

EUPHRATES SHIELD DYNAMO

NOVEMBER 2017

Al-bab City
by: Omar Alwan

PREPARED BY : INFORMATION MANAGEMENT UNIT

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The Assistance Coordination Unit (ACU) aims to strengthen the decision-making capacity of aid actors responding to the Syrian crisis. This is done through collecting, analyzing and sharing information on the humanitarian situation in Syria. To this end, the Assistance Coordination Unit through the Information Management Unit established a wide network of enumerators who have been recruited depending on specific criteria such as education level, association with information sources and ability to work and communicate under various conditions. IMU collects data that is difficult to reach by other active international aid actors, and publishes different types of information products such as Need Assessments, Thematic Reports, Maps, Flash Reports, and Interactive Reports.

For more information, contact us:

www.acu-sy.org	+90 (34) 2220 10 77
imu@acu-sy.org	+90 (34) 2220 10 88
	+90 (34) 2220 10 99

EUPHRATES SHIELD DYNAMO

NOVEMBER 2017

EUPHRATES SHIELD
DYNAMO REPORT
November 2017
PREPARED BY: INFORMATION MANAGEMENT UNIT

INDEX

SUB-DISTRICTS

- 1 Executive Summary**
- 2 Methodology**
 - 2 - Aim of the Euphrates Shield DYNAMO Report
 - 2 - Research Design
 - 2 - Research Methodology
 - 3 - Data Collection
 - 3 - Secondary Data Review and Triangulation
 - 4 - Data Management and Analysis
 - 4 - Limitations
- 5 ESHA Overview**

- 6 Demography**
 - 6 - Population of Assessed Sub-districts
 - 6 - IDPs Numbers:
 - 7 - IDPs Accommodation

- 10 Food Security**
 - 10 - Agriculture
 - 11 - Livestock
 - 11 - Development Projects in the Food Security Sector
 - 12 - Income Sources
 - 12 - Functional and Non-functional Bakeries
 - 14 - Food Sector Priorities

- 15 Health Sector**
 - Background
 - 15 - Health Services Assessment
 - 15 - Number of Hospitals, Clinics & Medical Staff
 - 18 - Accessibility
 - 18 - Cost of Services
 - 18 - Health Sector Priorities

- 19 WASH Sector**
 - 19 - Per Capita Water Share
 - 19 - Water Potability & Water Sterilization
 - 20 - Water Sector Management Responsibility
 - 20 - Water Delivery
 - 21 - Water Sector Priorities
 - 22 - Sewage Sector
 - 22 - Sewage Sector Priorities
 - 23 - Hygiene Sector
 - 23 - Hygiene Sector Priorities

- 24 Education Sector**
 - 24 - Functional and Non-functional Schools
 - 24 - Status of School Buildings
 - 25 - Teachers
 - 26 - Student-Teacher Ratio
 - 26 - Students
 - 27 - Needs of Functional Schools
 - 28 - Reasons of Schools Non-functionality
 - 28 - Difficulties Preventing Children from Going to School
 - 28 - Priorities for the Education Sector

- 29 Infrastructure Sector**
 - 29 - Electricity Sector
 - 30 - Electricity Sector Priorities
 - 30 - Road Networks
 - 30 - Communication Networks
 - 31 - Civil Defense Centers
 - 31 - Civil Defense Centers Priorities
 - 32 - Industrial and Trade Sector
 - 32 - Trade

- 33 Shelter and NFI**
 - 33 - Shelter
 - 34 - Shelter Sector Priorities
 - 34 - NFI Sector Priorities

- 35 Priorities Section**
- 36 Recommendations**

CAMPS

- 39 Euphrates Shield Camps Clusters**
- 39 Introduction**
- 39 Demography**
 - 39 - Number of IDPs in Assessed Camps
- 41 Food Security Sector**
- 41 Health Sector**
 - 41 - Evaluation of Health Services
 - 42 - Medical Centers and Staff
- 43 WASH Sector**
 - 43 - Average per capita share of water
 - 43 - The price of the cubic meter of water
 - 44 - Water Suitability for Drinking
 - 44 - Water Delivery Methods
 - 45 - Water Service Points and Personal Hygiene
- 46 Education Sector**
 - 46 - Number of Schools, Students, and Teachers
 - 47 - Reasons for Student Dropouts
- 47 Shelter and NFI**
- 48 Overall Priorities**
- 49 Recommendations**

LIST OF TABLES

- 02 **Table 01:** Assessed Sub-districts and Camps- Electricity Sector
- 03 **Table 02:** Confidence Levels
- 07 **Table 03:** IDPs' Numbers
- 08 **Table 04:** IDPs' Accommodation
- 13 **Table 05:** Maximum Production Capacity of Bakeries
- 16 **Table 06:** Number of Medical Centers
- 17 **Table 07:** Number of Medical Staff
- 18 **Table 08:** Accessibility & Cost of Services
- 19 **Table 09:** Per Capita Water Share
- 20 **Table 10:** Responsibility of the Water Sector Management
- 25 **Table 11:** Male and Female Teachers
- 27 **Table 12:** Students According to the Educational Stages
- 40 **Table 13:** Vulnerable Categories
- 41 **Table 14:** Sufficiency of Food
- 42 **Table 15:** Number of Medical Staff
- 45 **Table 16:** Water Service Points and Personal Hygiene
- 46 **Table 17:** Number of Schools, Students, and Teachers
- 48 **Table 18:** Status of Shelters

LIST OF FIGURE

- 04 **Figure 01:** Assessment Work plan
- 06 **Figure 02:** Population of the Assessed Sub-districts:
- 06 **Figure 03:** IDP Numbers
- 13 **Figure 04:** Functional and Non-functional Bakeries
- 21 **Figure 05:** Water Delivery
- 22 **Figure 06:** Sewage Sector
- 25 **Figure 07:** Status of School Building
- 19 **Figure 08:** Electricity sources
- 30 **Figure 09:** Means of Communication
- 31 **Figure 10:** Presence of Civil Defense Centers in Assessed Sub-districts
- 31 **Figure 11:** Civil Defense Centers Priorities
- 32 **Figure 12:** Proportion of Trade
- 33 **Figure 13:** The Status of Shelter
- 39 **Figure 14:** Number of IDPs in Assessed Camps
- 41 **Figure 15:** Sufficiency of food
- 41 **Figure 16:** Sufficiency of Health services:
- 42 **Figure 17:** Availability of Medical Centers
- 42 **Figure 18:** Health sector priorities
- 43 **Figure 19:** Daily Per Capita Water Consumption
- 43 **Figure 20:** Price of Water Per Cubic Meter
- 44 **Figure 21:** Water Suitability for Drinking.
- 44 **Figure 22:** Water Delivery Methods
- 44 **Figure 23:** Water Sector Priorities
- 45 **Figure 24:** Sanitation Sector Priorities
- 45 **Figure 25:** Hygiene Sector Priorities
- 47 **Figure 26:** Reasons of Student Dropouts
- 47 **Figure 27:** Education Sector Priorities
- 48 **Figure 28:** Priorities by Sector

LIST OF MAPS

- 05 **Map 01:** Assessed Sub-districts.
- 08 **Map 02:** IDP Accommodation
- 09 **Map 03:** IDPs' Areas of Origin
- 12 **Map 04:** Functional and Non-functional Bakeries
- 16 **Map 05:** Functional and Non-functional Medical Centers
- 17 **Map 06:** Number of Doctors
- 24 **Map 07:** Functional and Non-functional Schools
- 26 **Map 08:** Number of Students According to the Educational Stages
- 40 **Map 09:** Number of IDPs in Assessed Camps

LIST OF HEATMAPS

- 10 **Heatmap 01:** Difficulties Facing Agriculture
- 11 **Heatmap 02:** Difficulties Facing Livestock
- 11 **Heatmap 03:** Implementable Projects
- 13 **Heatmap 04:** Reasons for Bakery Non-functionality
- 14 **Heatmap 05:** The Priorities of Food Sector
- 18 **Heatmap 06:** Priorities of the Health Sector
- 19 **Heatmap 07:** Water Potability & Water Sterilization
- 21 **Heatmap 08:** Water Sector Priorities
- 22 **Heatmap 09:** Priorities of the Sanitation Sector
- 23 **Heatmap 10:** Priorities of Hygiene Sector
- 27 **Heatmap 11:** Needs of Functional Schools
- 28 **Heatmap 12:** Difficulties Preventing Children from Going to School.
- 28 **Heatmap 13:** Education Sector Priorities
- 30 **Heatmap 14:** Electricity Sector Priorities
- 34 **Heatmap 15:** Shelter Sector Priorities
- 34 **Heatmap 16:** Non-food Sector Priorities
- 35 **Heatmap 17:** Need Priorities by Sector
- 47 **Heatmap 18:** Shelter and NFI Sector Priorities

LIST OF ABBREVIATIONS AND ACRONYMS

ACU:	Assistance Coordination Unit
DYNAMO:	Syria Dynamic Monitoring Report
EWARN:	Early Warning and Response Network
GIS:	Geographic Information Systems
IDP:	Internally Displaced Person
IMU:	Information Management Unit
ISIS:	Islamic State in Iraq and Levant
KI:	Key Informant
NFI:	Non-Food Item
PKK:	Kurdistan Workers' Party
WASH:	Water, Sanitation, and Hygiene

EUPHRATES SHIELD DYNAMO

NOVEMBER 2017

EXECUTIVE SUMMARY

The Euphrates Shield DYNAMO assesses the general situation, humanitarian conditions, state of services, and priorities for sub-districts and camps in the Euphrates Shield Area (ESHA) in May and June 2017.¹

Encompassing eight sub-districts, across three districts, Azaz, Jarablus, and Al Bab, in the northern Aleppo countryside, the ESHA derives its name from the Turkish Euphrates Shield campaign against Islamic State (ISIS) forces in the area, which was carried out between August 2016 and March 2017, in cooperation with several FSA factions. The population of the area is nearly 700,000, including approximately 190,000 IDPs. Additionally, the area is home to 106,892 IDPs living in the area's 17 formal IDP camps.

Data collection was carried out by eight Information Management Unit (IMU) enumerators in the eight sub-districts and three IMU enumerators in the 17 area camps. Additionally, ten specialists from the ACU's medical section (EWARN), three specialists from the ACU's WASH section, and one specialist from the ACU's food security department contributed to data collection efforts.

The report is divided into two parts: one which examines sub-districts and one which examines area camps. The former includes sections on demography, food security, health, WASH, education, shelter and NFI, infrastructure, and sectoral priorities, while the latter includes sections on demography, food security, health, WASH, education, shelter and NFI, and sectoral priorities.

Despite the ESHA's relative stability, most sectors were found to be facing significant challenges and in dire need of support.

In the food security sector, the ESHA is known to include large amounts of arable land. As such agriculture is common in most sub-districts and is considered the primary source of income despite levels of cultivation dropping due to significant difficulties facing the sector, including the high cost of cultivation, and a lack of fertilizers, seeds, pesticides, and

irrigation. Due to the sector's economic importance and current challenges, agricultural enterprises and projects were found to be the most important implementable development projects for the ESHA.

While access to health services is relatively good in the ESHA, the health sector suffers from a lack of medical professionals, especially doctors, and uneven distribution of medical centers across the sub-districts. Importantly, nearly all 13 hospitals, 30 clinics, and 3 blood banks in the area provide their services free of charge.

Water has been a challenge for the ESHA. With low to medium per capita water share in all sub-districts, the price of water was found to be very high, due to a deteriorated water network and high transportation costs. Additionally, the sewage network was also found to be in urgent need of repair, due to leaks throughout parts of the network.

With 223 Functional schools, 1,982 teachers, and 59,624 students, the education sector is making serious improvements but still needs crucial assistance. Despite many buildings needing repair, the main concern was found to be financial support for teachers and school staff.

Finally, while infrastructure in many of the sub-districts has not incurred the level of destruction seen in some other parts of Syria, it still faced very significant challenges from years of neglect. In all sub-districts of the ESHA, except Jarablus which received power from Turkey, private power networks were the only source of electricity.

1- Some information was updated by IMU enumerators in September.

2- For easy readability and in order to save space, the abbreviation "ESHA" will be used throughout this report when referring to "Euphrates Shield Area", as geographical defined in the introduction. However, whenever the context may require referring to a division/sub-division of the region under discussion, i.e. district, sub-district, it will accordingly be made clear to avoid any geographical mis-designation.

METHODOLOGY

Aim of the Euphrates Shield DYNAMO Report

The Euphrates Shield DYNAMO report includes the following sections, demography, food security, health, WASH, education, shelter and NFI, and sectoral priorities. As such it aims to provide information on the general situation, humanitarian conditions, state of services, and priorities for sub-districts and camps in the ESHA. The main objectives of Euphrates Shield DYNAMO report are:

- Providing approximate population figures, including on IDPs, within the assessed sub-districts to facilitate improved response planning by humanitarian actors.
- Providing accurate sectoral information to facilitate setting accurate priorities for the assessed sectors.

Research Design

The ACU Information Management Unit (IMU) worked on the Euphrates Shield DYNAMO report from 1 June to 28 October 2017 and relies on data collected by IMU enumerators between May and June 2017.

Through two stages, a new questionnaire was developed by the IMU for the Euphrates Shield DYNAMO report. First, a new questionnaire based on the DYNAMO 6 questionnaire was designed. Following this, the new questionnaire was reviewed with ACU departments and was finalized using their feedback. With the finalized questionnaire, the IMU Analysis team designed the KOBO form used by IMU enumerators to collect data via smartphones.

Research Methodology

After receiving training on the new questionnaire, IMU enumerators, including eight sub-district enumerators and three camp enumerators, carried out data collection between 13 and 27 June. Data collection was carried out in all eight sub-districts and 17 camps of the ESHA.

Table 01: Assessed Sub-districts and Camps

Districts	Sub-districts	A'zaz Camps	Jarablus Camps	
Al Bab	Al Bab	Al Haramayn	Ein AlBaida	
	Ar-Ra'ee	Bab Al Nour	Almalab	
Jarablus	Ghandorah	Al Resala	Zogra	
	Jarablus	AlShohadaa (AlDahia AlQataria)	AlWaar	
A'zaz	A'zaz	Dahiat Aliman	Al Hododi	
	Mare'	Dahiat Sijjo	AlKhames	
	Suran	Al Rayyan	AlRabee	
	Aghtrin		Shamarekh (AlMokawama)	
			Bab Al Salameh Al Hododi	
			Bab Al Salameh Al Jadeed	

To collect data, IMU enumerators identified reliable sources of information based on their experience, and in addition to completing the questionnaire, compiled notes and triangulated information through additional sources. Ten doctors, three WASH specialists, and one food security specialist also participated in data collection.

The units of measurement covered in this assessment include individuals (e.g. number of IDPs), institutions (e.g. number of schools), and sub-districts (e.g. needed health interventions in each sub-district or camp).

Data Collection

Primary data collection methods used for the Euphrates Shield DYNAMO report included key informant interviews (KIIs), direct enumerator observations, and evidence recording. Carried out over 13 days, IMU enumerators conducted KIIs using the questionnaire as a basis to record information, or a notebook if it was unsafe to fill in the questionnaire onsite. Key informants (KIs) included members, representatives, and employees of local councils, camp management bodies, water institutions, and hospitals, in addition to civilians. To help verify information provided by KIs, enumerators recorded their own observations and obtained records when possible. With information collected, enumerators sent the final, completed questionnaires to the IMU via the Kobo collect program.

Secondary Data Review and Triangulation

To present a comprehensive view of the humanitarian situation in the assessed sub-districts and camps, the Euphrates Shield DYNAMO report drew on secondary data when available, including pre-crisis information, public reports, and previous ACU reports, including DYNAMO 6 and HNO 2017. Additionally, de-briefings were carried out with enumerators to obtain additional data that could be used to increase confidence levels.

Table 02: Confidence Levels

Code	Category	Description
1	High Confidence Level	<ul style="list-style-type: none"> • Three or more different KIs providing the same range of figures. • Regularly updated records available from all KIs for sharing and cross-checking. • Direct observations match the data presented by at least three KIs. • Evidence, such as photos and videos, is available to explain specific cases and incidents.
2	Average Confidence Level	<ul style="list-style-type: none"> • Three or more KIs providing a similar range of figures. • Regularly updated records available from at least one KI for sharing and cross-checking. • Direct observations match the data presented by at least three KIs. • Evidence, such as photos and videos, is available to explain specific cases and incidents.
3	Low Confidence Level	<ul style="list-style-type: none"> • Only one KI. • No records available. • Direct observations do not match the data presented by the KI. • No evidence, such as photos and videos, is available to explain specific cases and incidents.

Data Management and Analysis

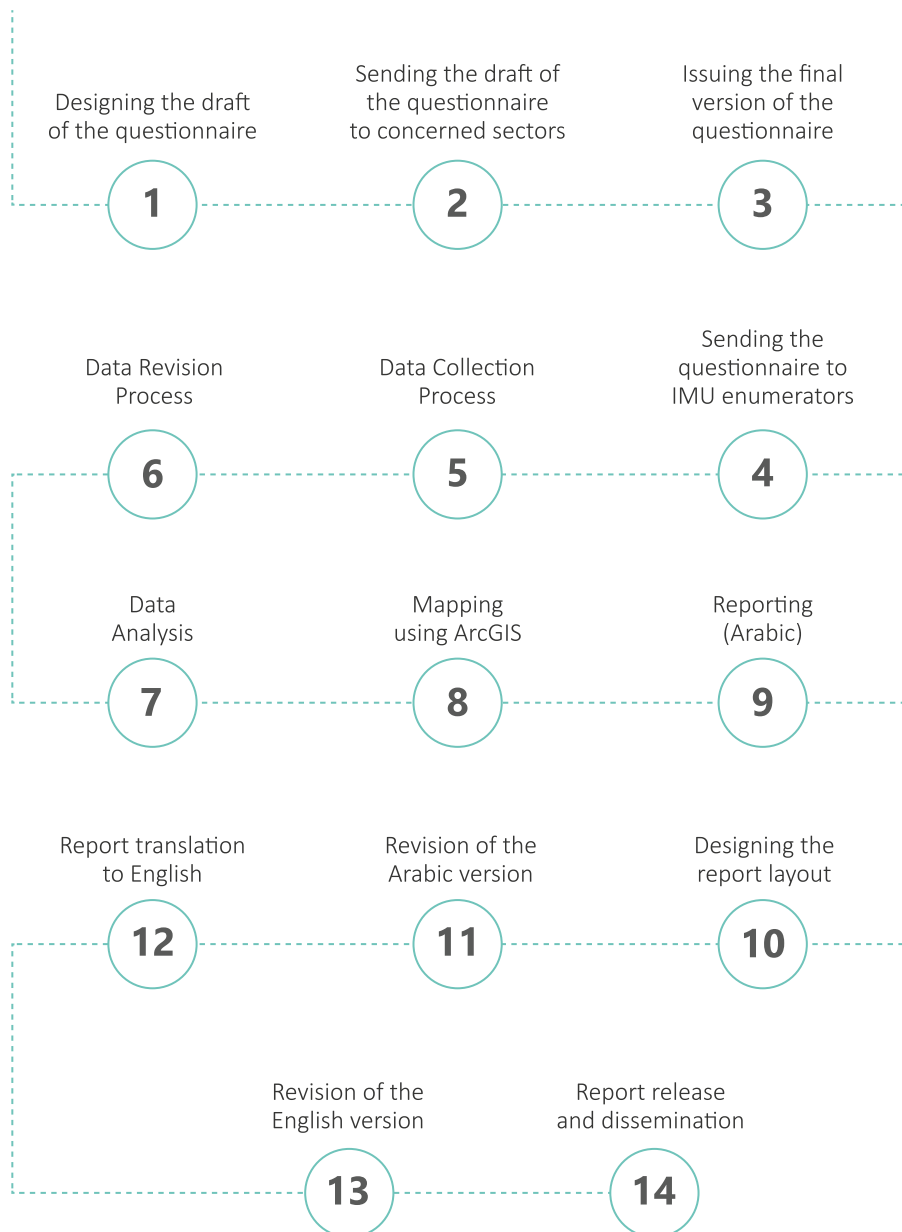
Once data was received by the IMU Network Coordination team from the IMU enumerators, it was exported as an Excel database, after which the IMU Analysis team used SPSS to identify and correct odd and missing values. The IMU Analysis team then used the data to produce tables, figures, and heatmaps for the report, as IMU reporting officers began work on the first draft. With the completion of the first draft, which also included maps designed by the IMU GIS officer using Arc GIS, the report was submitted for review by ACU and IMU management. Once feedback was incorporated, the IMU designer laid out the report visuals and reporting officers translated the Arabic report into English.

