



Infrastructure Overview in Azaz

Insights from Power, Water, Shelter, School, Medical, Waste, Market and Communications Infrastructure

Azaz, Aleppo, Governorate, Syria

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Introduction

This report by ROIA presents an insight into the infrastructure needs in the Azaz region of Northern Syria and represents an output for a project conducted by a consortium of Syrian NGOs on behalf of the UNDP (see box below). This report will serve as the foundation for community discussions with expert stakeholders in Azaz and help ROIA identify viable, sustainable infrastructure pilot projects. In the interest of coordination and information sharing, ROIA has opted to share its finding publicly.

In Azaz, like so many other areas inside Syria, there is a lack of current, publicly available data for NGOs and agencies to use to inform their programming. Preliminary desk research revealed few sources of needs data collected within the last 12 months and that which did exist was almost exclusively purposive and not statistically representative.

Given the limited time and resources allocated to conduct primary data collection, ROIA also opted to employ qualitative and purposive methods, namely Key Informant Interviews (KIIs). These interviews were conducted over the month of August 2018 with community stakeholders in Azaz with the authority to talk about infrastructure matters.

UNDP Early Recover Cluster Project

In early 2018, the UNDP acting as lead for the Early Recovery Cluster in Gaziantep, Turkey received a small portion of funding earmarked for the UN Syria Humanitarian Response Plan (HRP). As cluster lead, the UNDP announced that it would employ these funds to implement a different kind of project, one whose primary objective would be to prioritize data collection and analysis in order to better inform the coordinated response of the Early Recover Cluster member NGOs. To this end, the UNDP launched a call for proposals, seeking a consortium of local NGOs to implement a broad range of pilot projects (each with a budget of US \$6,000.00) in Azaz corresponding to the cluster's target areas as outlined in the HRP. One of these target areas is the sustainable rehabilitation of basic social and economic infrastructure.

As the member of the local NGO consortium responsible for facilitating the pilot projects falling under this area, ROIA conducted the needs assessment presented in this report.

Executive Summary

Seven years of conflict have taken a heavy toll on the social and economic infrastructure of Azaz. In the city, there is practically no area of infrastructure that is not in need of urgent attention. Nonetheless, it is still possible to identify infrastructure priority needs for the residents of the region, namely water, power and medical infrastructure.

Water infrastructure has been significantly degraded in the region. Most of the main water networks have been damaged beyond use and supply is insufficient even for the areas that are reached. Most inhabitants rely on water drawn from sunk wells and trucked in but again the volume is insufficient to meet the needs of all who reside in Azaz. Of equal concern is the cleanliness of the water, with a general perception that the water is not safe for consumption.

In Azaz there is currently no centralized **power infrastructure**. As a consequence of the conflict, all of Azaz was cut-off from the main power network and has had to exist off-grid and nearly all power in the area is supplied by privately owned generators that are costly to run. In many respects, the lack of affordable and reliable power exacerbates other infrastructure problems in Azaz, leaving water treatment plants idle, and hospitals and schools in darkness. However, Azaz authorities have reached an agreement to contract the private Turkish firm, *Al-Bab*, to supply the region with electricity.

Both **schools and medical facilities** in Azaz have been damaged and, while some have been completely destroyed, most of the pre-conflict structures are still standing and generally functional. The biggest issue is the severe lack of supplies, equipment and trained staff. Moreover, the constant flow of IDPs into the region has placed additional strain on the limited capacity of these facilities.

