Ministry of Foreign Affairs

NASEEJ
توفير الأمان المجتمعي للإنسان
نسيج

STICHTING VLUCHTELING 999

WASH Assessment for Syrian Refugee and Host Community Households in Akkar

Understanding the Needs of the Community

Ministry of Foreign Affairs

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EXECUTIVE SUMMARY

Lebanon is facing an ongoing and complex humanitarian crisis fueled by decades of political instability, one of the worst economic collapses globally in over 150 years (as classified by the World Bank) and the impacts of the COVID-19 pandemic. Poverty in Lebanon rose from 12% in 2012 to 44% in 2022; in the Akkar region it increased from 22% to 62%. Among Syrian refugees, poverty reached 87% [1]. These challenges have been further compounded by the recent displacement of people and new arrivals in Akkar. In response to the growing pressure on both Syrian refugees and Lebanese host communities, particularly in Akkar—one of Lebanon's poorest and most underserved regions—NASEEJ conducted a rapid needs assessment to better understand local priorities and to ensure community voices inform future humanitarian programming. The assessment involved a review of existing sectoral reports and data, as well as qualitative consultations through FGDs and KIIs. It focused on key areas including water access and service coverage, sanitation infrastructure, hygiene practices, health risks, coping strategies, and priority WASH-related needs. Based on Solidarites internationale report in 2021, in WASH: only about 8% of wastewater in Lebanon is treated [2].

This report summarizes the findings from those discussions and offers practical recommendations for targeted, community-informed interventions.

WATER

In the assessed towns, 70% from the host communities and Syrian refugees primarily depend on local wells and public water taps for drinking water followed by trucked water, bottled water, and spring water. Usage patterns vary by shelter type: Lebanese and refugee households living in houses or apartments tend to rely more on well water or water delivered directly to their homes, whereas those residing in informal settlements (IS), particularly in Mhmara and Tal Abbas, are more likely to purchase bottled water when needed.

While agencies-supported solar-powered systems have improved access in some areas, water supply remains intermittent and irregular due to unreliable electricity and infrastructure limitations. Most households travel short distances to fill their water containers from boreholes or wells, which often lack filtration and suffer from sediment buildup, leading many to prefer purchasing bottled or tanker water. Around 92% of refugee households do not treat water before consumption, raising health concerns.

Frequent electricity outages and inconsistent water distribution from public taps contribute to supply interruptions, increasing reliance on costly alternative sources. Lebanon has experienced a drastic decline in electricity supply with an average of 8-12 hours of power outages daily in rural areas like Akkar [3]. Key challenges include unreliable electricity for pumping, poor water quality, lack of filtration systems, and high costs associated with water procurement. The average monthly cost for households purchasing alternative water sources (bottled or tanker water) is approximately $20–$25 USD. Stakeholders emphasize urgent needs for solar power installation, regular water quality testing, filtration systems, and improved infrastructure to ensure consistent, safe, and affordable water access.

SANITATION AND HYGIENE

Sanitation infrastructure in the assessed towns across Akkar is severely limited and inconsistent, affecting both host communities and Syrian refugees. Based on UNHCR, approximately 25% of households in Akkar are connected to a

[1] HTTPS://APNEWS.COM/ARTICLE/LEBANON-POVERTY-WORLD-BANK-CRISIS-IMF-8BF2C6932D4A09D530EBED6C0FB255EB

[2] https://www.pseau.org/outils/ouvrages/solidarites_international_barometre_2021_de_l_eau_l_hygiene_et_l_assainissement_2021.pdf?

[3] HTTPS://WWW.SOLIDARITES.ORG/EN/LIVE-FROM-THE-FIELD/LEBANON-INNOVATIVE-WASH-SOLUTIONS-FOR-SYRIAN-REFUGEES/?

public sewage network, significantly below the national average of 60% [4]. Most municipalities, including Bebnine and Fnaydek, lack functioning sewage networks and wastewater treatment facilities. For instance, Bebnine has no official sewage network, and while Tekrit has a partially constructed public sewage system, only about 60% of households have access, and no wastewater treatment plant exists. Waste from the town is disposed of in a communal area called "Gebrael" in Akkar, rather than being treated locally. Many residents rely on informal sanitation methods such as soak pits and pit latrines, which are often poorly maintained, prone to leakage, and create odors—issues that worsen during seasonal changes.

Shared sanitation facilities are common among refugees, especially those living in overcrowded informal settlements (IS), where multiple families often share a single toilet. This leads to serious privacy and safety concerns, particularly for women and girls managing menstrual hygiene. Many female respondents reported challenges accessing menstrual products and proper disposal options, exacerbated by economic hardships and reduced humanitarian aid. Approximately 13% of refugees wash hands with water only, reflecting limited access to hygiene supplies like soap, which is unaffordable for many.