Limitations

Several limitations must be taken into consideration when using the Euphrates Shield DYNAMO report:

- It was difficult for enumerators to assess population figures, as population movement in the area is highly dynamic and there is no precise tracking system to capture these movements in real time.
- All enumerators, with the exception of one, were male, and all of the KIs were male.
- Some KIs refused to answer certain questions.
- At times, KIs and civilians lacked confidence in the usefulness of the questionnaire.

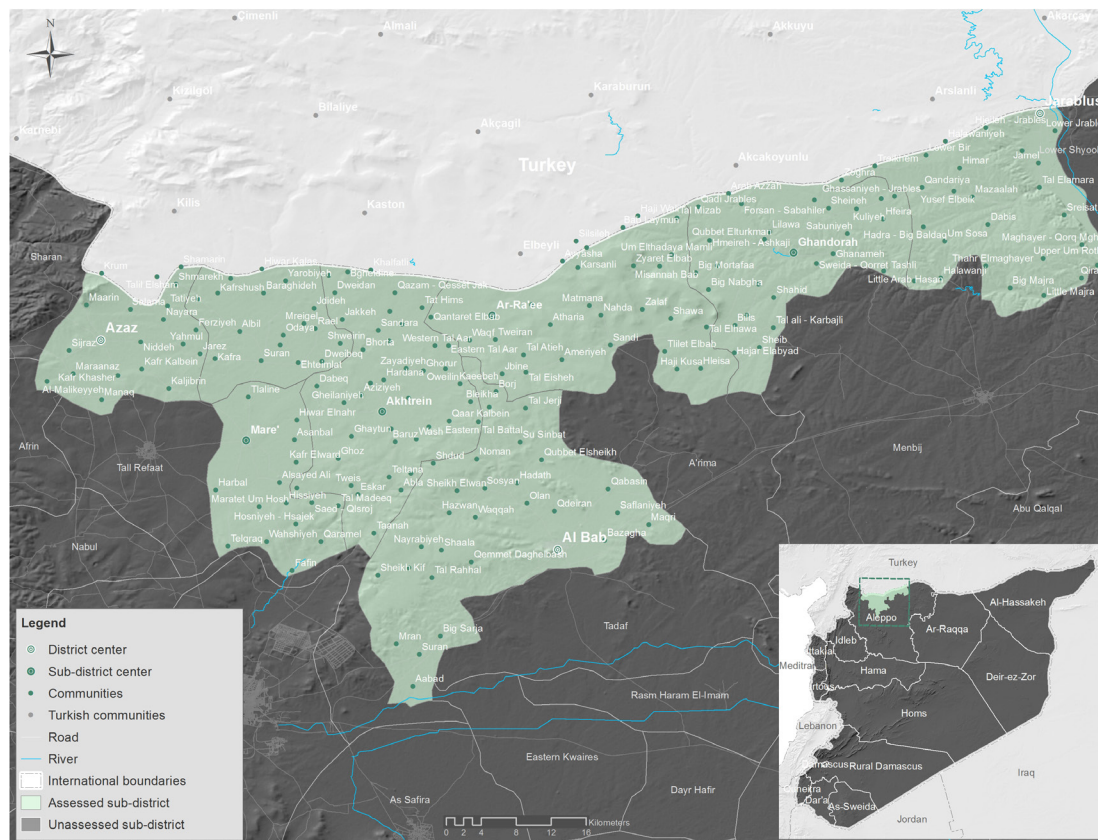
Figure 01: Assessment Work plan



ESHA Overview

The ESHA is located in the northern part of Aleppo governorate, in northwestern Syria. It is bordered to the north by the Syrian-Turkish border, to the south by the Syrian regime, and to the west and east by the PKK's controlled areas of Afrin and Ain al-Arab respectively. The ESHA includes eight sub-districts in three districts, including Jarablus Center and Ghandorah sub-districts in the Jarablus district, Ar-Ra'ee and Al Bab Center sub-districts in the Al Bab district, and Aghtrin, A'zaz Center, Suran, and Mare' sub-districts in the A'zaz district. The area of the eight sub-districts is approximately 2,328 km², the largest sub-district being Al Bab at 489 km², and the smallest being Suran at 167 km².

Map 01: Assessed Sub-districts.



The ESHA derives its name from the Turkish-led Euphrates Shield campaign to expel the ISIS from the area, which was launched in mid-2016 in cooperation with several Free Syrian Army (FSA) factions. The campaign focused on the eastern part of the area, which had been under ISIS control since late 2014. Starting at the Ar-Ra'ee sub-district, Turkish forces entered from Turkey, while FSA factions advanced eastward from A'zaz and Mare', which had been under opposition control since 2012.

With ISIS forces expelled from Ar-Ra'ee, the campaign continued eastward, expelling ISIS from the Jarablus district in September 2016, and southward to the al-Bab district, which was liberated from ISIS by February 2017. Further advances against ISIS were then halted, as regime forces gained control of ISIS communities just south of the ESHA.

While the eastern part of the area has witnessed significant fighting between opposition forces and ISIS since 2014, the western part has been characterized by relative stability, due to its proximity to Turkey and the consequent scarcity of airstrikes.² Thus, the western part has long been a destination for IDPs, especially those from elsewhere in Aleppo, Homs, and ISIS controlled areas.

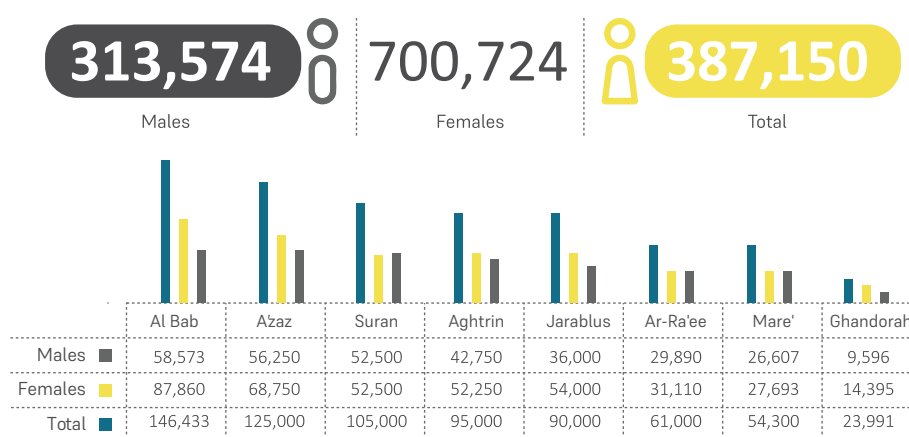
²- Of note, with the exception of the Mare' sub-district where FSA forces and the PKK's militias maintain active frontlines, enumerators did not witness any incidents of shelling or clashes during the period of data collection.

DEMOGRAPHY

Population of Assessed Sub-districts

The population in the assessed sub-districts, which was approximately 400,000 prior to the crisis in 2011, was found to have increased to approximately 700,000, including 189,999 IDPs.³ The Al Bab sub-district, which encompasses the largest area among assessed sub-districts, was found to be home to the largest number of people, at 146,433. Notably, throughout the entire ESHA, 55% of the population was found to be female. This is in part explained by the migration of a large proportion of men while the area was under ISIS control.

Figure 02: Population of the Assessed Sub-districts:

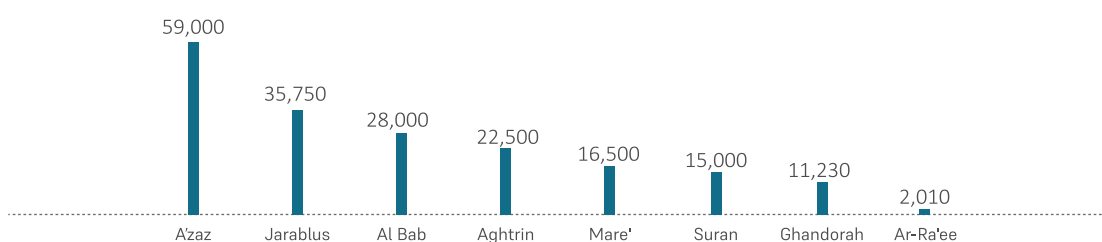


IDP Numbers:

At the start of the Syrian crisis, displacement was often characterized by civilians fleeing detainment, and moving from area to area within the same governorate. However, with the acute rise in hostilities, the frequency and scope of displacement increased dramatically. During this latter period, the ESHA became one of the primary destinations for IDPs due to the area's relative safety and proximity to Turkey.

The number of IDPs within the assessed sub-districts was found to be 189,990, or 27% of the total population of the area.⁴ The largest number of IDPs was recorded in A'zaz, at 59,000, or 47% of the total population A'zaz. The smallest number of IDPs was recorded in Ar-Ra'ee, at 2,010, or only 3% of the total population of Ar-Ra'ee. It is worth mentioning that the IDP registration process is done using rudimentary methods by newly established local councils which lack expertise in collecting statistical data. Hence, there is a great need to support and empower area local councils through capacity training, and human and financial resources for this task.

Figure 03: IDP Numbers



3- A continuous increase in the population is noticeable in the area due to recent waves of displacement, especially from Ar-Raqqa and Deir-ez-Zor governorates.

4- IDPs in this section refer to those living outside of formal IDP camps. IDPs living within formal camps are covered in the IDP camps section of the report.

Table 03: IDP Numbers:

Sub-district	Current Population	Total Number of IDPs	Percentage of IDPs
Al-Ra'ee	61,000	2,010	3%
Ghandorah	23,991	11,230	47%
Suran	105,000	15,000	14%
Mare'	54,300	16,500	30%
Aghtrin	95,000	22,500	24%
Al Bab	146,433	28,000	19%
Jarablus	90,000	35,750	40%
Azaz	125,000	59,000	47%
Total	700,724	189,990	27%

IDPs Accommodation

The largest number of IDPs were found to live in rented homes, at 75,210, or 40%, of total IDPs. Home rents ranged between \$40 and \$100 in most assessed sub-districts, with rents rising according to the homes' proximity to the center of the sub-district. Due to the high cost of rent, and low wages, many IDPs resorted to alternative solutions such as informal camps, vacant buildings, collective shelters, and host families.

Due to the inability to afford rent, and crowding within regular camps, informal camps were established throughout the assessed sub-districts, and were together home to some 68,080 IDPs, or 36%. Often established on public property as IDPs arrived, informal camps were found to be under served, and without formal management. Although IDPs residing in informal camps frequently attempted to register with regular camps, and asked them for various forms of support, their requests are often refused due to a lack of support to formal camps and various restrictions in the area. The largest number of IDPs who lived in informal camps was recorded in the Azaz and Jarablus sub-districts.

Approximately 10% of IDPs were found to have settled in vacant buildings and apartments. As many of these are unfinished, IDPs spend significant sums of money making them habitable. In addition to adding windows and doors, many are also forced to pay for the extension of water, electricity, and sanitation to these previously vacant buildings.

IDPs residing with host families made up 9% of the total IDP population. These IDPs are most often found to have already settled family in the area who are able to provide them space to live.

Finally, only 5% of IDPs lived in collective shelters, which are large separate tents for men and women. These shelters are usually temporary centers used to shelter newly arrived IDPs as they wait to settle in regular camps or other accommodations. Despite the fact that they are meant to be temporary, it was found that many families are forced to stay in these shelters for extended periods of time due to overcrowding in regular camps and a lack of alternatives.

Map 02: IDPs Accommodation

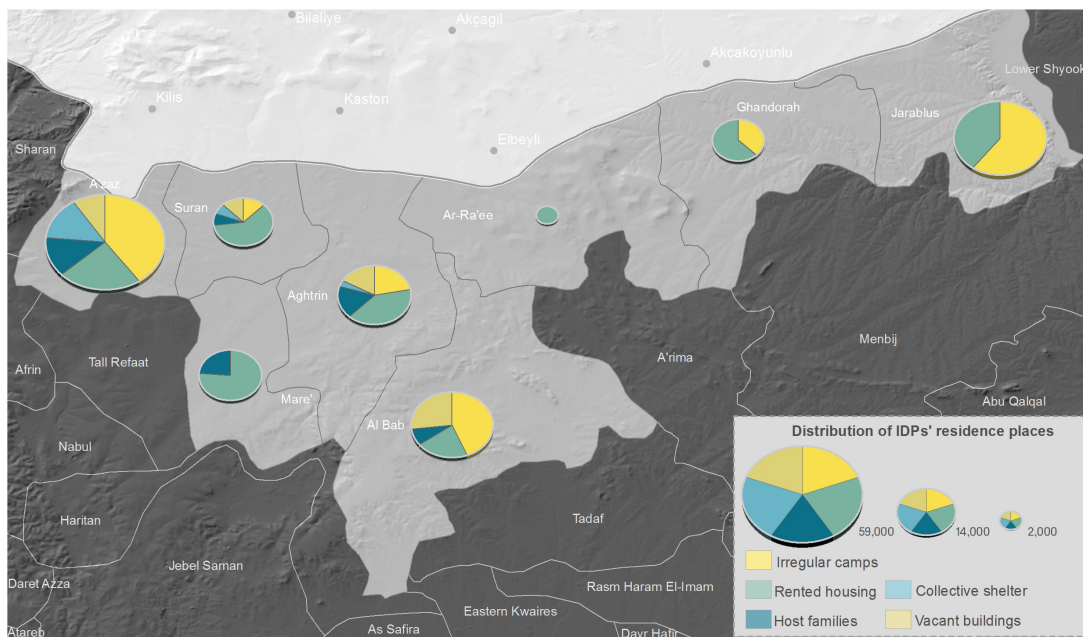
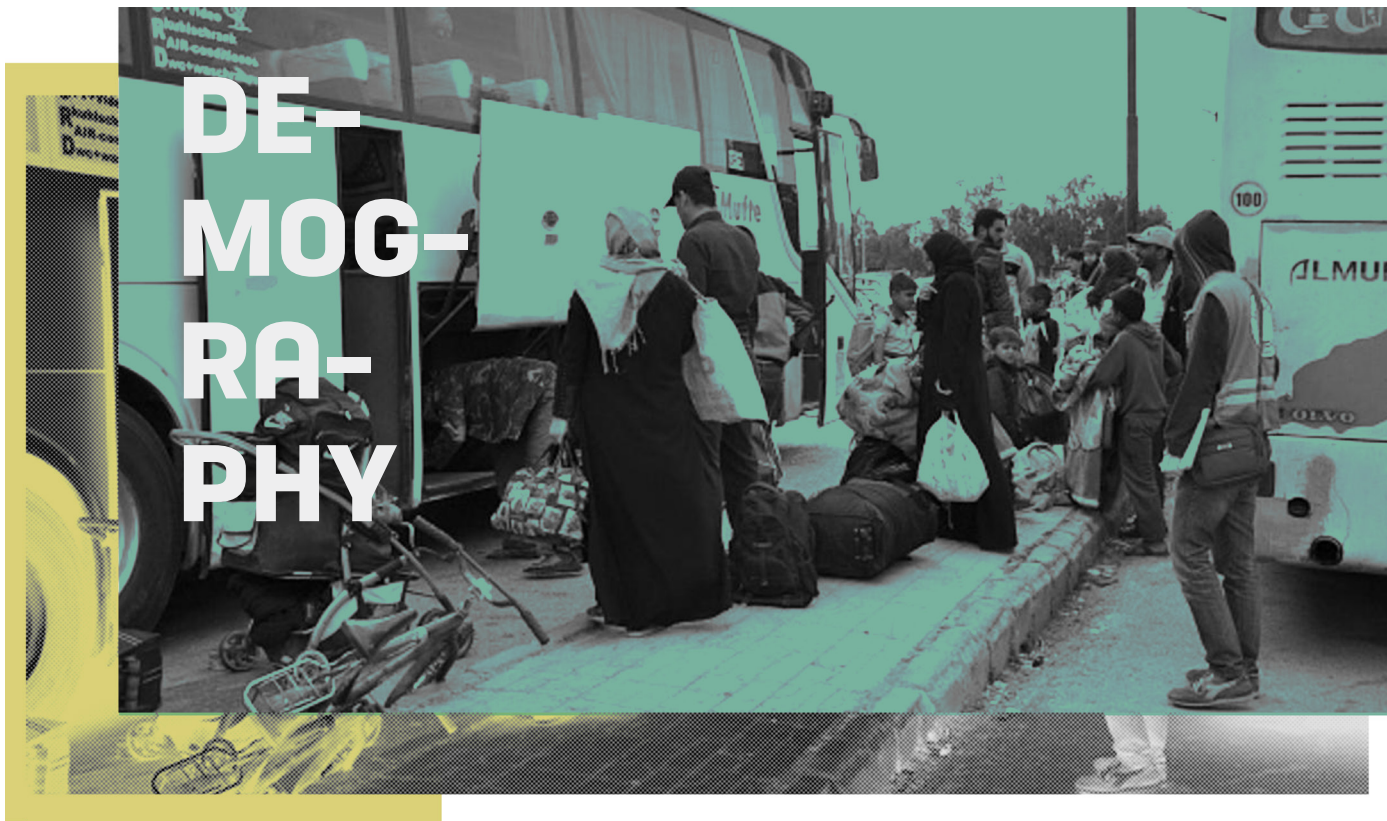
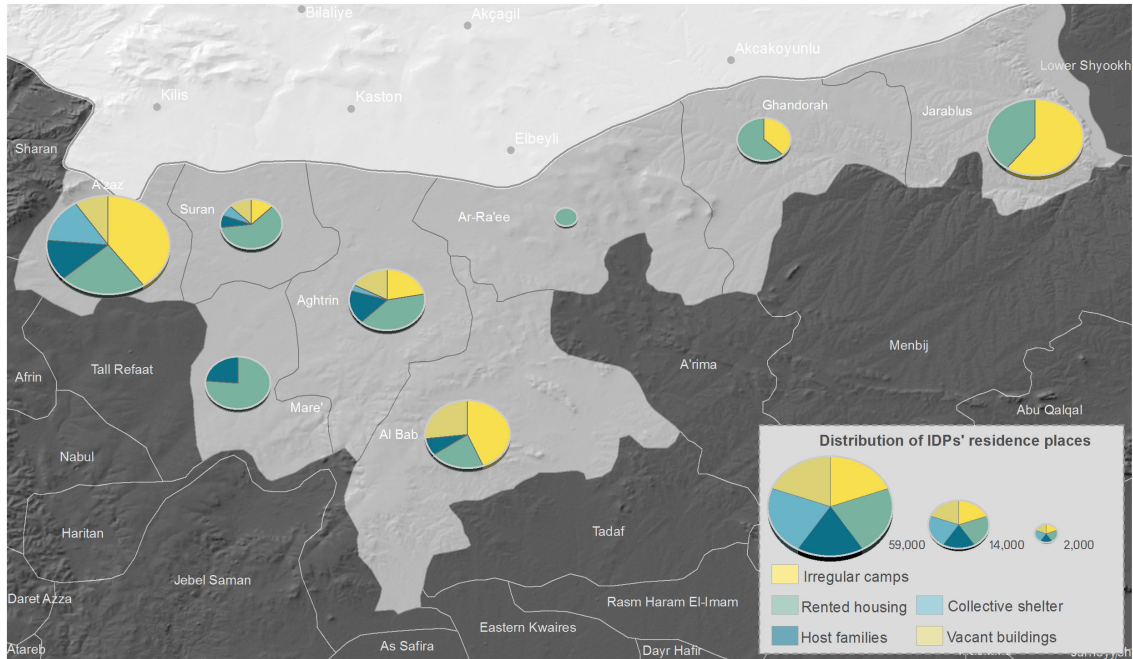