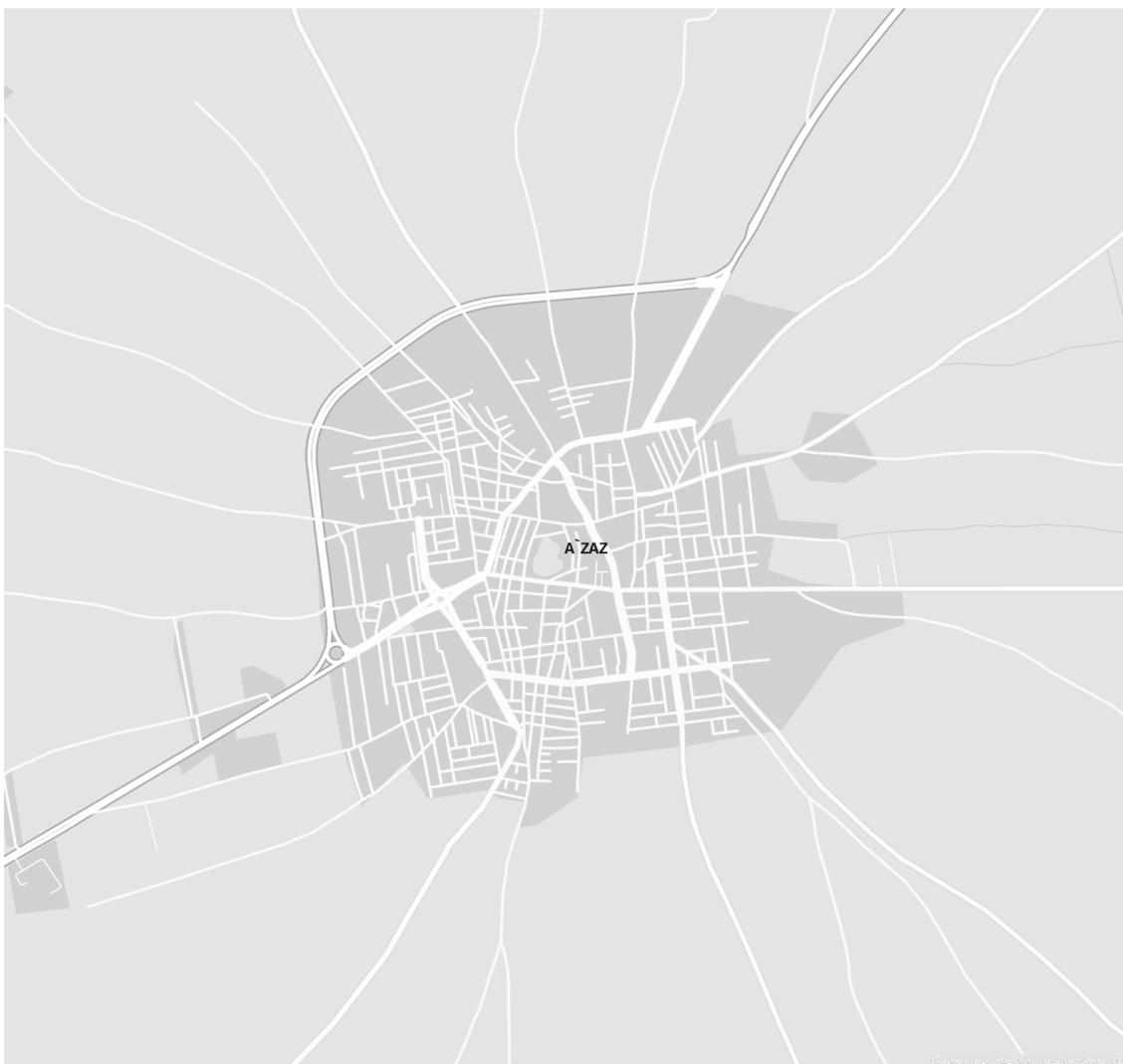
The **shelter situation** in Azaz has also been heavily affected by the large influx of IDPs. Much of the housing in the area has been damaged, with approximately 10% of homes unlivable. The steady increase of people moving into the area as they flee violence has meant that demand for housing has far outstripped supply. Monthly rent for homes and rooms in Azaz is now largely unaffordable for many residents.

Waste and sanitation, while still a problem, are not regarded to be too severe. The region has adequate toilet coverage and household waste can either be dumped in designated landfills or collected via free public service. While not ideal, these issues are not considered a priority.

Finally, **markets and communications** in Azaz have been remarkably resilient. While the road network has been damaged, the proximity to Turkey has meant that goods are still finding a way into Azaz and market activity is somewhat healthy. Likewise, the introduction of Turkish cellular networks and mobile data has more than covered the damage done to traditional communications services.

Methodology

This paper presents key findings regarding infrastructure needs among the population of Azaz, a region located in the Aleppo Governorate of northwest Syria. The findings are drawn from semi-structured interviews featuring a combination of closed and open-ended questions. In total, 10 authoritative community stakeholders were interviewed inside Azaz by ROIA enumerators in August 2018. These stakeholders were deliberately selected based on their knowledge on Azaz's social and economic infrastructure. Interviewees included teachers, doctors, civil engineers, academics and key members of the civil administration.



Priority Needs Overview

Respondents identified water infrastructure, power infrastructure, and medical infrastructure as the priority needs inside Azaz. When asked to identify the causes of these needs, key informants gave a range of clear answers.

1.1. Which 3 infrastructure needs are currently the most severe in your community? Please rank in order of severity (with 1st being the most severe).			
Need	Overall Rank	Score*	Number of Rankings
Water	1	15	6
Power	2	11	4
Medical	3	10	5
Shelter	4	8	3
Schools	5	6	5
Waste	6	4	2
Transport	7	3	3
Sanitation	8	3	2
Markets	= 9	0	0
Communications	= 9	0	0

Water Infrastructure

Residents of Azaz lack sufficient access to clean, safe drinking water. The region's main network has fallen into a state of severe disrepairs and serves only a restricted geographic area. Overall, the majority of Azaz's inhabitants must rely on alternative water sources of questionable quality and limited volume.

