Services and Infrastructure in Return Areas (SIRA) Shirqat Town and East Bank

**Returns Working Group**

26 March 2019

Research Objectives

General Objective

Inform evidence-based humanitarian programming and service delivery through providing detailed information regarding service provision in selected areas of origin for IDPs who are likely to be returning.

Specific Objectives

- Provide support to CCCM Cluster programming in facilitating sustainable returns during camp consolidation/phase out processes.

- Support evidence-based advocacy efforts related to camp consolidation and returns.

- Provide an overview of conditions in the area to humanitarian actors who are implementing emergency interventions. In particular to:

    - Define and profile the area selected.

    - Identify and map the availability and accessibility of services within the defined area, highlighting key gaps and barriers to service provision.

    - Gauge the perceptions and expectations of residents regarding service delivery.

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Area of Analysis
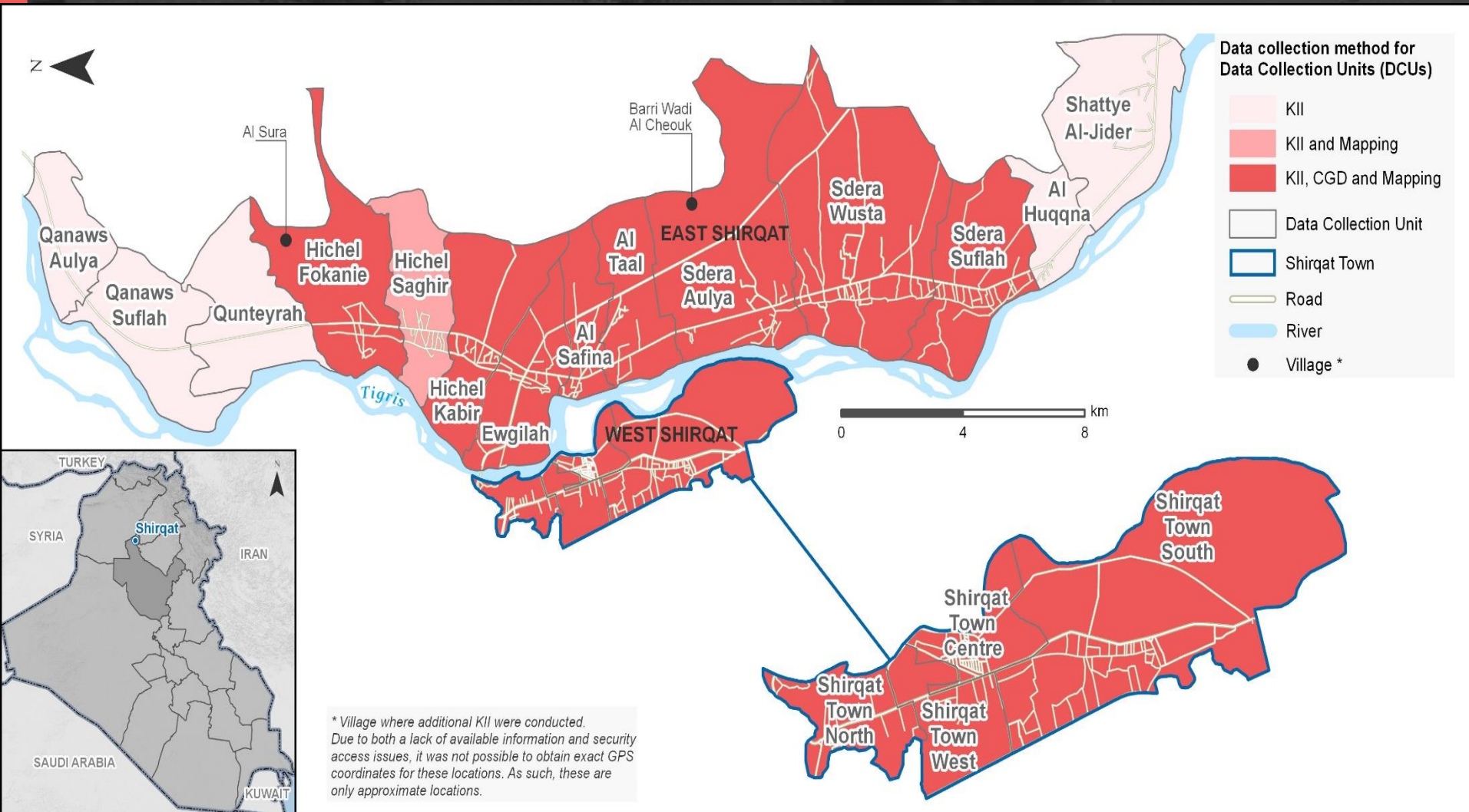
Assessment Methodology