Wastewater disposal often occurs via open drainage channels, particularly in Fnaydek, raising environmental and health risks during floods. Across the region, the lack of organized waste management and wastewater treatment increases community health vulnerabilities.

Despite the presence of some infrastructure, maintenance remains costly and inadequate, with frequent blockages in drainage systems requiring expensive interventions. Humanitarian actors provide hygiene kits and dignity supplies, but shortages and inconsistent cash assistance hinder adequate hygiene practices. Overall, about 72% of households report access to improved sanitation facilities, but large gaps remain, especially in ISs where sanitation services have deteriorated.

Key challenges include insufficient sewage infrastructure, lack of wastewater treatment, overcrowded and shared sanitation facilities, limited access to hygiene products, and compromised privacy and safety for women and girls. Urgent attention is needed to improve sanitation infrastructure, support menstrual hygiene management, enhance waste disposal systems, and ensure reliable access to hygiene supplies to protect health and dignity in these vulnerable communities.

HEALTH AND PROTECTION

No recent major health outbreaks have been reported in the assessed towns; however, WASH-related health concerns persist. Around 12% of refugee households reported skin diseases like scabies in the past two months, with rates reaching 24% in informal settlements and substandard shelters—higher than the 13% reported in apartments and houses. Lebanese households reported no recent water- or sanitation-related illnesses, likely due to better water quality monitoring and municipal oversight.

About 30% of respondents recalled a cholera outbreak affecting their town, consistent with the 2022 national outbreak reported by WHO—the first in nearly 30 years. Although no recent waterborne disease cases have been officially recorded, poor infrastructure, lack of water treatment, and shared sanitation facilities, especially in refugee settings, continue to pose significant health risks. Protection concerns are notable for women and girls, particularly refugees in informal settlements who face safety and privacy challenges when using shared or distant toilets at night. Shared sanitation facilities and the need to fetch water from distant or communal sources can pose safety risks, particularly at night or in overcrowded conditions with limited privacy. In Berkayel, over 60% of parents reported their children avoid school toilets due to hygiene concerns, emphasizing the need for improved maintenance.

In towns like Tal Abass Gharbi and Fnaydek, while no recent major outbreaks occurred, inadequate sanitation infrastructure and water safety fears remain. The 2014 Akkar assessment highlighted high prevalence of vectors such as mosquitoes (98%), flies (95%), and rats (92%) in informal settlements, exacerbating health and protection risks [5].

[4] https://www.unhcr.org/lb/news/unhcr-funded-solar-panels-ensure-uninterrupted-access-clean-water-25-000-residents-akkar?

[5] https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON416?

Overall, urgent improvements in WASH infrastructure, water treatment, hygiene promotion, and safe, gender-sensitive sanitation facilities are critical to mitigate health risks and protect vulnerable groups in these communities.

COPING AND PRIORITIES

When water or sanitation services fail, both host and refugee households across the assessed towns adopt various coping mechanisms that often come at a financial and health cost. Many Syrian refugee families reduce or suspend hygiene-related activities such as bathing or cleaning when water is unavailable, while about 20–30% purchase water from tanker trucks or small containers to meet their essential drinking and cooking needs. In some cases, around 10% of households seek access to water or sanitation facilities from neighboring homes or nearby informal settlements.

Reliance on purchased water is widespread—particularly in Berkayel and Tal Abbas Gharbi—but this coping mechanism is unsustainable due to the rising cost of tanker deliveries, especially during summer months. Households in these towns reported spending a growing share of their limited income on water, forcing them to cut back on consumption. Similarly, in Tekrit, approximately 10% of respondents said they require at least three 10-liter gallons of drinking water per week, highlighting the strain caused by inconsistent water supply. Across all six towns, residents consistently identified the lack of a functional wastewater and sewage network as the most urgent WASH priority. In Akkar, only 62% of households are connected to a public sewage network, leaving 38% reliant on septic tanks (≈ 30%) or open drainage systems (≈ 8%) [6]. This absence of proper sanitation infrastructure leads to environmental contamination and health hazards, with untreated wastewater frequently flowing into open drains or agricultural lands. Community members also stressed the need to install solar-powered water pumping systems to ensure reliable access during electricity cuts, improve school hygiene facilities—as many children avoid using unclean toilets—and expand access to safe, private sanitation options for women and girls, particularly in collective shelters and informal settlements.

Overall, the top priorities identified were:

- Establishing or rehabilitating wastewater and sewage systems;
- Expanding solar-powered water supply systems;
- Ensuring affordable and consistent access to clean water; and
- Improving hygiene and privacy conditions in schools and refugee shelters.

These interventions are seen as critical to restoring dignity, reducing health risks, and improving overall resilience among both host and refugee communities in Akkar.