Table 04: IDPs Accommodation

Sub-district	Rented Accommodation	Informal Camps	Vacant Buildings	Collective Accommodation Centers	Host Families
Aghtrin	9,300	5,000	4,000	700	3,500
Al-Ra'ee	2,010	0	0	0	0
Suran	9,000	2,000	2,000	1,000	1,000
Mare'	12,500	0	60	0	3,940
Azaz	15,000	23,000	6,000	8,000	7,000
Al Bab	6,500	12,000	7,500	0	2,000
Ghandorah	7,150	4,080	0	0	0
Jarablus	13,750	22,000	0	0	0
Grand total	75,210	68,080	19,560	9,700	17,440

Map 03: IDPs Place of Origin



FOOD SECURITY

Agriculture

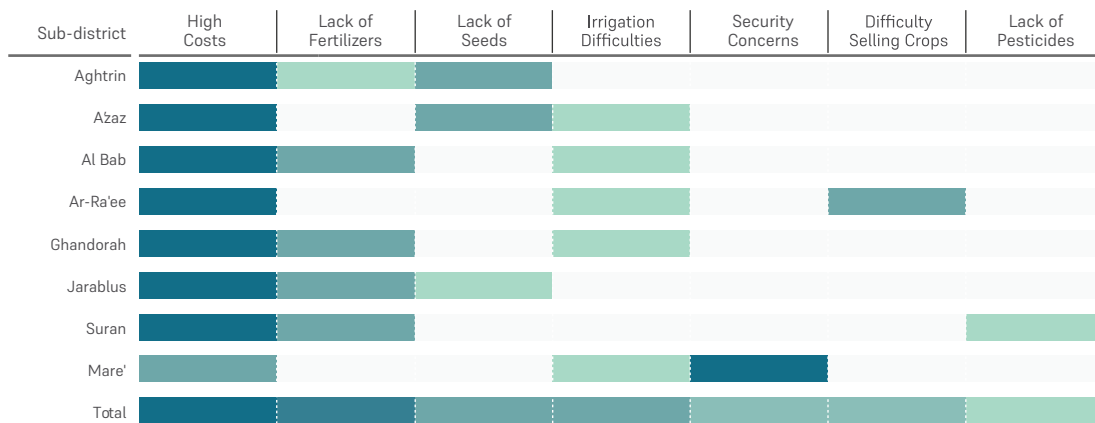
In the sub-districts of the ESHA, agriculture has traditionally been the most important economic activity in the area. Notably, the entire area has been famous for the cultivation of strategic crops such as wheat, barley, legumes, and potatoes. Additionally, sub-districts are known to cultivate specific crops. For instance, the Jarablus sub-district is well known for the cultivation of cumin, olives, pistachios, and almonds, while the Ar-Ra'ee sub-district is well known for cultivating corn and onions.

Since 2011, cultivation decreased throughout the area, which has had a negative impact on the local economy. While each sub-district suffers from specific issues, the overall decrease appears to be driven by the high cost of cultivation, and a lack of fertilizers, seeds, pesticides, and irrigation. These challenges are compounded by the fact that power and water sources remain scarce. In the Jarablus sub-district, these issues alone led to a drop in cultivation by 35% since 2011.

Displacement and accessibility issues were also found to have contributed to the decline. In Suran, which witnessed a drop of 80% since 2011, many farmers were expelled from their land by ISIS, and due to the aforementioned difficulties, have found it extremely difficult to begin recultivating their land. Meanwhile, in the A'zaz and Mar'e sub-districts, which border the PKK's controlled areas, farmers are unable to access neighboring lands under the said militias' control, and find it too dangerous to cultivate lands near frontlines.

As local councils, in collaboration with the Syrian General Corporation for Cereals and the Syrian Organization for Seed Multiplication of the Syrian Interim Government have worked to secure important inputs such as seeds, fertilizer and pesticides for strategic crops, the situation has begun to improve slightly. Improvements have also been seen following support from the Turkish Government for selling cereals and legumes.

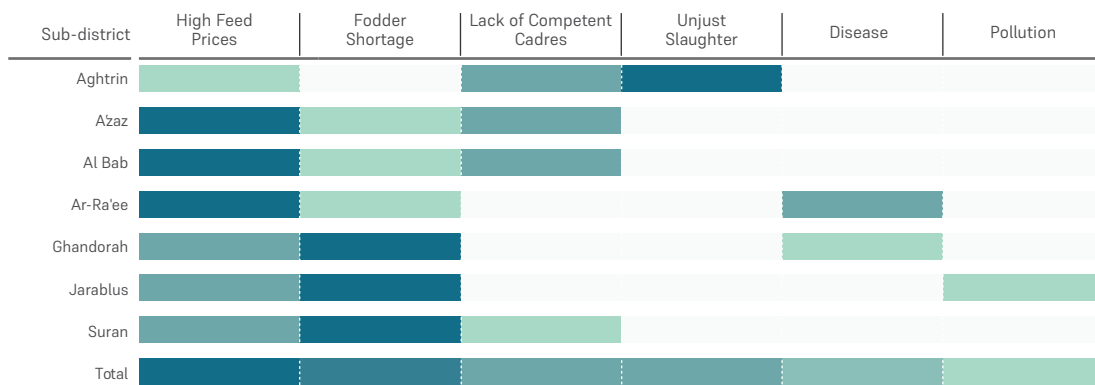
Heatmap 01: Difficulties Facing Agriculture



Livestock

Livestock projects, for raising sheep, cattle, goats, and poultry, are not widespread in the area, and those that do exist are small, and often done on peoples' home property. The exception to this is in the Al Bab Center sub-district, at Qdeiran and Qabasin, where due to the presence of poultry feed manufacturing plants and veterinarians, there is a concentration of poultry farms. The two primary factors negatively impacting livestock production throughout the area were found to be the high price and shortage of livestock feed.

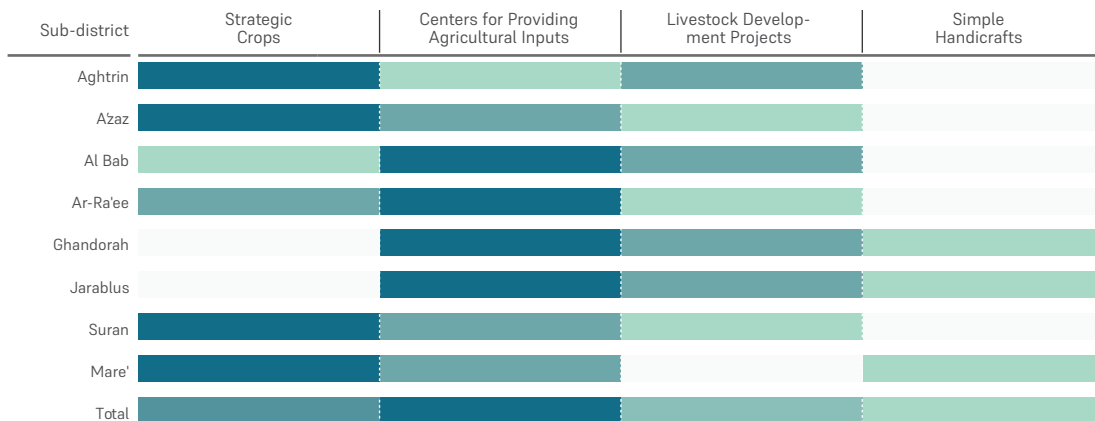
Heatmap 02: Difficulties Facing Livestock



Implementable Development Projects in the Food Security Sector

Because of the prevalence of cultivatable land and experienced farmers, the Euphrates Shield can host several home to several development projects related to food security. Strategic crop cultivation led in the number of Implementable projects in the Aghtrin, A'azaz, Suran, and Mare' sub-districts, whereas centers for providing agricultural inputs to farmers led the number of projects projects in the Al Bab, Ar-Ra'ee, Ghandorah, and Jarablus sub-districts.

Heatmap 03: Implementable Projects



Income Sources

The population of rural Aleppo generally, and the assessed districts specifically, depend on agriculture as a primary source of income. Trade and manufacturing, remittances, manual labor, livestock, and humanitarian aid were important sources of income.

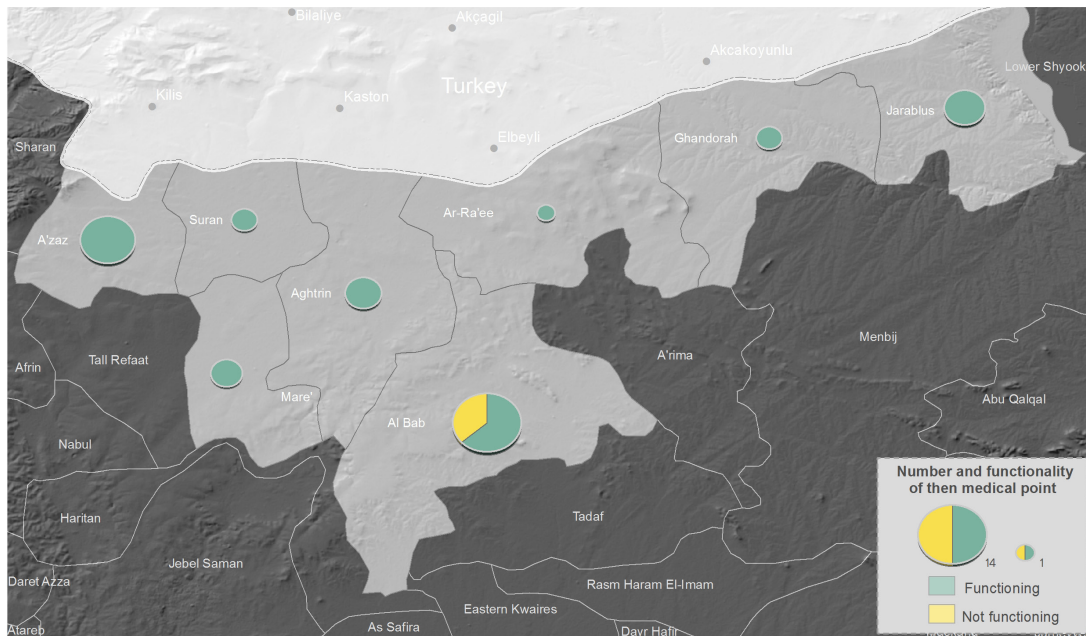
Functional and Non-functional Bakeries

The total number of bakeries in the assessed sub-districts was 55, including 34 Functional bakeries which represent a combined daily production capacity of 124 tons. The largest number of functional bakeries was in the Al Bab and A'zaz sub-districts with 15 and six bakeries respectively.⁵

According to the ACU's Bakeries in the Northern Syria report, "the price of bread in the ESHA varies, from 75 SYP to 200 SYP, or approximately \$0.15 to \$0.40. Price variations were due to several factors, with the most important being the amount of flour provided to a given bakery or area by humanitarian organizations. Thus, in bakeries of the A'zaz district, which received 84% of its flour from humanitarian organizations, the average price for a kilogram of bread was 78 SYP, or \$0.16, while in the Al Bab district 74% is provided by humanitarian organizations, and the price of 1 kilogram of bread was slightly higher at 91 SYP, or \$0.18. Meanwhile, in the Jarablus center sub-district, where there was only one bakery supported by humanitarian organizations, which sold 1 kilogram of bread for 100 SYP, or \$0.20, all other bakeries in the sub-district provided bread at 200 SYP, or \$0.40, per 1 kilogram. As bakeries in the A'zaz district sought to provide bread to the Jarablus center sub-district to increase profits, prices of bread were consequently seen to have risen in the former.

The amount of bread produced in the Al Bab district, together with its three assessed sub-districts, Al Bab center, A'rima, and Ar-Ra'ee, exceeded the needs of the district's population, which stood at 60 tons per day. The extra amount was transferred to the neighboring villages and sub-districts that had no bakeries. The amount of bread made in A'zaz district, is insufficient because of the large number of IDPs in camps in that district."⁶

Map 04: Functional and Non-functional Bakeries



5- Both sub-districts have the largest number of population as reported in demography section.

6- <https://www.acu-sy.org/en/bakeries-in-northern-syria-v3-2017/>

Figure 04: Functional and Non-functional Bakeries

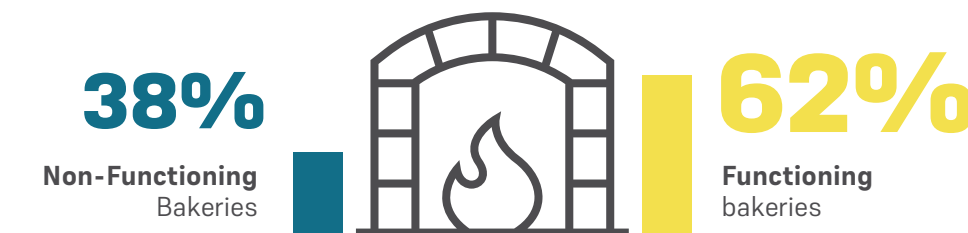
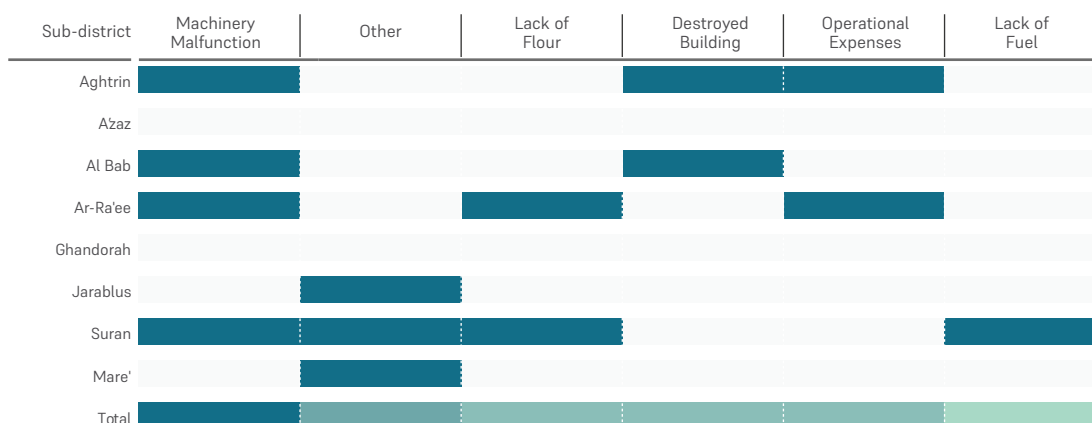


Table 05: Maximum Production Capacity of Bakeries

Sub-district	# of Functional Bakeries	# of Non-functional Bakeries	Total Production Capacity of Functional Bakeries (Ton per Day)
Aghtrin	1	4	10
Azaz	6	0	28
Al Bab	15	5	37
Al-Ra'ee	2	2	8
Ghandorah	3	0	12
Jarablus	3	1	5
Suran	3	4	8
Mare'	1	5	16
Total:	34	21	124

In addition to the 34 Functional bakeries, there were 21 of Non-functional bakeries in the area. The largest number of Non-functional bakeries were in the Al Bab sub-district, where five bakeries were found to be Non-functional. machinery malfunction was the main reason for bakeries Non-functionality, while a lack of flour, inability to cover operating expenses, stolen equipment, and building destruction were also found to be reasons.

Heatmap 04: Reasons for Bakery Non-functionality

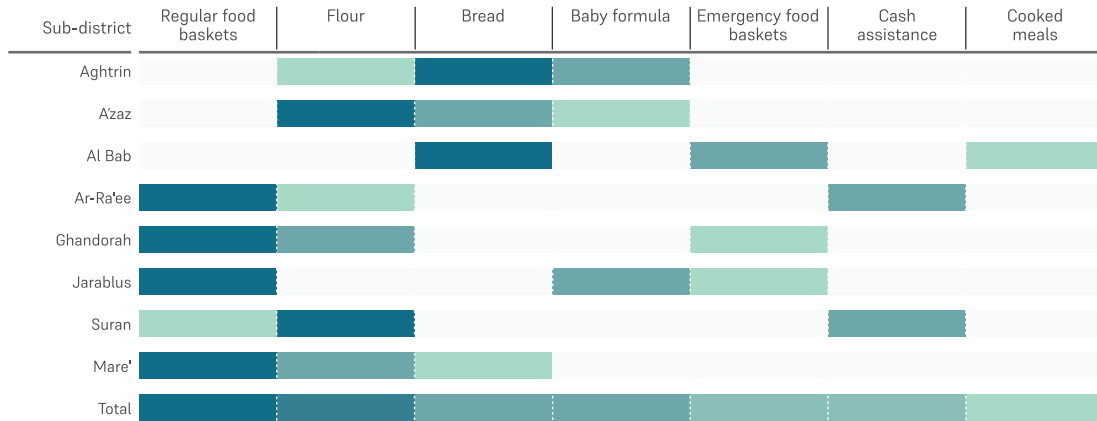


Food Sector Priorities

The following priorities topped the priorities of food security sector:

- Providing regular food baskets.
- Flour availability
- Bread Provision

Heatmap 05: The Priorities of Food Sector



HEALTH SECTOR

Background

Since its liberation from ISIS, the ESHA has witnessed remarkable improvement in the delivery of the health services. Improved security and stability encouraged the return of doctors and the rehabilitation of medical centers by several organizations, most often under direct supervision by the Turkish Ministry of Health.

Health services are concentrated in the western part of the ESHA, with A'zaz standing as the center for health services for much of the area. This has been in large part due to A'zaz's proximity to the Turkish border, making it more secure and a focal for international and local humanitarian organizations. As such, A'zaz is home to 12 health centers, five hospitals, and a blood bank, together staffed by 69 doctors, or 35% of all doctors in the entire ESHA. Al Bab sub-district stands as the second hub, with three operating hospitals, two health centers, and a blood bank. Due to fighting between Euphrates Shield Campaign forces and ISIS, three hospitals in Al Bab Center are completely destroyed and one is partially destroyed. Meanwhile, the eastern part of the ESHA suffers from a shortage of medical services. The Jarablus sub-district is home to just one hospital, established by the Turkish Ministry of Health in late summer 2016, and five health centers.

Health Services Assessment

The provision of the health services can be divided into three levels. The delivery of the first level takes place in primary health care centers, clinics, and child and maternal care centers, and the services include patient screening and first aid. The delivery of the second level takes place in specialized hospitals, which also include operating theatres. The delivery of the third level includes physical therapy and takes place in rehabilitation and prosthetic centers.

Number of Hospitals, Clinics & Medical Staff

The number of operating hospitals in the ESHA was found to be 13, in addition to 30 operating clinics. Notably, there are no blood banks in the eastern part of the area, with all blood banks found in A'zaz, Mare', and Al Bab.