The SIRA consists of various data collection tools based on a qualitative methodology:

Community Leaders KIIs	Community Group Discussions	Service Providers KIIs	Participatory Mapping
• **28 community leader KIIs** conducted; at least one per DCU • Multi-sectoral questionnaire	• **24 Community Group Discussions (CGDs)** 2 per neighbourhood / village (male/female) • Multi-sectoral questionnaire	• **24 Subject Matter Expert (SME) KIIs conducted.** • Electricity, Water, Waste Management, Health, Education, Livelihoods and Legal experts	• **Participatory mapping sessions** conducted in 13 DCUs (where security permitted) • **10 neighbourhood maps** • **Additional GIS analysis** conducted

*Data was collected from 21 October to 22 November 2018

Key Findings

Background and context

Background

- Most of Shirqat District population was displaced during the crisis, with ISIL taking control in June 2014.

- Shirqat town and the west bank of the Tigris retaken on September 2016, east bank retaken a year later.

- The east bank experienced a more intense level of conflict damage.

Population dynamics

- Primarily Sunni Arab population.

- Approximately 123,000 residents had returned at time of data collection.

- Intentions findings August 2018: only 5% of IDP households from the district planned to return in the next 12 months.

Key Findings

Basic Services

- Significant structural damage to services on east side during conflict.

- Both water and electricity services restored to a semi-functional level in most areas. Although water treatment consistently reported as a concern.

- Legal services have resumed to pre-crisis level, with the exception of the land registry not opening.

Healthcare

- Level of healthcare services reportedly far worse than before ISIL.

- Prescription medication no longer provided by the government, leading to increased reliance on more expensive private pharmacies.

- Destruction and theft of medical equipment, staff shortages, and increased cost of treatment has led to increased barriers in accessing treatment.

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Key Findings

Education

- Reported staff shortages, overcrowded classes and a lack of teaching materials.

- Enrolment rates reportedly higher than pre-crisis levels due to lack of livelihood opportunities.

Livelihoods

- Lack of livelihood opportunities a major issue.

- Government and security forces previously primary employers, now few opportunities.

- Agriculture previously a major employer, but challenges for people to return due to a lack of capital, destruction and theft of equipment, and fear of land contamination.

- Increase in residents searching for work outside Shirqat.

Key Findings

Food and Markets

- PDS distributions were reportedly less frequent and of lower and less quality and quantity than pre-crisis levels.

- Cost of food and non-food items reported to have increased due to increased tariffs and checkpoints.

Shelter and Security

- Considerable shelter damage on the east bank, with much yet to be repaired.

- Armed groups still pose a considerable threat, with reports of movement and presence in nearby area.

- Reported areas of land contaminated with explosives, targeted attacks, and indiscriminate IEDs are all security concerns.

- East bank and rural areas have movement restrictions at night due to concerns over armed group movements.
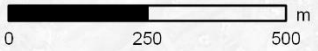
Mapping
Outputs

