the main factors in movement decision-making.

THANKS FOR YOUR ATTENTION

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Upon request