Map 05: Operating & Non-operating Medical Centers

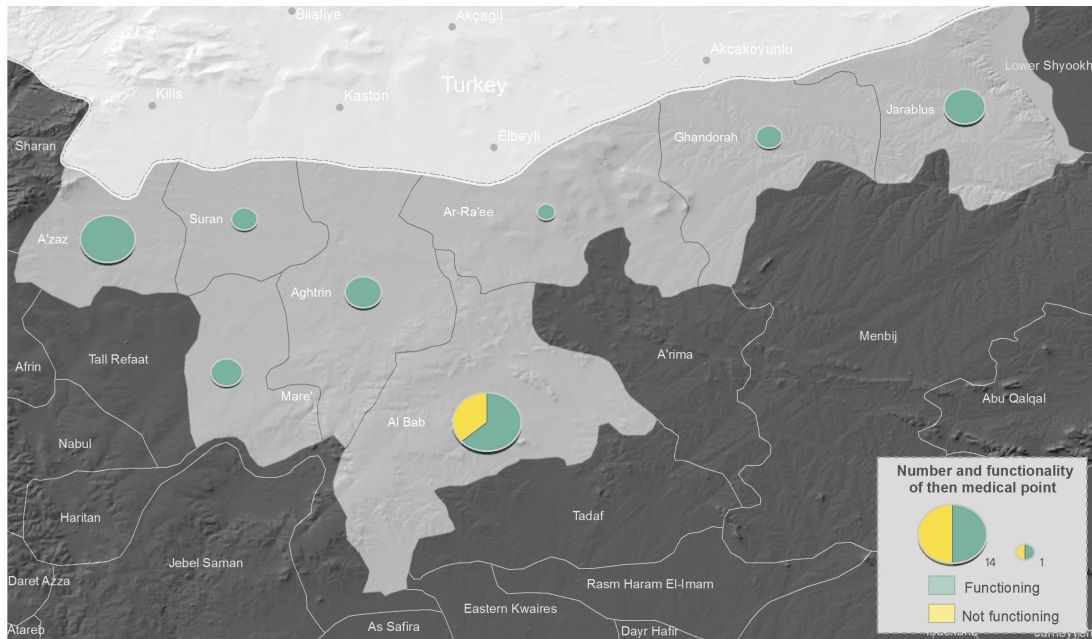


Table 06: Number of Medical Centers

Sub-district	Status of Hospital Buildings			Operating Hospitals & Clinics		Blood Banks
	Undestroyed	Completely Destroyed	Partially Destroyed	Hospitals	Clinics	
Aghtrin	1	0	0	1	3	0
A'zaz	5	0	0	5	12	1
Al Bab	3	1	3	3	2	1
Ar-Ra'ee	0	0	0	0	2	0
Ghandorah	1	0	0	1	2	0
Jarablus	1	0	0	1	5	0
Suran	1	0	0	0	3	0
Mare'	2	0	0	2	1	1
Total	14	1	3	13	30	3

The total number of doctors in the ESHA reached 198 male and female doctors, with 213 male nurses, 98 female nurses, and 63 midwives. Some specialist doctors were found to often work between several medical centers during the week and across several nearby sub-districts. It was recorded that there were no female doctors in the Ar-Ra'ee and Ghandorah sub-districts.

A large number of medical staff, and especially nurses, do not hold official training documentation. Instead, these staff rely on informal experience gained in hospitals and medical centers over the past several years.

Map 06: Number of Doctors

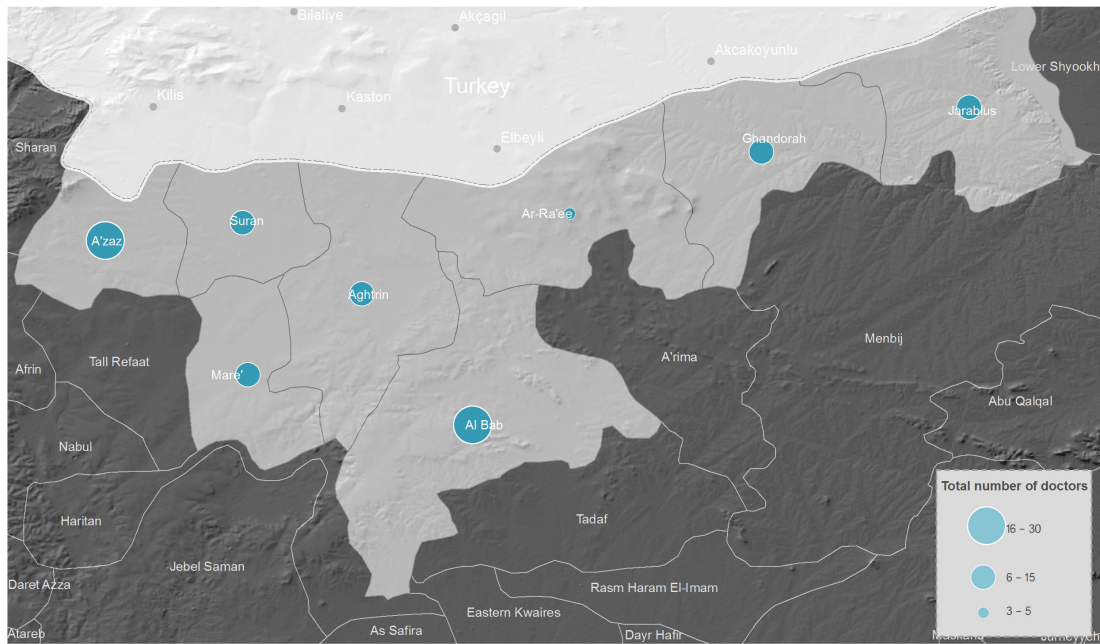


Table 07: Number of Medical Staff

Number of Doctors	Ar-Ra'ee	Suran	Aghtrin	Ghandorah	Mare'	Al Bab	Jarab-lus	Azaz	Total
Overall Number of Doctors	5	11	11	13	13	35	41	69	198
Percentage of Female Doctors	0	10	20	0	40	20	25	10	125
General Practitioners	2	2	5	3	2	10	8	25	57
Dentists	0	3	1	3	1	7	5	3	23
Orthopedics	0	1	1	1	2	4	3	7	19
Pediatricians	0	1	2	5	2	2	8	9	29
Gynecologists	0	1	0	0	2	1	4	5	13
Internists	3	3	1	1	2	5	7	9	31
General Surgeons	0	0	1	0	2	4	3	11	21
Nurses (Male)	3	4	7	5	3	20	5	16	63
Nurses (Female)	8	9	15	12	12	70	35	52	213
Midwives	2	8	5	4	6	50	10	13	98

Accessibility

Due to the ESHA's relative security, accessibility is not a significant issue, as for most it was found that accessibility to hospitals and health centers was considered easy to average. However, for those residing in remote communities, accessibility was often found to be difficult. This was partially overcome in the Ar-Ra'ee, Mare', and the Al Bab Center sub-districts, where there were ambulance services present. However, an ambulance system was found to be an urgent need in all other assessed sub-districts.

Cost of Services

With the exception of one health center in the Suran sub-district, all medical centers in the ESHA were found to provide free services, as all their needs, including medicine, equipment, and salaries, were covered by external support. Meanwhile, the health center in the Suran sub-district was forced to charge nominal fees to continue its running.

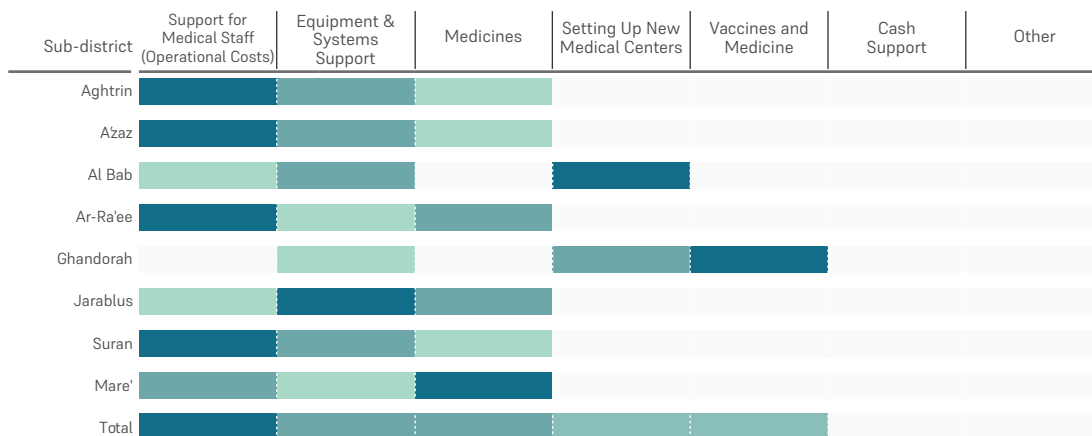
Table 08: Accessibility & Cost of Services

Sub-district	Information about Health Centers			Accessibility			Service Cost	
	Medical Center	Operating Medical Centers	Non Operating Medical Centers	Easy	Medium	Difficult	Free	Partial
Aghtrin	4	4	0	4	0	0	4	0
Azaz	17	17	0	17	0	0	17	0
Al Bab	12	5	7	5	0	0	5	0
Ar-Ra'ee	2	2	0	2	0	0	2	0
Ghandorah	4	3	1	0	3	0	3	0
Jarablus	6	6	0	6	0	0	6	0
Suran	3	3	0	0	3	0	2	1
Mare'	3	3	0	0	0	3	3	0
Total	51	43	8	34	6	3	42	1

Health Sector Priorities

- Support for medical staff, especially in the Aghtrin, Azaz, Ar-Ra'ee, and Suran sub-districts.
- Setting up new medical centers, especially in Al Bab.
- Increased provision of vaccines and medicine, and facilitating their entry into the area from Turkey.
- Providing additional medical staff, and especially specialized medical staff, due to the acute shortage in the area.

Heatmap 06: Priorities of the Health Sector



WASH SECTOR

Per Capita Water Share

Hostilities over the past years greatly reduced the availability of water in the ESHA, as the area's water infrastructure incurred significant damage. Thus, per capita water consumption was found to have dropped, to less than 50 liters per day in the A'zaz and Al Bab sub-districts, and between 50-80 liters per day in the six other sub-districts. Notably, the price per cubic meter of water exceeded 800 SYP, approximately \$16, over all the assessed sub-districts due to the high cost of transporting water via tankers.

Table 09: Per Capita Water Share

Sub-district	50< lt. /day	Between 50-80 lt./day
Aghtrin	0	1
Ar-Ra'ee	0	1
Suran	0	1
Mare'	0	1
A'zaz	1	0
Al Bab	1	0
Ghandorah	0	1
Jarablus	0	1
Total	2	6

Water Potability & Water Sterilization

Since 2011, local and international organizations have overseen water sterilization efforts in many of the assessed sub-districts. The majority of water was found to be potable according to lab reports in seven of the eight assessed sub-districts. The lowest level of water potability was found in the Al Bab Center sub-district, where only 10% of was found to be potable.

Rusty, deteriorated pipes, damage incurred during hostilities, and the absence of required maintenance while ISIS was in control, have all rendered the area's water network defective. Additionally, due to trenches dug by ISIS ahead of the Euphrates Shield Campaign, sewage has entered parts of the water network. Consequently, significant repairs and rebuilding must be done to restore the network.

Heatmap 07: Water Potability & Water Sterilization

Sub-district	Water Sterilization Done?	Do You Think the Water Is Potable?	Unpotable as Per Lab Reports	Potable According to Lab Reports	Do You Think the Water Is Unpotable?
Aghtrin	No	75%	0%	75%	0%
Ar-Ra'ee	No	30%	0%	70%	0%
Suran	No	20%	0%	60%	20%
Mare'	No	0%	0%	100%	0%
A'zaz	No	30%	0%	70%	0%
Al Bab	No	0%	70%	10%	20%
Ghandorah	No	20%	10%	70%	0%
Jarablus	Yes	30%	0%	70%	0%

7- The price of \$ changes rapidly in Syria. For the purpose of the report an approximate price will be regarded as \$1=500 SYP

Water Sector Management Responsibilities

Local councils, supported by the Stabilization Committee, are responsible for the management of the water sector in all of the sub-districts, except in the Azaz and Al Bab sub-districts. In the former, international organizations are responsible for approximately 30% of the management, and in Al Bab the private sector holds 30% in their running. The water of those wells is sold to the public through truck tanks. In addition to this, the local council runs some wells and owns large truck tanks, which sell water to smaller truck tanks that sell water to citizens.

Table 10: Responsibility of the Water Sector Management

sub-district	Local Council	International Organizations	Private Sector
Aghtrin	100	0	0
Ar-Ra'ee	100	0	0
Suran	100	0	0
Mare'	100	0	0
Azaz	70	30	0
Al Bab	70	0	30
Ghandorah	100	0	0
Jarablus	100	0	0

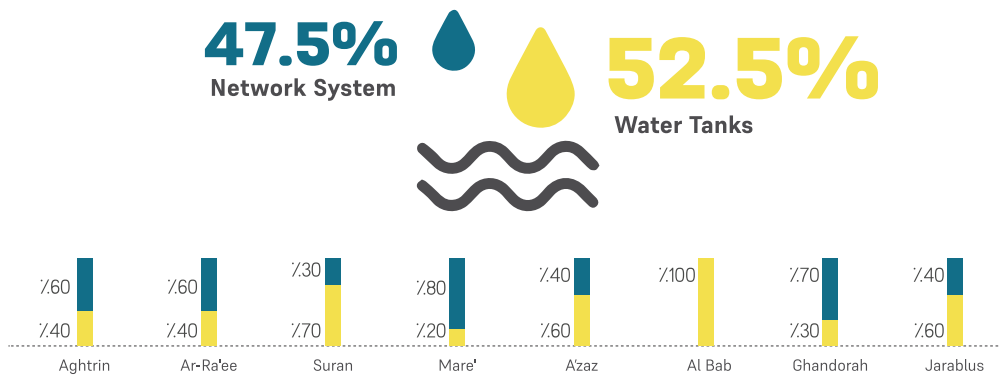
Water Delivery

The public water network had been the main source of water in more than 90% of Syria before the onset of the crisis. This network was often fed by river water, surface water, and sometimes groundwater. Notwithstanding severe inefficiencies, water stations remain the main source of drinking water in 47.5% of the assessed sub-districts. The highest percentage was in the Mare' and Ghandorah sub-districts, at 80% and 70%, respectively.

The results of the study showed that there are two ways to deliver water to the people living in the areas under assessment. The average rate of water delivery by truck tanks reached 52.5%, whereas it stood at 47.5% from the public network. The highest percentage for the use of truck tanks was in the Al Bab Center sub-district, at 100%, as the private sector is responsible for the water supply and distribution. It should be noted that some local councils have recently begun to impose a fixed price per cubic meter of water in an effort to control soaring prices, and prevent exploitation by some traders.

Notably, the transportation of water via truck tanks often results in increased water prices. Equally, the price of water transported in this way fluctuates according to the price of fuel. Furthermore, sometimes the districts in which the use of truck tanks is prevalent do not receive enough water, as in the Al Bab Center and Azaz sub-districts where the per capita daily water consumption falls below 50 liters.

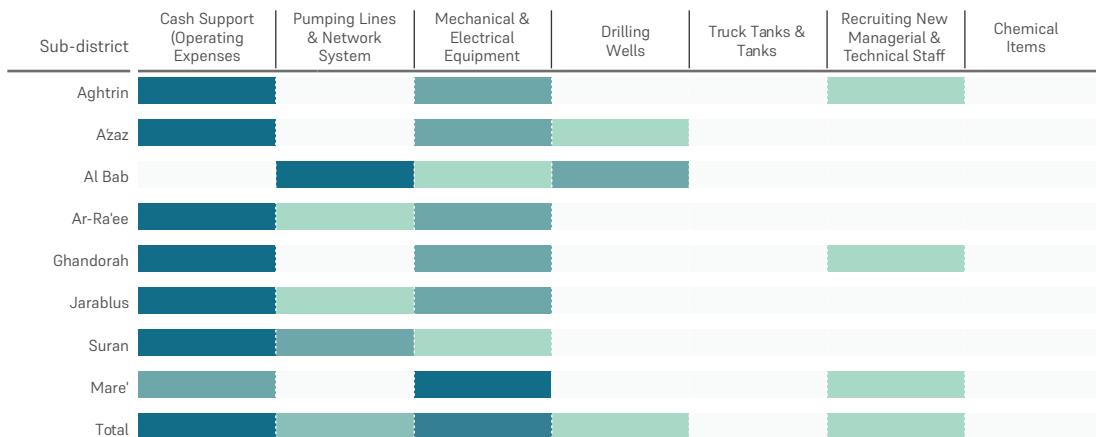
Figure 05: Water Delivery



Water Sector Priorities

- Cash support in the majority of assessed sub-districts is required, which would cover extraction of water, transportation, operating expenses and workers' wages, those working in the water sector.
- Pumping lines and network system.
- Mechanical and electrical equipment including pumps and accessories and their periodic maintenance.
- Drilling wells especially in Al Bab sub-district.
- Recruiting new managerial and technical staff.

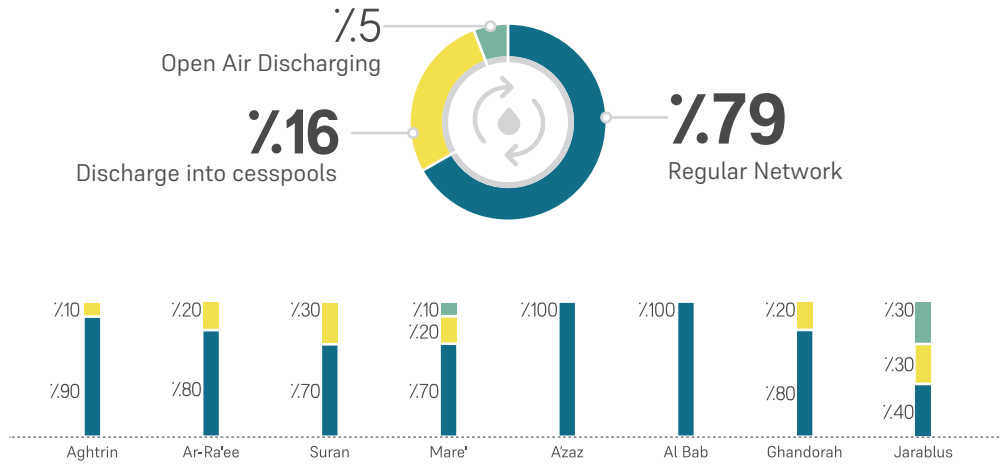
Heatmap 08: Water Sector Priorities



Sewage Sector

Sewage is supposed to be discharged into a regular sewer system that feeds into sewage treatment plants. Although 79% of the area's wastewater is discharged into regular sewer networks, 16% of the network suffers from partial damages sustained by shelling. As such, it was found that wastewater is leaking from parts of the sewer system. As a result, an increasing number of communities have relied on cesspools to discharge wastewater, despite growing concerns that this is having a negative impact on groundwater and that they often have to be drained by pumping truck tanks. Positively, wastewater discharge into open spaces accounted for just 5% of wastewater discharge in the area. This was observed in the Jarablus and Mare' sub-districts.

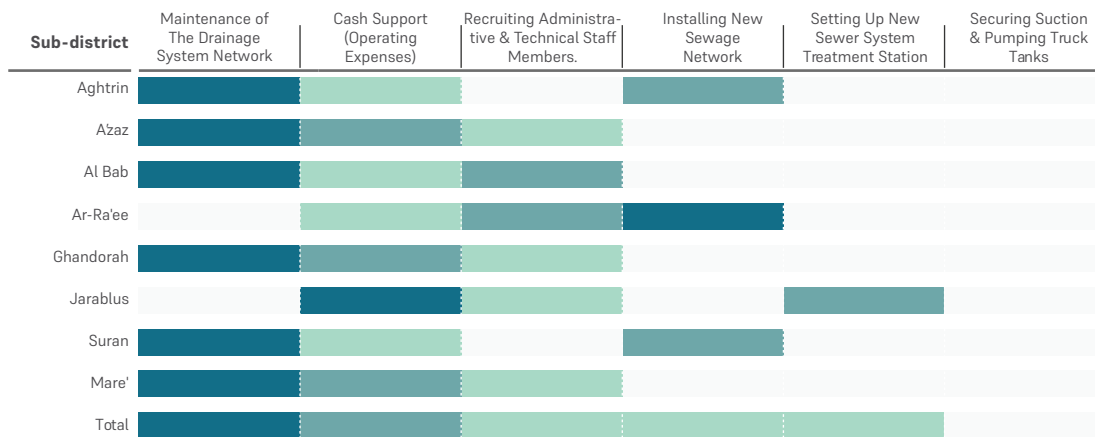
Figure 06: Sewage Sector



Sewage Sector Priorities:

- Maintenance of the sewage network, given the fact that there are cracks in these networks leading to leakage of sewage water, in addition to the fact that many of the out of service networks need maintenance in order for them to be put back into service anew.
- Cash support, including supporting the operating expenses such as the fuel diesel to operate the machines and supporting the salaries' payment.
- Recruiting administrative and technical staff members.
- Installing new sewage network; seeing that the old networks are not in a position to withstand the current volume of wastewater, much as these networks require expansion or replacement.