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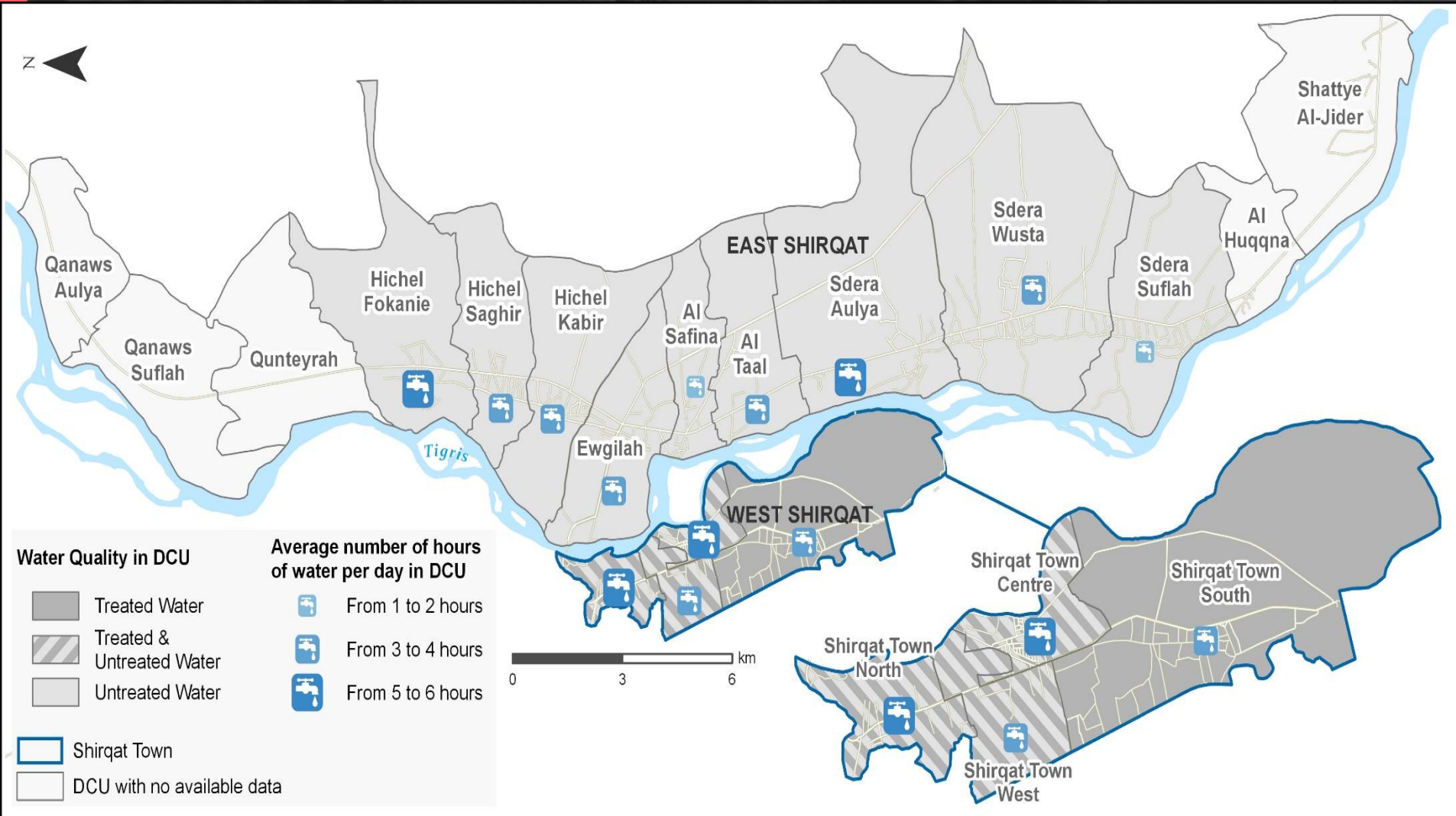
Neighbourhood Map – Shirqat Town East