Prior to the conflict, the area nearby lake Maydanki was the primary source of potable water for the region. However, supply was cut off when the lake came under control of Kurdish forces. Since the Turkish occupation of northern Syria, water from lake Maydanki has once again started flowing to Azaz yet it is now widely considered undrinkable and a vector of disease. The reasons for the fall in quality is unclear, it is potentially the water treatment facilities in the area falling idle due to the state of disrepair of the main power grid.

^{1*} Score was assigned based on priority order with 1st equal to 3 points, 2nd being equal to 2 points, and 3rd being equal to 1 point.

The primary source of drinking water in the region is from sunken wells of Azaz’s residents, but these are insufficient in number and yield to adequately cover the needs of the population. Water trucking enhances the supply of water but once again, the volume at which this is imported does not meet the needs of the area. Moreover, as with the lake water, there are concerns as to the cleanliness of well and trucked water, with the latter being perceived as unsafe.

“Water is trucked in, but it is from unknown sources, it could be the cause of disease. It is not clear.”

Key Informant #4

Significantly, while access to water is limited, it is important to note that the water that is available is generally affordable.

6.2. How much does water cost?		
Source	SYP	USD
Water Trucking (per litre)	2.00	0.004
Wells (per litre)	1.00	0.002
Mains Network (per month of access)	3,000.00	5.80

Power Infrastructure

As with much of Syria, the electrical grid serving Azaz has been completely destroyed by 7 years of conflict. In Azaz there is no longer any central grid and all of the residential and commercial buildings of the region must rely on privately generated electricity. By a wide margin, the main source of electricity in Azaz is fuel-fun generator but for Azaz’s residents, the use of these generators is prohibitively costly and unreliable, severely hampering both public and private life. The cost of sufficient power for an average household is estimated at being between US\$36.90 and US\$49.20 per month. Moreover, many respondents explained how many of Azaz’s factories and workshops are forced to lie idle due to high running cost of electricity. It must be noted, however, that the Azaz authorities have reached an agreement to contract the private Turkish firm, *Al-Bab*, to supply the region with electricity soon.

Medical Infrastructure

Over the course of the conflict, the deliberate destruction of medical infrastructure has been widespread. Across Syria hospitals and clinics lie in ruins and those that are still standing are often damaged, chronically understaffed, and in dire need of equipment and supplies.

“There are few hospitals in the area, but there is also a lack of truly competent staff.”

Key Informant #8

Azaz is no different and there is high demand for the renovation of destroyed medical structures. Key Informants explain, however, that arguably more than the need for physical rehabilitation is the need for sustainable financing, staff training, and access to medical supplies. Currently, medical facilities are supported primary through funding from the Turkish Government and assorted NGOs active in the region, yet there is still a significant gap between the level of support needed and the level of support given.

Findings

Shelter Infrastructure

While many of the region's residential structures have suffered damage, an estimated 90% of original residential buildings are still inhabitable. Nonetheless, there are still insufficient shelters to adequately house the population, largely a result of the steady and significant IDP influx into the region. This scarcity of housing, coupled with a fall in household income, has the net effect of making shelter generally unaffordable. Estimates place the average household income at around US\$150.00 per month, yet a rent for a home ranges between US\$100.00 and US\$200.00. Single rooms are more affordable, but still range between US\$30.00 and US\$75.00.

Education Infrastructure

Similar to the housing situation, several educational facilities in Azaz have been damaged beyond use. However, by far the greatest issue is the strain placed on educational facilities by increased numbers of children, insufficient funding and materials, and insufficient numbers of trained staff. Overall, most primary and secondary aged schoolchildren of both sexes in Azaz attend classes regularly, yet the quality of the schooling they receive is of questionable quality. Many schools lack electricity, running water, telecommunications systems and trained teachers –all of which have a detrimental impact on education. This situation may be poised to improve as the Turkish government has taken over administration of Azaz's schools and has begun to take over their financing, since the Turkish occupation of northern Syria.

Waste and Sanitation

Azaz is served by public free waste collection –albeit of irregular frequency– and there are several designated landfill areas to be found. Overall, these services are considered less than adequate by many but are not considered a high priority for the community. Regarding toilets and sanitation, interviewees generally reported satisfactory coverage and access.

Markets and Communications

Markets and communications in Azaz were reported to be in fairly good condition. Most respondents explained that there were ample markets that could be accessed both affordably and safely for both women and men. While affordability was still an issue, most shops in Azaz stock a range of goods and provide services on par to pre-conflict situation. Meanwhile, the inconvenience caused by a degraded landline system has been compensated for by widespread access to cell phones and cellular Internet data.