Heatmap 09: Priorities of the Sanitation Sector



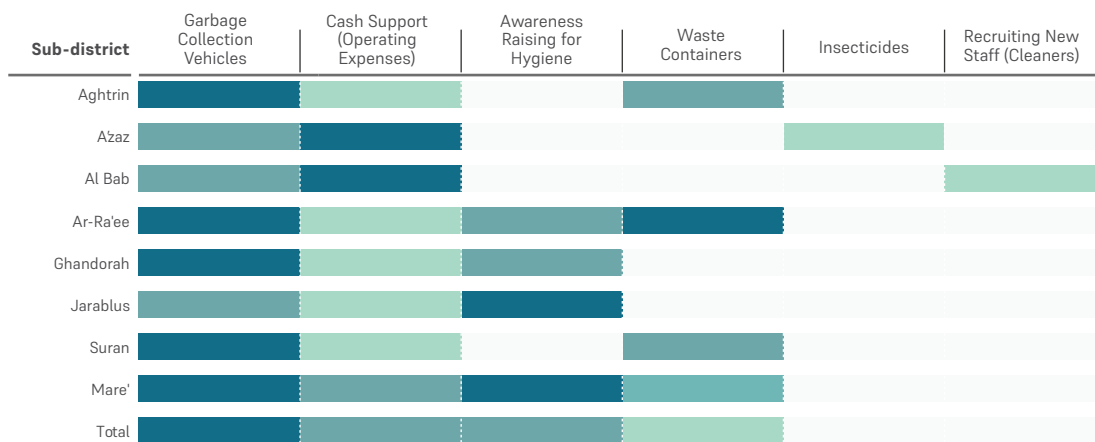
HYGIENE SECTOR

Transporting solid waste to the outside of the sub-district is the most widely used method. This method is the one reported to commonly be used across the board in all districts. The waste is dumped and piled up in isolated areas, far from the residential places, despite the risk of environmental pollution.

Hygiene Sector Priorities

- Provide the local councils with garbage collection vehicles.
- Cash support and baking up the operating expenses, including fuel diesel required for the vehicles, salaries for the workers, and periodic maintenance expenses of the vehicles.
- Awareness campaigns to raise awareness towards hygiene.
- Provide garbage containers.

Heatmap 10: Priorities of The Hygiene Sector



WASH SECTOR



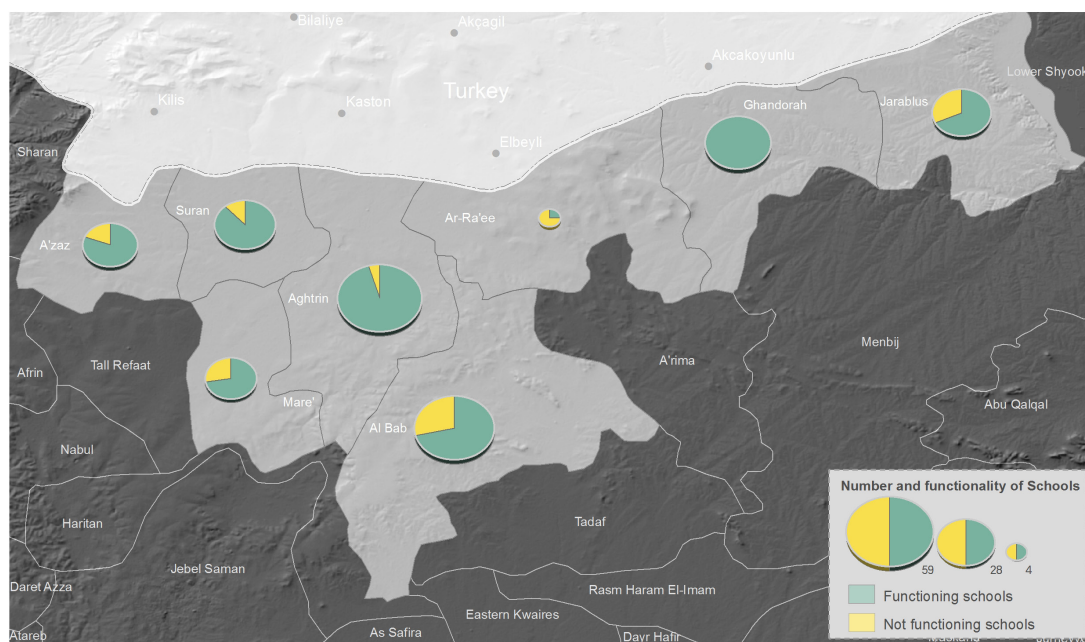
EDUCATION SECTOR

Despite the suspension of education in areas under ISIS control, which led to the spread of illiteracy and interrupted many area students' education, it is expected that the education sector will improve significantly during the 2017-2018 academic year due to increased Turkish support.

Functional and Non-functional Schools

There are 268 schools in the ESHA, of which 223, or 83%, are functional. The largest number of schools was reported in the Aghtrin sub-district with 59 schools. Amongst the remaining 45 Non-functional schools, 15 are located in the Al Bab sub-district. Notably, the lowest number of schools was registered in the Ar-Ra'ee sub-district, with only four schools, three of which are Non-functional.

Map 07: Functional and Non-functional Schools



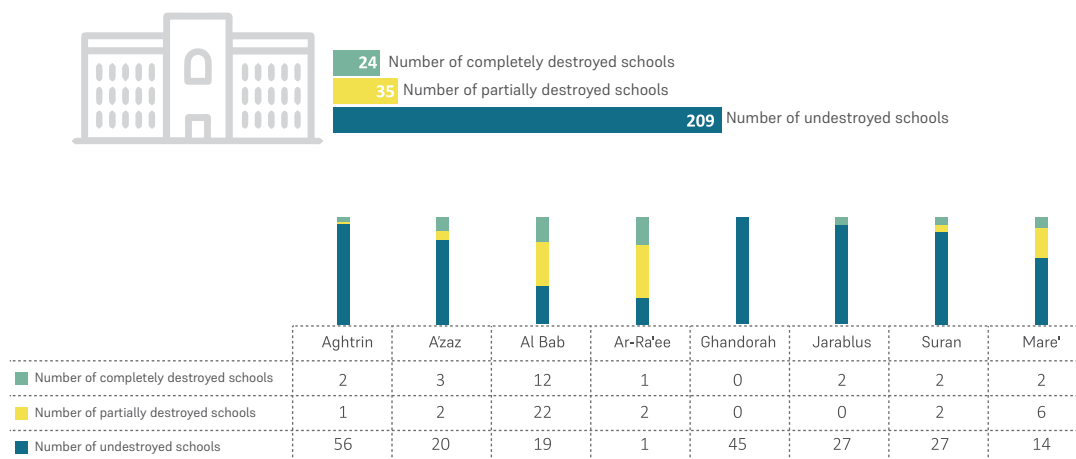
Status of School Buildings

In the ESHA, 209 schools were not destroyed, while 35 are partially destroyed, and 24 are completely destroyed. The largest number of partially or fully destroyed schools was recorded in the Al Bab sub-district where 34 schools were found to be fully or partially destroyed.

Results also showed that all functional schools are not destroyed or partially destroyed ones. Seeing that all partially destroyed schools also stopped Functional in the sub-districts of Suran, Ar-Ra'ee, A'zaz and Aghtrin.

It is worth mentioning that there are nine Non-functional schools in the sub-district of Jarablus, although there are only two schools partially destroyed. This fact goes to confirm that there are some other reasons behind the Non-functionality of these schools, one of which is the shortage in funding. Noting that the results of the study showed that it is the destruction of the school buildings which is the main reason for rendering the schools non-operating in six of the eight assessed sub-districts. It should also be noted that communities are making continuous efforts with available resources to rehabilitate some of the schools, so that more children can attend school.

Figure 07: Status of School Building



Teachers

The number of teachers in the assessed sub-districts recorded an increase of about 10% compared to previous data from the IMU's Schools in Syria 2017 report.⁸ The total number of teachers, males and females, in the area stands at 1,982. The percentage of female teachers scored only 39%, where the decline in the percentage of female teachers is attributed to the fact that due to social reasons, the percentage of female education was traditionally lower than that of males in most of the sub-districts of the area. Regarding profession, the percentage of male and female professional teachers stands at 60%; whereby the percentage of volunteering female and male teachers accounts for 40%.⁹

The largest number of teachers is in the Suran sub-district, with 450 teachers, while the lowest number is in the Ar-Ra'ee sub-district with just 35 teachers.¹⁰ Noting that teachers across the board in both the Aghtrin and A'zaz sub-districts are officially professional teachers. Knowing that intensive training courses for teachers have recently started in the region in a step aimed at correcting and developing the education sector.

Table 11: # of Male and Female Teachers

Sub-district	Officially Professional Teachers		Volunteer Teachers	
	Male	Female	Male	Female
Aghtrin	190	86	0	0
A'zaz	224	130	0	0
Al Bab	10	4	170	149
Ar-Ra'ee	20	10	2	3
Ghandorah	60	42	32	23
Jarablus	50	30	28	35
Suran	150	50	150	100
Mare'	72	57	52	53
Total	776	409	434	363

8- <https://www.acu-sy.org/en/schools-report-2017/>

9- Volunteer teachers are teachers who may have graduated or not graduated university, but do not have any formal teacher training.

10- The low number of teachers in Ar-Ra'ee can be attributed to the fact that there is only one functional school in this sub-district.

Student-Teacher Ratio

While the number of teachers increased by 10% compared to Schools Report in Syria 2017 report, the number of students increased by more than 100%. This confirms the urgent need to increase the number of specialized teachers in the ESHA. This has already begun, with competitions and tests being held for the appointment of teachers, in addition to educational refresher courses for already appointed teachers.

The student-teacher ratio was found to be appropriate, at 30 to 1, in four sub-districts, Mare', Suran, Ghandorah, and Ar-Ra'ee, whereas the ratio stood between 30 to 40 to 1 in three sub-districts, A'zaz, Al Bab and Jarablus. Meanwhile, the worst recorded student-teacher ration was recorded in the Aghtrin sub-district, at 57 to 1.

It is worth mentioning here that the present assessment informs about the adequacy of teachers without addressing their major of study, and did not address the expertise and competencies possessed by persons supervising the educational process.

Students

The number of students in assessed sub-districts was 59,624. The recent growth in the number of students is attributed to the return of relative security in much of the area. Despite this increase, the number of students is far below the number of eligible school going children, meaning that there remains a significant number of drop outs.

Most students in the area are in the primary stage, with 48,662 or 82% of area students. Meanwhile, the number of students in the lower-secondary stage is 9,277, or 15%, and in the upper-secondary stage, 1,685, or 3%. It is worth mentioning that in the sub-districts of Ar-Ra'ee and Jarablus only the primary level is available. IMU enumerators noted that some children, especially those who have passed the primary stage, are often forced to join the labor market to help their families.

The number of students per school varies from one sub-district to another. The largest number is in the A'zaz sub-district, with 548 students per school, while the smallest number was in the Ghandorah sub-district, with 103 students per school.

Map 08: Number of Students According to the Educational Stages

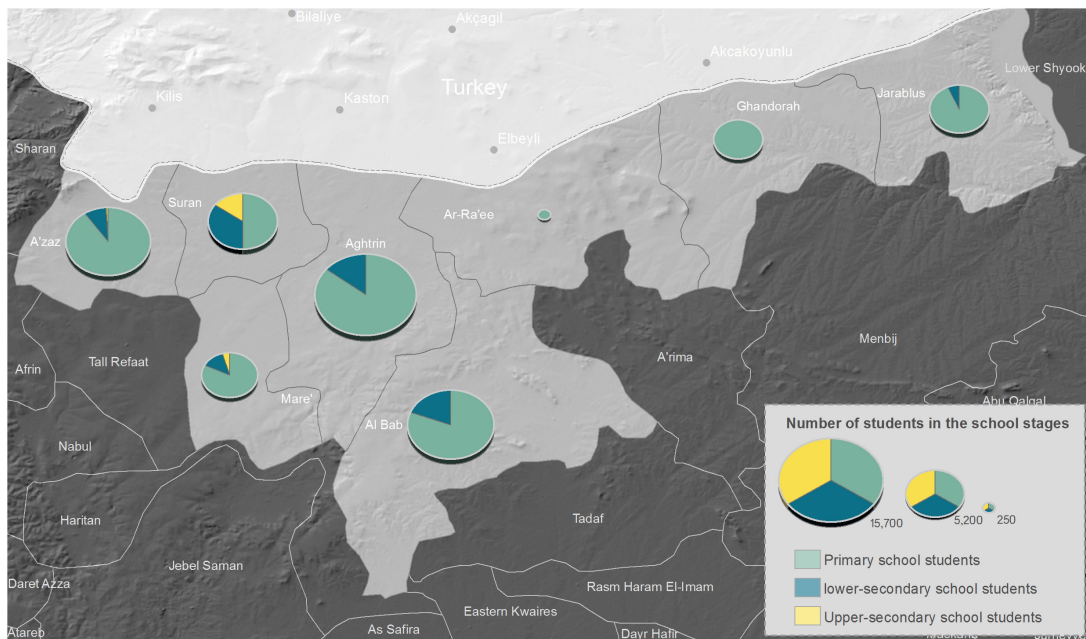


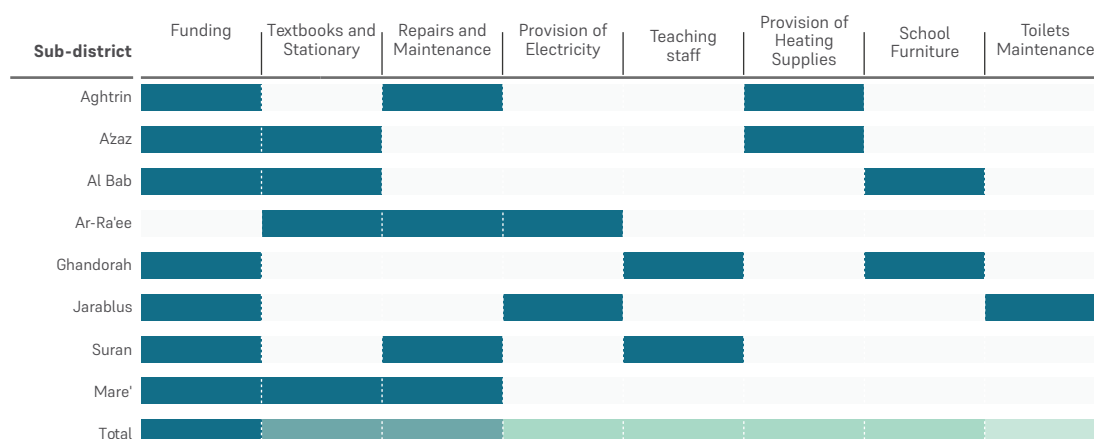
Table 12: Number of Students According to the Educational Stages

sub-district	Primary Stage students	Lower-Secondary Stage students	Upper-Secondary Stage students	Total number of students	Total number of teachers	Number of students per teacher	Number of students per school
Aghtrin	13,180	2,400	125	15,705	276	57	280
Azaz	9,802	1,047	120	10,969	354	31	548
Al Bab	9,120	2,280	0	11,400	333	34	300
Ar-Ra'ee	250	0	0	250	35	7	250
Ghandorah	3,710	0	0	3,710	157	24	103
Jarablus	5,000	400	0	5,400	143	38	270
Suran	3,700	2,500	1,200	7,400	450	16	274
Mare'	3,900	650	240	4,790	234	20	299
Total:	48,662	9,277	1,685	59,624	1,982	30	279

Needs of Functional Schools

The need for additional funds is the first need for functional schools in all of assessed sub-districts except Ar-Ra'ee. Additional needs included textbooks and stationery items, especially for schools in the Azaz, Al Bab Center, Ar-Ra'ee, and Mare' sub-districts, and repairs and maintenance for school buildings, especially in the Aghtrin, Ar-Ra'ee, Suran and Mare' sub-districts. Finally, specialized teaching staff was also an urgent need, as many teachers are volunteers with no certification qualifying them to teach.

Heatmap 11: The Needs of Functional Schools



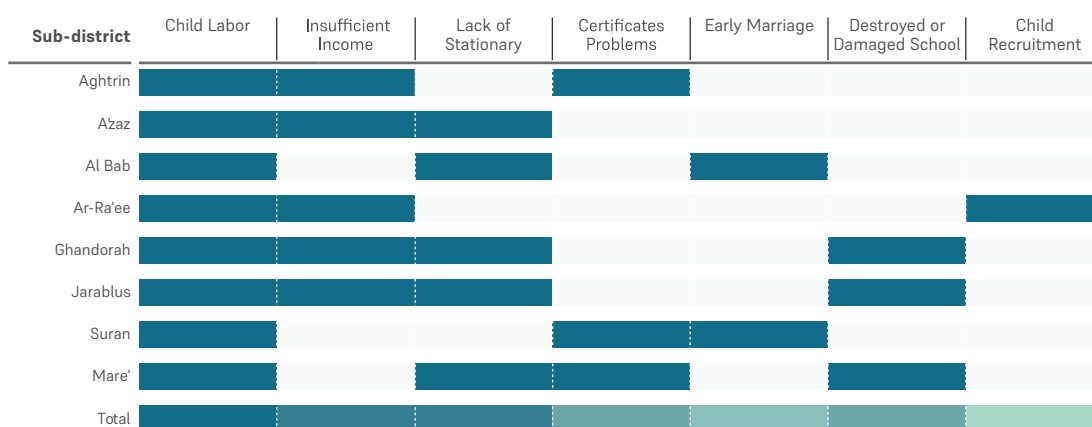
Reasons of Schools Non-functionality

The partial or complete destruction of school building topped the reasons of schools' Non-functionality, followed by the absence of funding. The reasons also included inadequate health facilities, lack of school furniture, shortage in teaching staff, especially in Aghtrin sub-district and security reasons in Mare' sub-district.

Difficulties Preventing Children from Going to School

The financial difficulties took first place among the reasons preventing children from learning, and this has to do with child labor and the lack of adequate resources for parents to send their children to school. The shortage of textbooks and stationery items came in the second place, not providing students with certificates after the exams or else not certifying the certificates. There are social reasons as well as early marriage, in addition to the partial or complete destruction of some school buildings.