Legend:
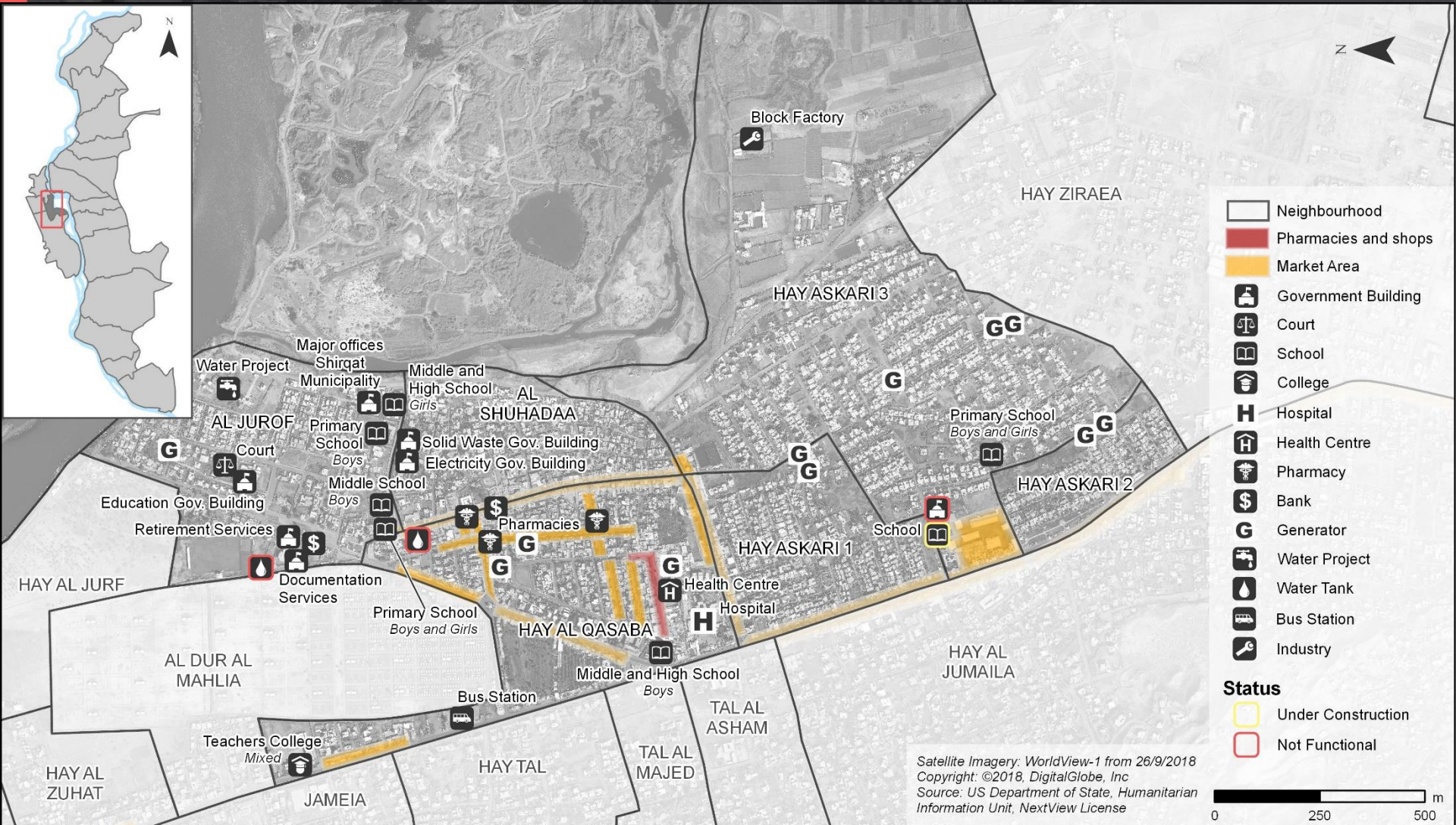
- Neighbourhood
- Pharmacies and shops
- Market Area
- Government Building
- Court
- School
- College
- H Hospital
- Health Centre
- Pharmacy
- $ Bank
- G Generator
- Water Project
- Water Tank
- Bus Station
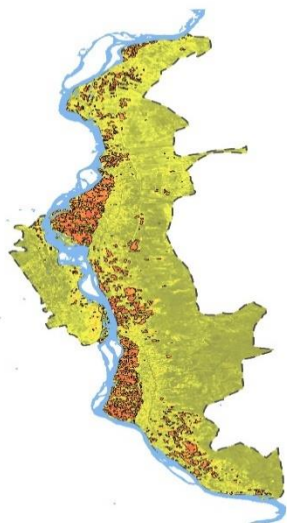- Industry

Status
- Under Construction
- Not Functional

Satellite Imagery: WorldView-1 from 26/9/2018
Copyright: ©2018, DigitalGlobe, Inc
Source: US Department of State, Humanitarian
Information Unit, NextView License

0   250   500 m

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Reported Access to Water

Water Quality in DCU

Treated Water

Treated & Untreated Water

Untreated Water

Shirqat Town

DCU with no available data

Average number of hours of water per day in DCU

From 1 to 2 hours

From 3 to 4 hours

From 5 to 6 hours

Qanaws Aulya

Qanaws Suflah

Qunteyrah

Hichel Fokanie

Hichel Saghir

Hichel Kabir

Al Safina

Al Taal

Ewgilah

EAST SHIRQAT

Sdera Aulya

Sdera Wusta

Sdera Suflah

Al Huqqna

Shattye Al-Jider

Tigris

WEST SHIRQAT

Shirqat Town Centre

Shirqat Town South

Shirqat Town North

Shirqat Town West

km
0   3   6

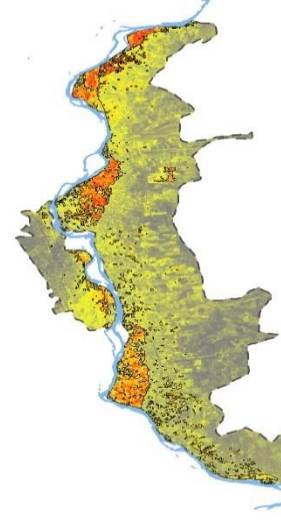# Changes in Agricultural Land-use 2014-2018

March 2014
Approximate Active
Farmland Area: 24 Km²
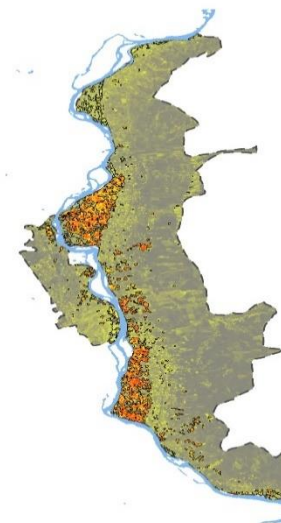Classification Accuracy: 81%*
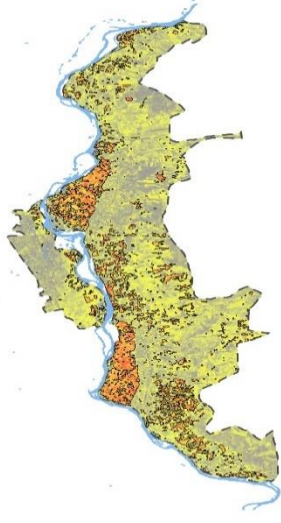
March 2015
Approximate Active
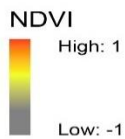Farmland Area: 35 Km²
Classification Accuracy: 80%*
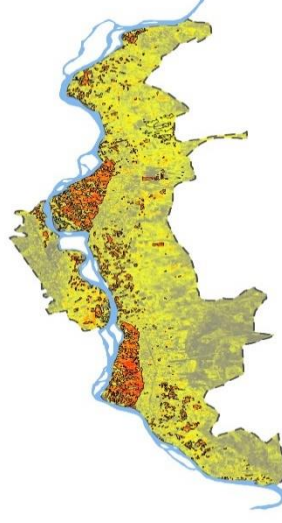
March 2016
Approximate Active
Farmland Area: 23 Km²
Classification Accuracy: 90%*

March 2017
Approximate Active
Farmland Area: 28 Km²
Classification Accuracy: 81%*

March 2018
Approximate Active
Farmland Area: 22 Km²
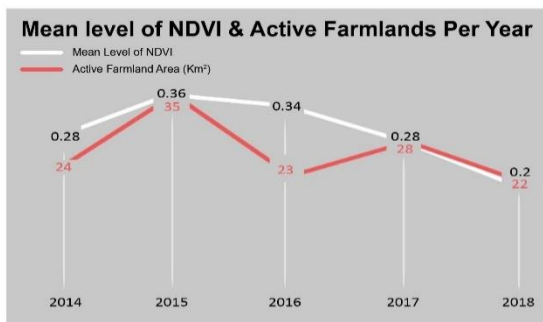Classification Accuracy: 89%*

NDVI

High: 1

Low: -1

Data Collection Area

Active Agricultural Land

River

* Classifiction accuracy: a series of startified sample points were randomly spread on the data collection area, the classifyed image was compared at each point to a true colour composite image and the ratio of difference between the classifed image and true colour compostie was computed.

The normalized difference vegetation index (NDVI) is calculated using the Red and Near Infrared bands of a satellite image. NDVI is calculated from the visible and near infrared light reflected by vegetation, and is an indicator used to measure vegetation health and density. Healthy vegetation absorbs most of the visible light that hits it, and reflects a large portion of the near-infrared light. Unhealthy or sparse vegetation reflects more visible light and less near-infrared light. The resulting value range is between -1 and +1. A value closer to +1 represents denser vegetation, and a value closer to -1 represents barren areas of rocks or sand.

As reported in all KIIs and CGDs, March is the peak month for agricultural cultivation in Shirqat, with crops at their highest yield pre-harvesting. Due to this, images from March over different years were selected from United States Geological Survey (USGS) Landsat 8 reflectance library to calculate and compare NDVI, and thus changes in vegetation health and density.

This was combined with a supervised classification to evaluate land use and identify active agricultural lands and water bodies, allowing comparison of approximate areas of active farmlands over time.

Mean level of NDVI & Active Farmlands Per Year

— Mean Level of NDVI
— Active Farmland Area (Km²)

Year	2014	2015	2016	2017	2018
Mean Level of NDVI	0.28	0.36	0.34	0.28	0.2
Active Farmland Area	24	35	23	28	22

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THANK YOU FOR YOUR ATTENTION

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