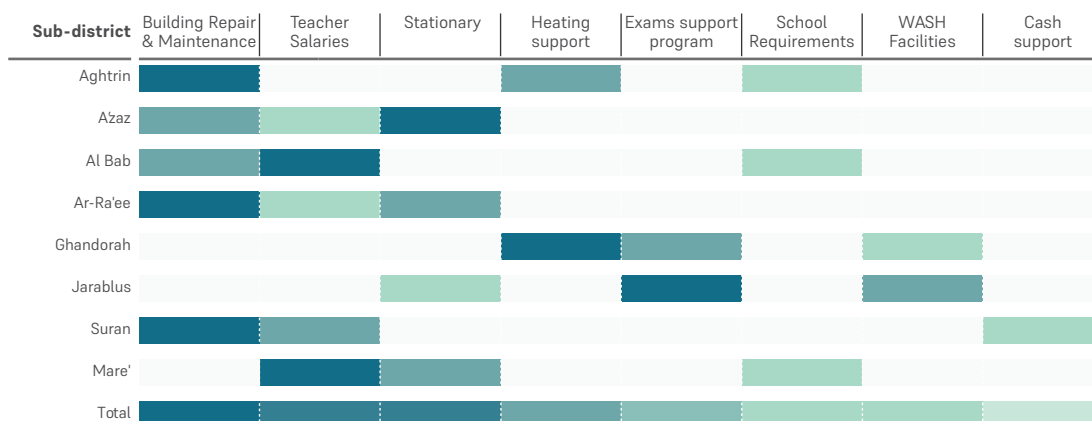
Heatmap 12: Difficulties Preventing Children from Learning



Priorities for the Education Sector

- Repair and maintenance of destroyed school buildings.
- Support the salaries of teachers and educational staff.
- Providing educational supplies and stationery.
- Support the provision of heating.

Heatmap 13: Education Sector Priorities



INFRASTRUCTURE SECTOR

Infrastructure and public utilities in Syria were significantly impacted by the crisis, as clashes, airstrikes, shelling, and neglect caused significant damage. In the ESHA, the relative safety and stability provide an important opportunity to begin recovery across all sectors and a return of normal economic life, for which the infrastructure rehabilitation is essential.

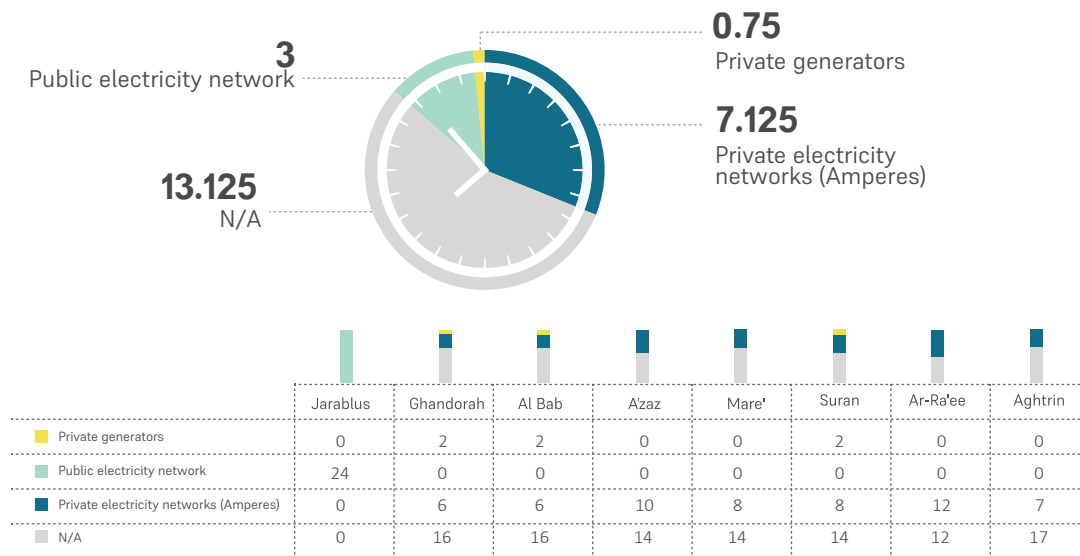
Electricity Sector

The conflict has left the electricity network largely destroyed. As such, private networks electricity networks (amperes) which depend on private generators, have been established to fill the gap. However, after the liberation of the area from the ISIS, efforts to repair the public electricity networks have started. It is worth mentioning that prior to the conflict, the primary source of power in the area was the Tishreen dam and a large thermal power station located between Aleppo and Ar-Raqqa. However, this power is not provided to the ESHA, as it is currently under control of the Syrian regime and the PKK'a militias.

Assessment results demonstrated that free electricity was only available 24 hours a day in the center of Jarablus sub-district through the Turkish electricity network, while surrounding villages in the Jarablus sub-district were only provided two hours a day. In all other assessed sub-districts, the private electricity networks (amperes) were the only source of electricity, and the number of hours varied greatly between sub-districts, while the average was 13 hours a day. In these sub-districts, it was found the population suffered from the high cost and poor performance of these networks, especially in Al Bab. KIIs indicated that the price of an ampere in these areas ranged between 1300 and 1500 SYP (approximately \$26 to \$30).

Experts noted that investing in larger generators, or finding mechanisms to import more electricity from Turkey through making necessary maintenance, could remedy much of the issues in the electricity sector.

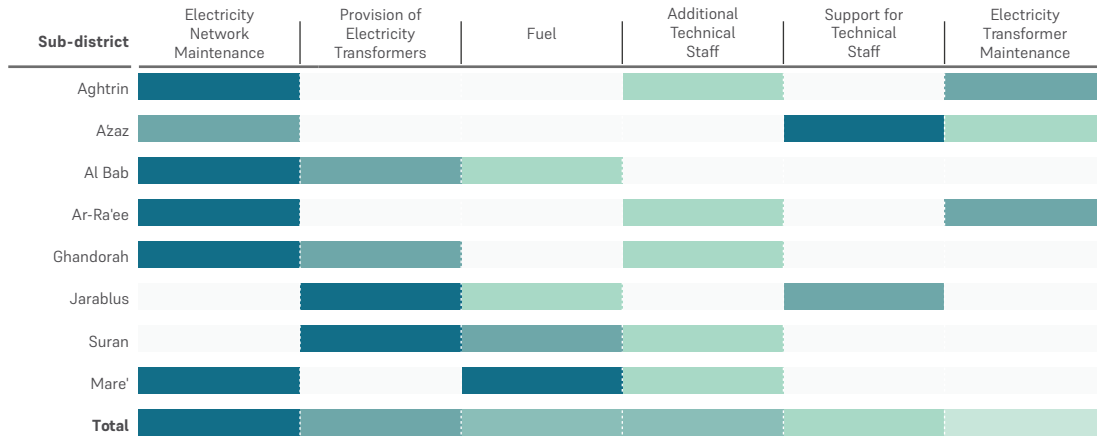
Figure 08: Electricity sources



Electricity Sector Priorities

- Public electricity network rehabilitation.
- The provision of electricity transformers, especially in the Jarablus and Suran sub-districts.
- Securing additional power sources through larger generators or importing additional electricity from Turkey.
- The provision of additional fuel for generators, and providing support for operating expenses.

Heatmap 14: Electricity Sector Priorities



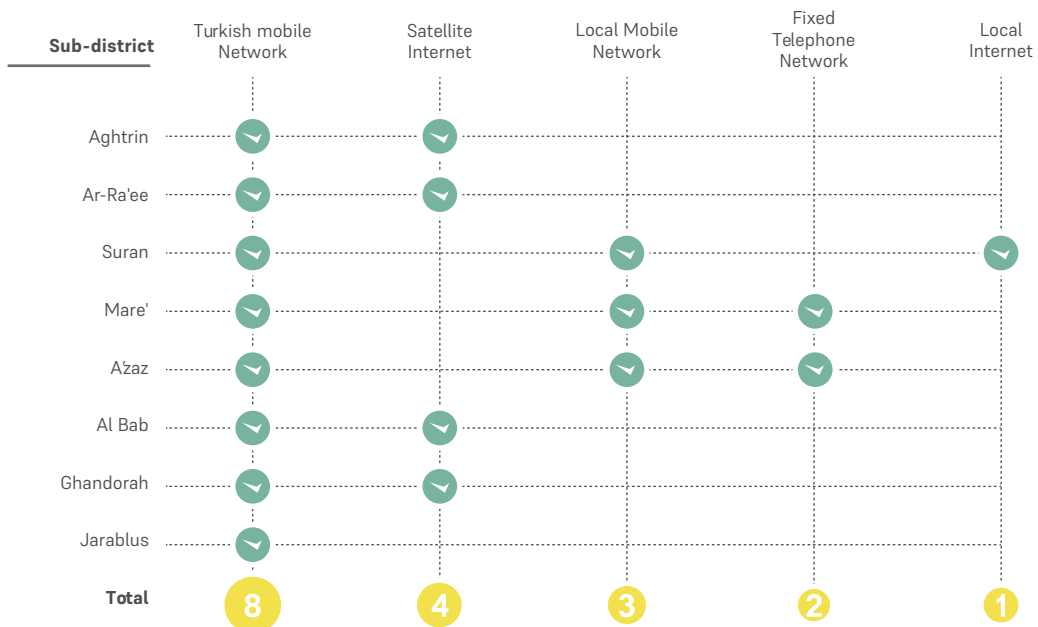
Road Networks

Road networks, which are essential to improving the economic situation in the assessed sub-districts, were found to have not been maintained in many years. Additionally, road networks do not reflect the new administrative divisions imposed by the reality of control force boundaries. Moreover, there is a need for maintenance of the old roads in the following sub-districts: Aghtrin, Ar-Ra'ee, Mare', Azaz, Al Bab, and Ghandorah.

Communication Networks

All assessed sub-districts use the Turkish mobile network, while the Syrian mobile network is also available in the Suran, Mare', and Azaz sub-districts. The fixed telephone network is also available in Azaz and Al Bab, while the deterioration of the fixed telephone exchange is reparable in all assessed sub-districts except Ar-Ra'ee. Satellite internet is also available within the Aghtrin, Ar-Ra'ee, Al Bab, and Ghandorah sub-districts, whereas local internet was available only in Suran.

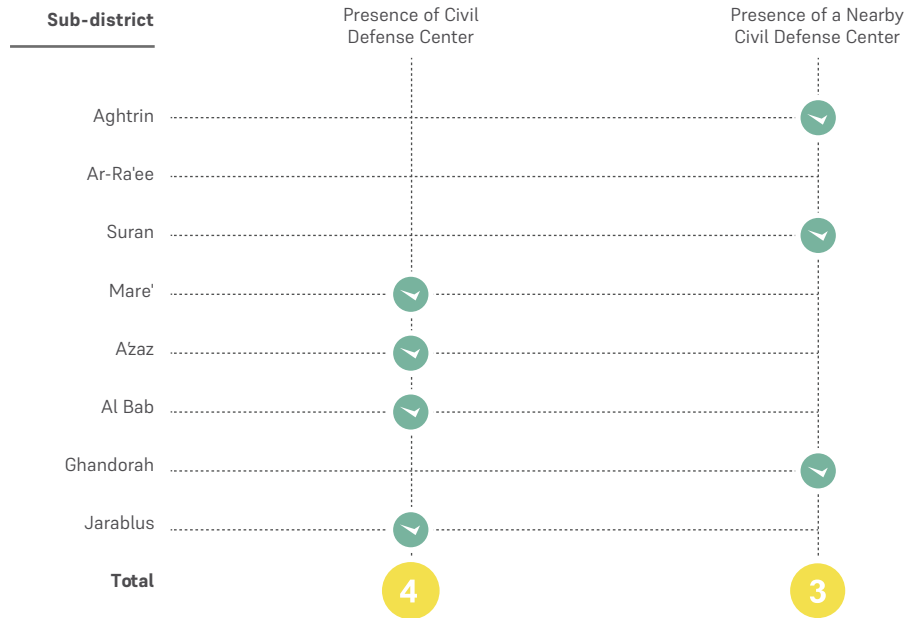
Figure 09: Means of Communication



Civil Defense Centers

The assessment found that there were civil defense centers within the Mare', A'zaz, Al Bab, and Jarablus sub-districts, while there were none in Aghtrin, Suran, Ghandorah, and Ar-Ra'ee. Additionally, there was no civil defense center near Ar-Ra'ee. As landmines left behind by ISIS have killed several people, area civil defense forces have made demining a priority. However, the assessment found that they were in need of additional equipment for demining.

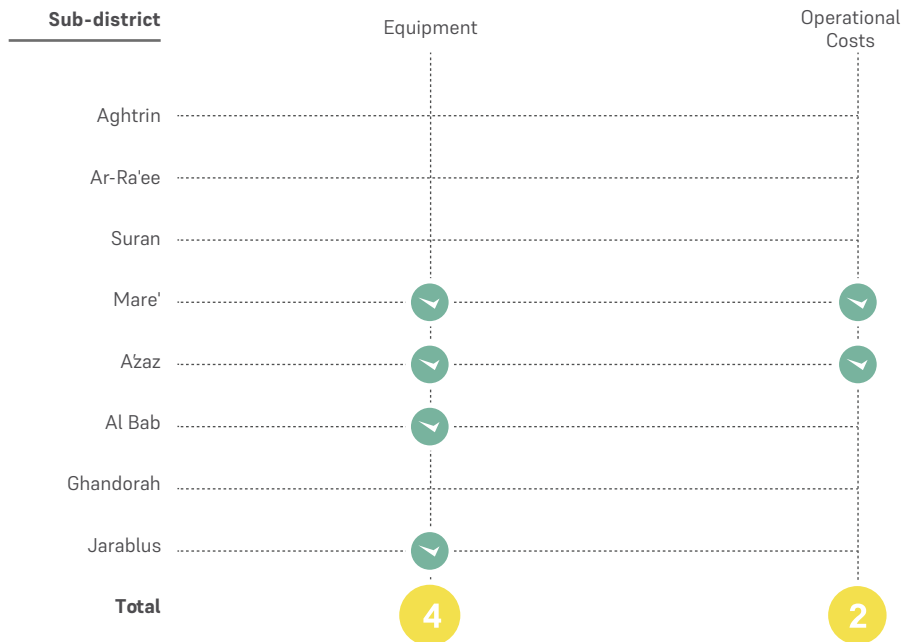
Figure 10: Presence of Civil Defense Centers in Assessed Sub-districts



Civil Defense Centers Priorities

- Providing equipment to the civil defense centers in the Mare', A'zaz, Al Bab, and Jarablus sub-districts.
- Providing operational costs for the civil defense centers in the Mare' and A'zaz sub-districts.

Figure 11: Civil Defense Centers Priorities



Industrial and Trade Sector

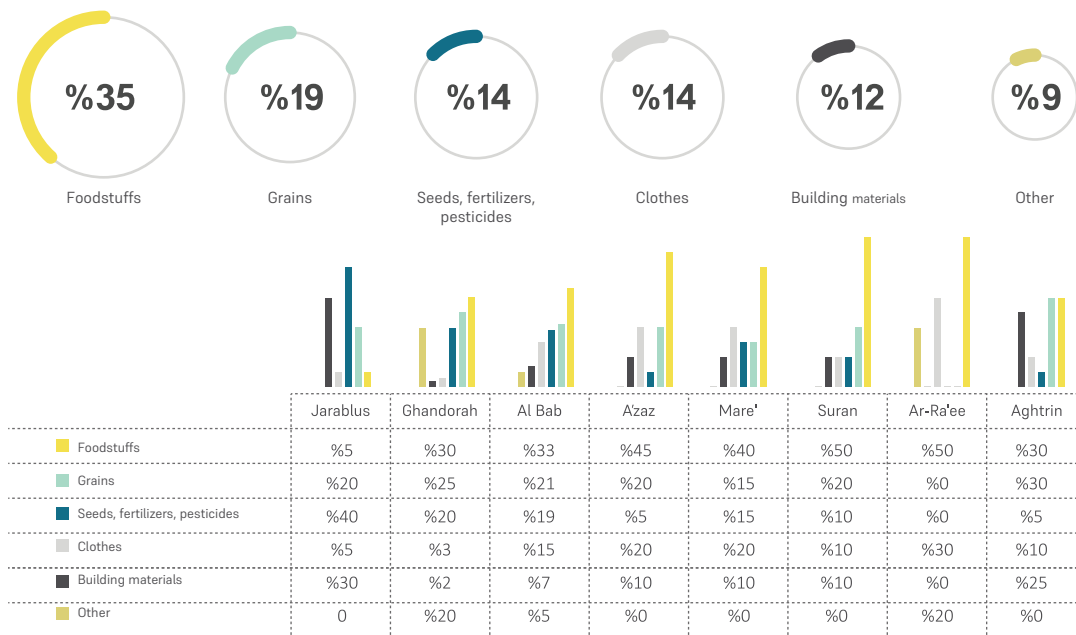
The relative stability of the ESHA was found to have encouraged limited growth in area industry. According to updated data for the month of September by an ACU enumerator in Al Bab, many factories have been opened in the area, including construction materials plants and factories for the production of batteries, food products, agricultural inputs, and clothing. A number of workshops have also been opened for food products, building materials, packaging, electrical equipment, and various other products.

While the poor state of infrastructure and public utilities have discouraged many from reopening existing factories and workshops, or establishing new ones, a lack of raw materials was also found to be a factor discouraging renewed activity.

Trade

Trade was also found to be quite active in the ESHA, with border crossings witnessing significant movement of goods from Turkey to the area, and then to neighboring areas and cities. The food trade made up 35% of area trade activity, followed by grain at 19%, seeds and fertilizers at 14% each, and construction materials at 12%. Notably, most of this movement is in one direction, thus supporting area agriculture and industry will be essential to encourage the continued improvement of the economic life cycle and to secure a surplus for export.

Figure 12: Proportion of Trade



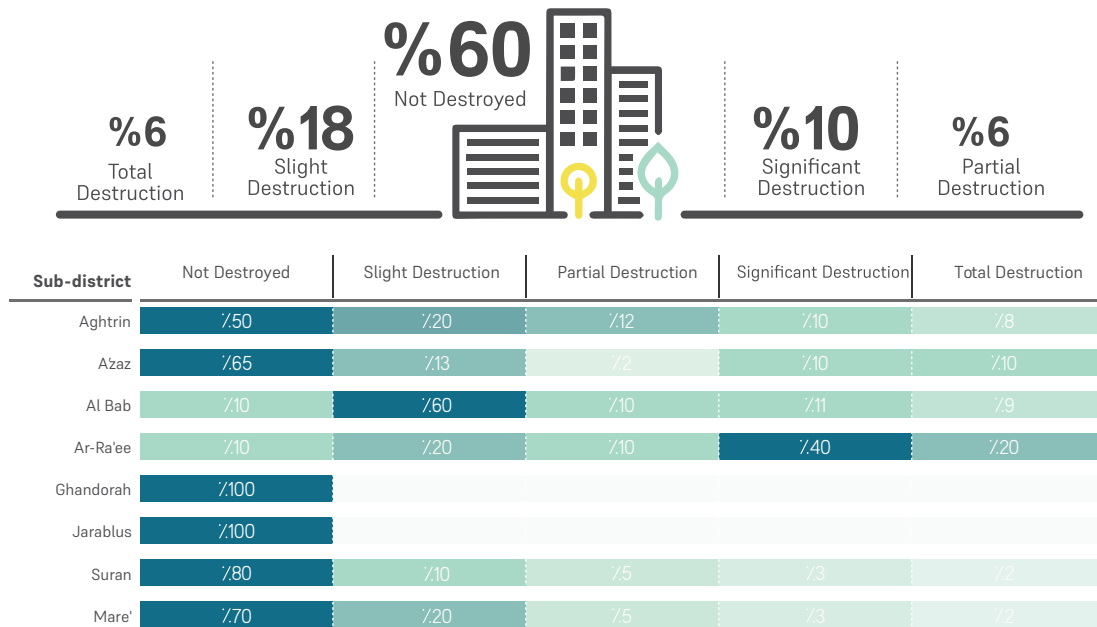
SHELTER AND NFI

Due to repeated waves of displacement into the ESHA, there is a severe need for non-food items such as clothing, furniture, mattresses, blankets, and kitchen equipment. Needs have been made more severe by the high price of these goods in area markets, and the weak purchasing power of civilians. IDPs during migration cannot carry even their simple needs especially that migratory movements often occur during the shelling or clashes. Moreover, the higher prices of these materials in the markets and the weak purchasing power of civilians were a key cause of the increasing need to provide these materials as aid in the affected areas.

Shelter

The percentage of destroyed buildings was relatively low in much of the ESHA, except in the Ar-Ra'ee and Al Bab sub-districts which witnessed severe hostilities. In both sub-districts, only 10% of buildings were not destroyed, while 20% were totally destroyed in Ar-Ra'ee and 9% in Al Bab. Further, 40% of buildings were seriously destroyed in Ar-Ra'ee, while 60% were slightly destroyed in Al Bab.

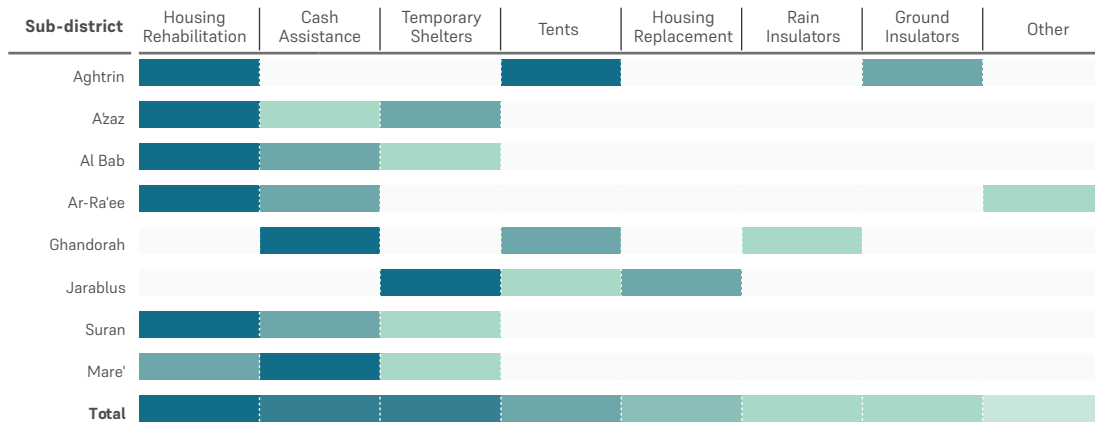
Figure 13: The Status of Shelter



Shelter Sector Priorities

- Housing rehabilitation especially in the Aghtrin, A'azaz, Al Bab, Ar-Ra'ee, and Suran sub-districts.
- Cash assistance especially in the Mare' and Ghandorah sub-districts.
- Securing temporary shelters, especially in the Jarablus sub-district.

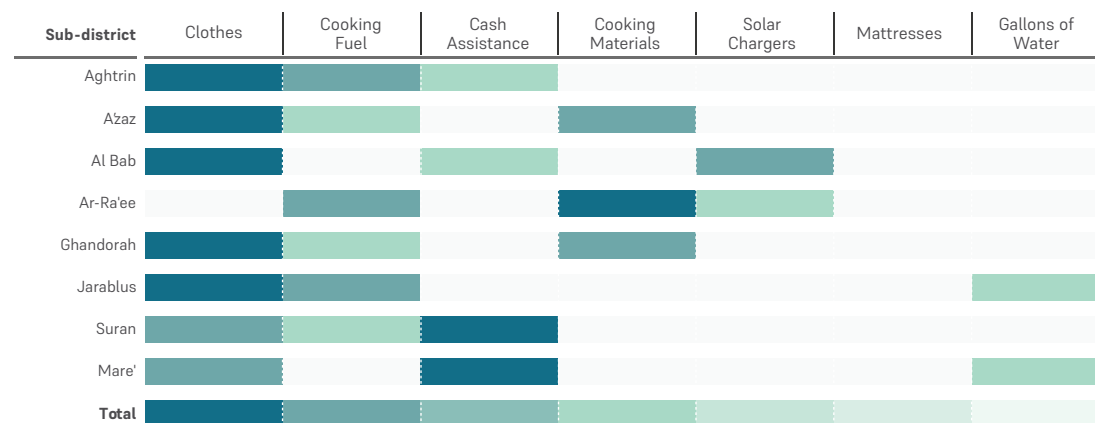
Heatmap 15: Shelter Sector Priorities



NFI Sector Priorities

- Clothing.
- Cash assistance.
- Cooking fuel and materials.

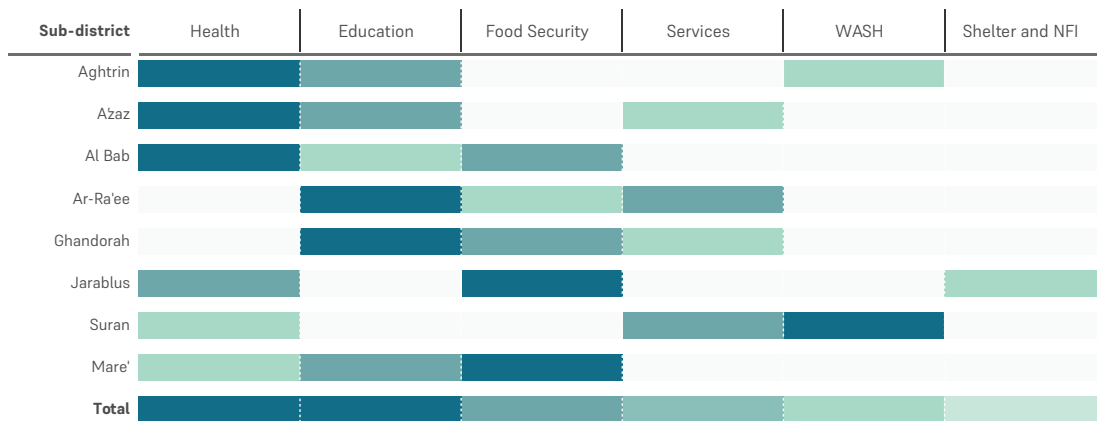
Heatmap 16: Non-food Sector Priorities



PRIORITIES SECTION

The assessment found that the two sectors in the most need of support in the ESHA were health and education. Where health was in the most need of support in the Aghtrin, A'zaz, and Al Bab sub-districts, education was in the most need of support in the Ar-Ra'ee and Ghandorah sub-districts. In the entire area, food security was found to be third, although the first priority in the Jarablus and Mare' sub-districts.

Heatmap 17: Need Priorities by sector



**EU-
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TES
SHIELD**



RECOMMENDATIONS:

Demography Section

- Qualifying specialized cadres concerned with the census and registration of the population and the IDPs and following up the displacement movements.
- Securing jobs for displaced people and supporting small projects and development assistance.
- Financial support for displaced persons living in rented premises because the rent of the house is a burden on them.
- Implementing housing projects in order to provide better shelter for the displaced.

Food Security Sector

- Supporting the agricultural sector by providing inputs of fertilizers and pesticides with promotional prices.
- Promoting agricultural mechanization and maintenance of agricultural mechanisms.
- Supporting the livestock sector by securing feed at incentive prices and opening agricultural extension centers that provide vaccines and medicines for livestock keepers.
- Supporting development projects and strategic crops and creating markets for agricultural products and facilitating export procedures.
- Securing sources of water for irrigation in the shadow of the scarcity of water resources.
- Systematic support for the neediest families including regular food baskets.
- Bakeries support to contribute to lower the price of bread and restarting Non-functional bakeries.

Health Sector

- Financial support including operational costs and equipment.
- Supplying hospitals with medical specialists in all disciplines.
- Providing vaccines and medicines and facilitating their entry into Syria from Turkey.

WASH Sector

- Securing water resource and water tanks maintenance.
- Monetary support for the water and sanitation sector and supporting operating expenses.
- Maintenance and repair of pumping lines and water networks.
- Maintenance of the sewage network.
- Garbage collection vehicles.

Education Sector

- Restoration of partially destroyed schools and rebuilding completely destroyed schools.
- Financial support for schools and the salaries of the teaching staff.
- Periodic assessment of the educational process, including students, teachers and administrative staff performance.

Shelter and NFI Sector

- Rehabilitation of accommodation and cash support.
- Supporting all non-food items including clothes, cooking fuel and cash assistance.

Infrastructure Sector

- Securing a source of electricity supply and repairing the public electricity network and providing electrical transformers.
- Maintenance of the public road network due to its important role in the revitalization of economic life.
- The establishment of civil defence centers and supporting them with equipment in the sub-districts where civil defence centers are not available.
- Maintenance of existing non-operating factories and supporting small enterprises and the establishment of new factories.



EU- PHRA- TES SHIELD CAMPS



EUPHRATES SHIELD CAMPS

Introduction:

There are two camp clusters in the ESHA, the A'zaz camps cluster and the Jarablus camps cluster. The former was established with the first wave of IDPs arrivals to liberated areas of the northern Aleppo countryside in 2012, as the area's exposure to shelling and air strikes has historically been much less than other areas of Syria due to its proximity to Turkey. With its relative safety, the flow of IDPs to camps in the A'zaz district has continued throughout the conflict, with IDPs arriving as recently as mid-2017 from the al-Waar neighborhood of Homs and ISIS-controlled areas of eastern Syria. The second camps cluster, in Jarablus, is relatively new, established in late 2016, after the Turkish-backed Euphrates Shield liberation of the area.

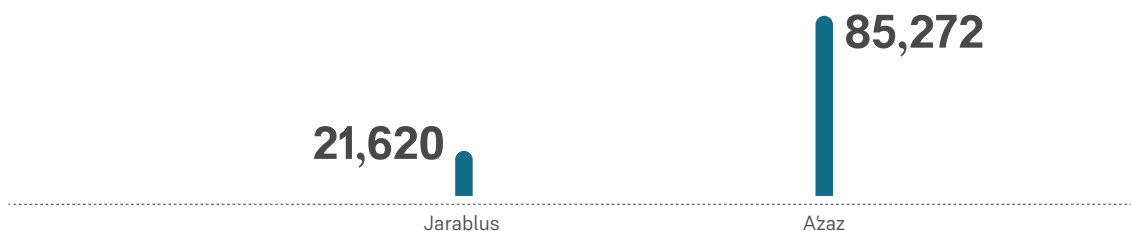
DEMOGRAPHY

Number of IDPs in Assessed Camps

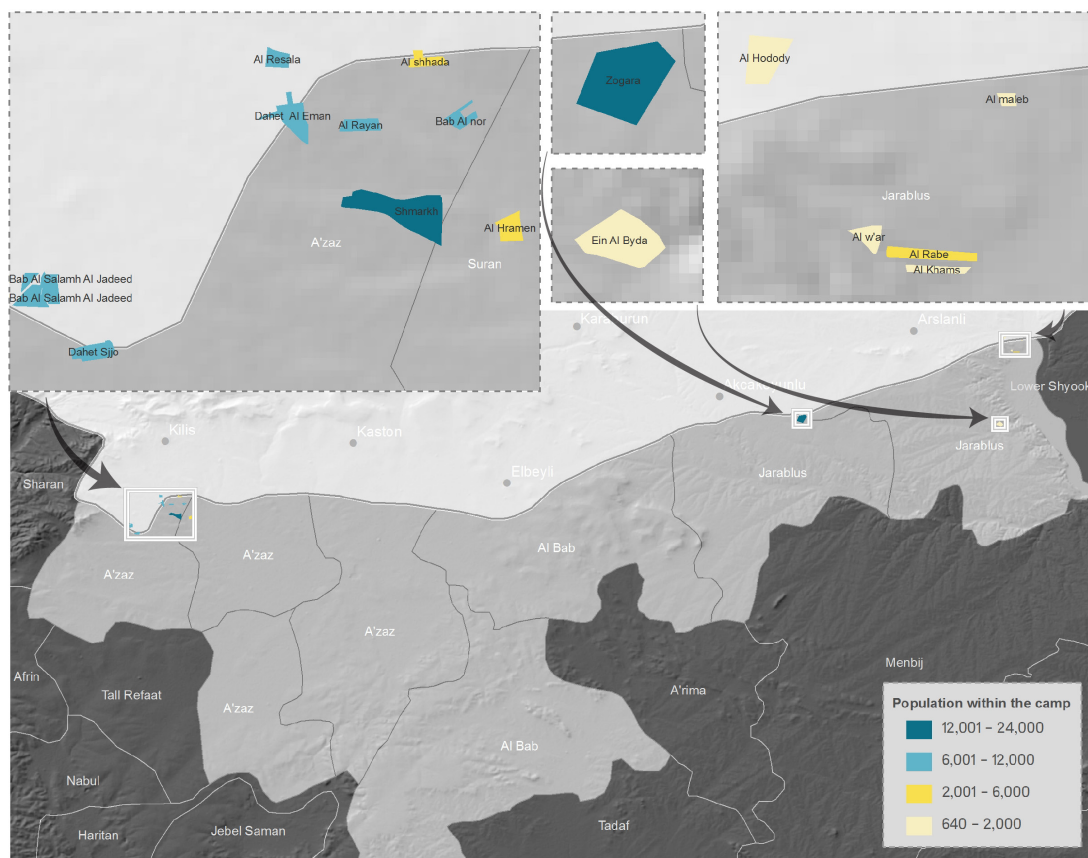
In the 17 camps within the A'zaz and Jarablus camps clusters there were a total of 106,892 IDPs. The ten camps located in the A'zaz sub-district are the Al Rayyan, Dahiat Sijjo, AlShohadaa (AlDahia AlQataria), Al Haramayn, Al Resala, Bab Al Salameh Al Hododi, Bab Al Salameh Al Jadeed, Bab Al Nour, Dahiat Aliman, and Shamarekh (AlMokawama) camps, while the seven located in the Jarablus sub-district are the Al Hododi, Al Khames, Al Rabee, Al Malab, AlWaar, Ein AlBaida, and Zogra camps.

Older, larger, and more established, the A'zaz camps cluster, was home to 85,272 IDPs, of which 41,998, or 49%, were male, and, 43,274, or 51%, were female. In the Jarablus camps cluster, there were 21,620 IDPs, where 10,667, or 49%, were male, and 10,953, or 51%, were female.

Figure 14: Number of IDPs in Assessed Camps



Map 09: Number of IDPs in Assessed Camps



Vulnerable Groups

There were 1024 families under the responsibility of women, 934 orphans, 58 unaccompanied elderlies, 219 persons with special needs, and 60 disabled in the two clusters. Particular attention has to be paid to these vulnerable groups.

Table 13: Vulnerable Categories

Cluster	A'zaz	Jarablus	Grand Total
Unaccompanied Elders	42	16	58
Households Headed by Females	825	199	1024
Disabled	50	10	60
Cases of Domestic Violence	0	4	4
Orphans	745	189	934
Persons with Special Needs	173	46	219

Data showed that 814 IDPs lived outside the camps of the Jarablus camps cluster, and were residing in tents or cars. Moreover, a large number of IDPs lived in informal camps within the A'zaz camps cluster, but accurate numbers were unavailable.

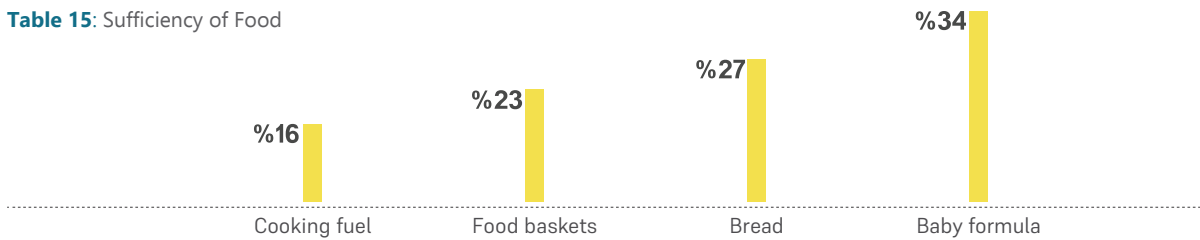
FOOD SECURITY SECTOR:

The food security sector is one of the main sectors in IDPs camps. This section includes an assessment of the food security sector in both camp clusters, examining the quantity, quality, price, and priorities of the sector.

The average daily share of bread per capita in both camp clusters was two loaves, where bread was distributed in bags to each family in proportion to the number of family members. Additionally, IDP families in both clusters were provided food baskets. In the Jarablus camps cluster, all families received food baskets, for a total of 3,991 food baskets distributed.¹¹ However, in the A'zaz camps cluster, 12,974 families each received a single food basket, leaving an estimated shortage of 2,297 baskets.

The following table shows the general assessment of the quantity, quality, and prices of most food items in the A'zaz and Jarablus camps clusters.

Table 15: Sufficiency of Food



Cluster	Consumables			Bread			Vegetables			Meat		
	Qty	Quality	Price	Qty	Quality	Price	Qty	Quality	Price	Qty	Quality	Price
A'zaz	Enough	Good	High	small amount	Medium	High	Medium	Medium	High	Enough	Good	High
Jarablus	Medium	Medium	High	Medium	Medium	High	Enough	Good	High	Enough	Good	High

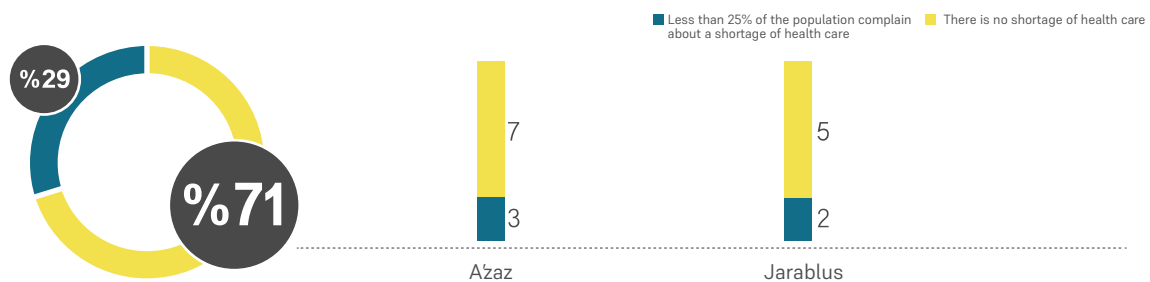
HEALTH SECTOR

As another leading sector in IDP camps, the health sector needs continuous attention and support from donor parties and relief organizations. This section includes an evaluation of health services, medical centers and staff, and health sector priorities.

Evaluation of Health Services

Overall, the data demonstrated a lack of health services in several camps across both clusters, with 29% of the assessed camps requiring increased health services. As such, there was a shortage in health services in three camps in the A'zaz camps cluster, and two in the Jarablus camps cluster. In all remaining camps, health services were not found to be lacking.

Figure 16: Sufficiency of Health Services:



11- All 12,737 IDPs in the Zogra camp of the Jarablus camps cluster also received cooked meals.

Medical Centers and Staff

Medical centers were available in eight camps in the A'zaz camps cluster, and in two in the Jarablus camps cluster.^{12 13}

Figure 17: Availability of Medical Centers

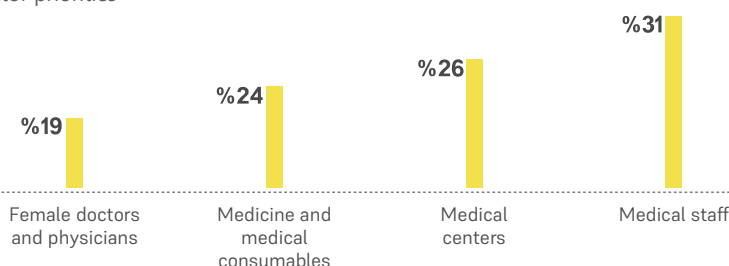


With a larger number of medical centers in the A'zaz camps cluster, the medical staffing situation was notably better than Jarablus. Nevertheless, even with 40 doctors present in the A'zaz camps cluster, there were no general or orthopaedic surgery doctors in the entire cluster. In the Jarablus camps cluster, a severe shortage was identified, with only four doctors present, two of which were paediatricians. Meanwhile, there were no dentists, gynaecologist, or internal medicine doctors in the entire cluster. The following table shows doctors in the camps according to their medical specialization, in addition to the proportion of female doctors.

Table 15: Number of Medical Staff

Cluster	A'zaz	Jarablus	Grand Total
Total number of physicians	40	4	44
Female percentage	27%	50%	31%
Internal physicians	10	0	10
Pediatricians	12	2	14
Dentists	4	0	4
Gynecologists	8	0	8
General Practitioners	6	2	8
General Surgery Physicians	0	0	0
Orthopedic Surgeons	0	0	0
Female nurses	16	1	17
Midwives	13	3	16
Male nurses	16	2	18

Figure 18: Health sector priorities



12- In the A'zaz camps cluster, there were no medical centers in the Bab Al Salameh Al Jadeed and Al Haramayn camps.

13- In the Jarablus camps cluster, there were no medical centers in the Al Hododi, AlKhames, AlRabee, AlMalab, and AlWaar camps

WASH SECTOR

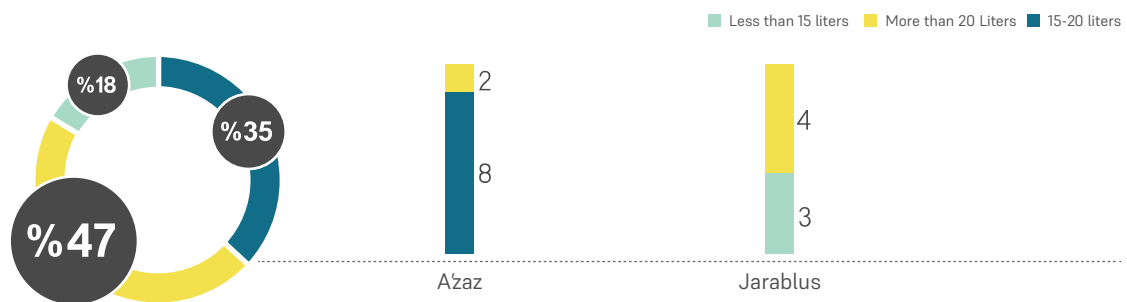
Due to the severe living conditions of IDPs, and the fact that potable water and proper sanitation is essential for maintaining a healthy life and preventing the spread of disease, the water, sanitation, and hygiene (WASH) sector, is crucial to maintain and improve. This section includes an evaluation of drinking water, sanitation, hygiene, and WASH sector priorities.

Average per Capita Share of Water

According to SPHERE standards, the minimum amount of daily per capita water consumption is 15 liters. However, according to these standards, water needs vary according to religion, customs and climate. Consequently, people in Arab countries often consume more than 15 liters per day.

Meeting these standards, daily per capita water consumption exceeded 20 liters in 8 camps in the A'zaz camps cluster, and was between 15 and 20 liters in six camps across the A'zaz and Jarablus clusters. In only three camps, Ein AlBaida, Zogra, and Al Hododi in the Jarablus cluster, per capita consumption was 15 liters or less. These variations were largely due to problems in the local water networks and uneven international and local support amongst camps. For instance, key informants stated the daily per capita share of water in the Bab Al Salameh camp in the A'zaz camps cluster was greater than that in camps in the Jarablus camps cluster because there were several organizations providing support to the WASH sector in A'zaz. However, there were restrictions on the activities of organizations in the newly established Jarablus camps cluster, which impeded development of the sector.

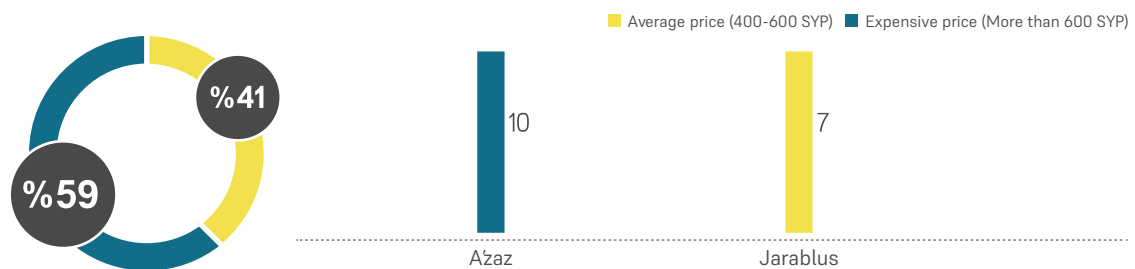
Figure 19: Daily Per Capita Water Consumption



The Price of The Cubic Meter of Water

In both camp clusters, IDPs had to buy water at their own expense. The price per cubic meter of water in all camps of the A'zaz camps cluster exceeded 600 SYP, or \$1.20, while the price per cubic meter in the Jarablus camps cluster ranged between 400 and 600 SYP, or \$0.80 and \$1.20.

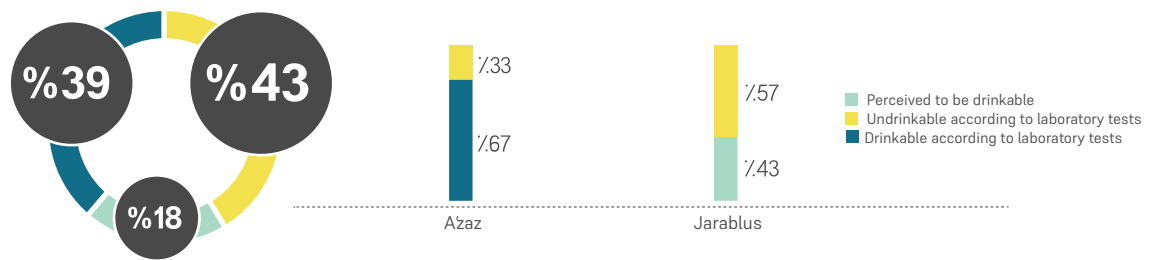
Figure 20: Price of Water Per Cubic Meter



Water Suitability for Drinking

It was confirmed by KIs that periodic analyses was only carried out for water in the A'zaz camps cluster. Laboratory results showed that water is drinkable in 67% of camps in the cluster, while perceived to be drinkable in 33% of the camps. Without any testing in the Jarablus camps cluster, water was perceived to be drinkable in just 57% of the camps. According to KIs, drinkable water was sterilized with chlorine, which eliminates any bacteria that may be present in the water.

Figure 21: Water Suitability for Drinking.



Water Delivery Methods

According to KIs, water tanks were the most commonly used method for water delivery in the assessed camps, with 60 % in A'zaz, and 71% in Jarablus. Meanwhile, 40% in A'zaz and 29% in Jarablus, local water networks were used.

Figure 22: Water Delivery Methods

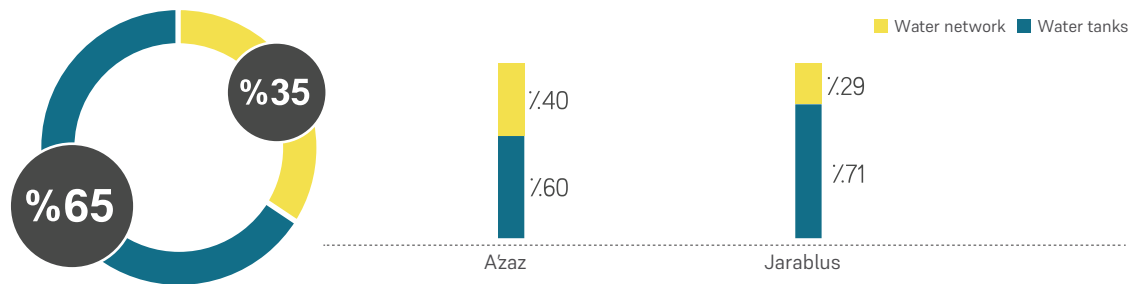
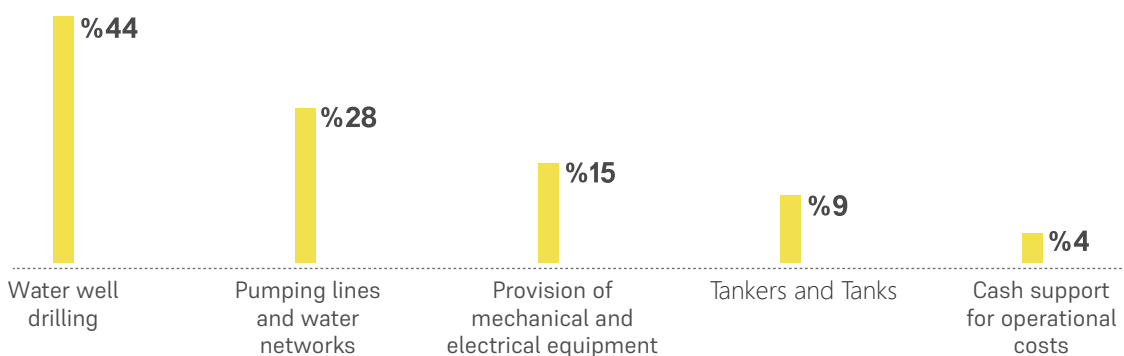


Figure 23: Water Sector Priorities



Water Points and Personal Hygiene

According to SPHERE standards, every 20 IDPs should have access to one suitable toilet. The following table shows that this standard was not reached in either the A'zaz or Jarablus camp clusters. Although all bathrooms and toilets were working, their number is insufficient when compared to the number of IDPs, as the following table demonstrates.

Table 16: Water Points and Personal Hygiene

Cluster	A'zaz	Jarablus	Grand Total
Functional Bathrooms	821	166	987
Functional Toilets	572	685	1257
Private Bathrooms	637	810	1447
Public Toilets	1506	271	1777
Number of IDPs Per Bathroom	130	104	108
Number of IDPs Per Toilet	80	57	60

Figure 24: Sanitation Sector Priorities

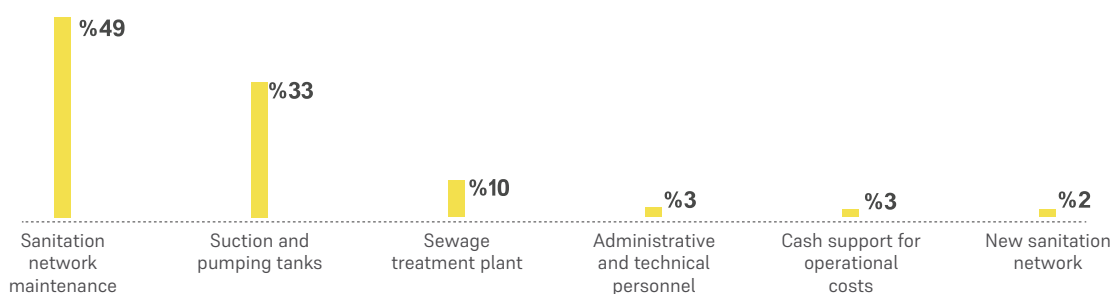
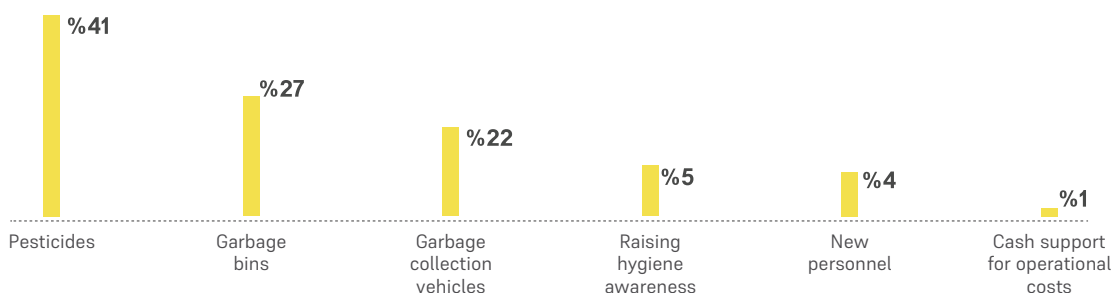


Figure 25: Hygiene Sector Priorities



EDUCATION SECTOR

Access to education is a fundamental right for all people, and is a very urgent need in both camp clusters. This section includes an evaluation of the number of schools, students and teachers, reasons for student dropouts, and the priorities of the education sector.

The Number of Schools, Students, and Teachers

Results of the study showed that education remains entirely stopped in the Jarablus camps cluster. With no schools present in the camps, schools in the Jarablus sub-district, were located very far from the camps and are thus hard for students to reach. According to one IMU enumerator, the nearest school was located 5 km away from the Al Hododi camp. Furthermore, according to the IMU's IDP Camps Monitoring Report V33, "The highest dropout rate was in Jarablus cluster with 100% due to the complete stop of the educational process there."¹⁴

In the Azaz camps cluster, the situation was better, with ten functional schools. Within these schools, there were 361 teachers, 47% of which were women. The number of students attending these schools was 9,038, the highest number of which were in the primary education stage, 8,054 students, followed by 488 in the pre-secondary education stage, and 46 in the secondary stage.

Table 17: The Number of Schools, Students, and Teachers

Cluster	Azaz	Jarablus	Grand Total
Functional schools	10	0	10
Non-functional Schools	0	0	0
Regular Male Teachers	78	0	78
Regular Female Teachers	56	0	56
Volunteer Male Teachers	113	0	113
Volunteer Female Teachers	114	0	114
Percentage of Female Teachers	47%	0	47%
Total Students	9038	0	9038
Primary Students	8504	0	8504
Pre-secondary Students	488	0	488
Secondary Students	46	0	46
Students Teacher Ratio	25	0	25

14- <https://www.acu-sy.org/en/idp-camps-monitoring-report-v33/>

Reasons for Student Dropouts

A lack of awareness of the importance of education and child labor topped the reasons for student dropouts in the Jarablus and A'zaz camp clusters. This was most often due to the difficult economic conditions, which forced families to send their children to work. Additionally, in the A'zaz camps cluster, early marriage was also a factor, whereas in the Jarablus camps cluster, the unavailability of schools and teachers was a significant reason.

Figure 26: Reasons of Student Dropouts

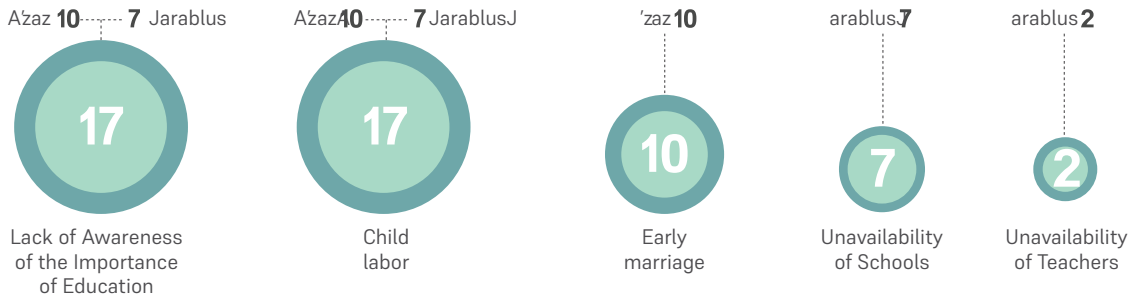
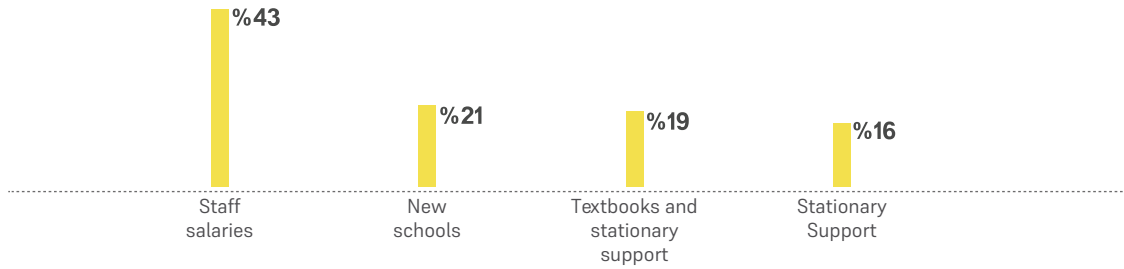


Figure 27: Education Sector Priorities



SHELTER AND NFI

Within the A'zaz and Jarablus camp clusters, living places included tents, caravans, and built rooms. While tents were the only available shelter in the Jarablus camps cluster, with 1,558, they were also the most prevalent form of shelter in the A'zaz cluster, with 9,731, for a total of 11,289 across both clusters. Additionally, in A'zaz, there were also 4,131 caravans, and 215 built rooms.

Several shelter improvements were identified, including the need for 3,296 heat insulators, 271 replacement tents, and 172 tents in need of repair.

Table 18: The Status of Shelter

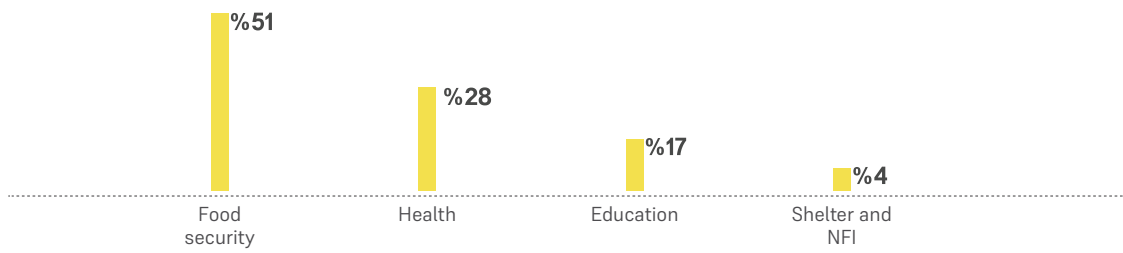
Cluster	A'zaz	Jarablus	Grand Total
Tents	9731	1558	11289
Tents in Need of Repair	157	15	172
Tents in Need Replacement	268	3	271
Built rooms	215	0	215
Caravans	4131	0	4131
Heat Insulators	300	3296	3596

Table 18: Shelter and NFI Sector Priorities

Cluster	Fuel	Clothing	Mattresses	Household Utensils	Mosquito Nets
Jarablus					
Azaz					
Total					

OVERALL PRIORITIES

Figure 28: Priorities by Sector



RECOMMENDATIONS:

Demography

- Paying particular attention to vulnerable groups within the two clusters as there were 1024 families under the responsibility of women, 934 orphans, 58 unaccompanied elderlies, 219 persons with special needs, and 60 disabled.

Food

- To provide infant formula in Jarablus camps.
- Bread distribution in Azaz camps because most of the camps' population are unemployed and are unable to buy bread, regardless of its price.
- To provide more food baskets.
- Provision of more cooking fuel.

Health

- Recruitment of doctors especially in Jarablus camps where there is a severe shortage of medical staff, and recruitment of female physicians.
- Opening health centers in the camps that do not contain health centers.

WASH

- Drilling of wells and the provision of pumping networks and water lines.
- Sewerage network maintenance and the provision of suction and pumping tanks.
- Provision of pesticides, garbage containers, and garbage collection mechanisms.

Education

- Establishment of new schools in Jarablus camps due to the lack of schools.
- Supporting the educational staff salaries.
- Stationary and textbooks support.

Shelter and NFI

- The provision of Mosquito nets and mattresses as they topped shelter sector priorities in these camps.
- To provide household utensils and clothes in Jarablus cluster.
- To deliver thermal insulators especially in Jarablus cluster.

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EUPHRATES SHILED
DYNAMO REPORT
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EUPHRATES SHIELD DYNAMO

وحدة تنسيق الدعم
ASSISTANCE COORDINATION UNIT



Incilipinar Mah.3 Nolu Cd.
Akinalan is Mrk. Kat 5
Sehitkamil/Gaziantep. Turkey

+90 (34) 2220 10 77
info@acu-sy.org
www.acu-sy.org