WASTE MANAGEMENT

Solid waste management across the assessed towns in Akkar remains basic, under-resourced, and largely unsustainable. Most municipalities rely on private contractors to collect waste and transport it to the Srar landfill, with collection frequency ranging from daily to twice per week. However, insufficient bin coverage and low community compliance with fee payments continue to undermine service delivery. Across the towns, 70–88% of respondents reported that the number of public waste bins is inadequate, leading to overflow, foul odors, and infestations of flies, dogs, and rodents near residential areas. In Tekrit and Fnaydek, bins are often distant from homes, while in Bebnine and Mahamra, some have been stolen or damaged, further straining capacity. Limited municipal budgets exacerbate the issue: households are expected to pay 300,000–400,000 LBP per month, yet only around 40% do so, forcing municipalities to cover the gap. Operational costs are also high. For instance, Tekrit spends roughly $2,600 per month on waste collection, and the private contractor charges around $15 per ton of waste collected. Municipalities that own compactor trucks (such as Berkayel) struggle with maintenance and fuel expenses, while others (like Bebnine and Fnaydek) rely on out-of-service or rented trucks, increasing costs and reducing collection efficiency. Improper disposal practices were observed across all sites, including pouring kitchen oil and food waste into drains. In Mahamra, more than 60% of residents in informal settlements reported limited access to waste bins, with 40% admitting to burning waste, creating toxic fumes and contamination risks.

[6] https://thepublicsource.org

According to the COOPI 2024 "Sustainable Waste Management in Akkar" initiative, the region's municipal solid waste (MSW) generation averages 0.85 kg per person per day in rural areas, increasing to 1.0–1.2 kg in urban towns—figures consistent with national waste generation rates (MoE, 2023) [7]. Community and municipal stakeholders consistently identified several priorities needs to improve waste management:

- Repairing or replacing compactor trucks to reduce reliance on private contractors.
- Increasing the number and size of waste bins, especially near informal settlements.
- Launching awareness campaigns on waste segregation, recycling, and fee compliance.
- Introducing small-scale recycling or composting initiatives to reduce landfill dependence.
- Strengthening enforcement of proper medical waste disposal to protect public health.

Without addressing these gaps, unmanaged solid waste will continue to pose health, sanitation, and environmental risks, particularly in densely populated or flood-prone areas where waste can contaminate surface water sources.

[7] https://www.coopi.org/en/lebanon-sustainable-waste-management-in-akkar.html

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ABBREVIATIONS

FGD	**Focus Group Discussion**
KII	Key Informant Interview.
UNHCR	United Nations High Commissioner for Refugees.
COOPI	Cooperazione Internazionale
IDPs	Internally Displaced Persons.
Its/ISs	Informal settlements
WASH	Water, Sanitation, and Hygiene.
WHO	World Health Organization.
NLWE	North Lebanon Water Establishment
NGO	Non-Governmental Organization.
KAP	Knowledge, Attitudes, and Practices.
DRM	Disaster Risk Management
UNICEF	United Nations International Children's Fund.
PWDs	Persons with Disabilities.
EUR	Euro
LBP	Lebanese Pound
USD	United States Dollar
GoL	Government of Lebanon.
VASYR	Vulnerability Assessment of Syrian Refugees.

INTRODUCTION AND CONTEXT

Lebanon is facing a humanitarian crisis resulting from different complex factors, including decades of political instability, the country's economic collapse, the aftermath of the COVID-19 pandemic, and the catastrophic Beirut Port explosion in August 2020.

The World Bank has classified Lebanon's economic collapse as one of the most severe globally in over 150 years, with the Lebanese pound losing more than 90% of its value against the US dollar since 2019, plunging over 80% of the population into poverty (World Bank, 2021; UNICEF) [8].

This economic freefall has been compounded by hyperinflation, which surpassed 150% in 2023, making it increasingly difficult for Lebanese households to afford basic needs, including food, healthcare, and housing (WFP,2022) [9].

In addition, essential services such as electricity, water, and sanitation have become hardly accessible further exacerbating public hardship. The 2023 conflict between Hezbollah and Israel has further deepened the vulnerabilities, creating a volatile environment leading to intensified humanitarian needs, social tensions, and economic despair.

Akkar is one of the poorest and least developed areas in Lebanon. According to UNHCR, as of 31 December 2023, there are 220,931 registered Syrian refugees in Northern Lebanon, of which 99,533 reside in the Akkar Governorate [10]. The "Escalating Needs in Lebanon" infographic (2023) reports that in Akkar, there are 156,645 displaced Syrians considered among the people in need [11].

Figure 1: Governorates of Lebanon.

Since early March 2025, tens of thousands of people displaced from Syrian coastal governorates (Tartous, Latakia, Homs, Hama) have crossed into Akkar and North Lebanon. The latest UNHCR flash updates report: ~ 35,846 new arrivals from Syria (6,216 Syrian families + 365 Lebanese families) across 30 locations in North & Akkar, by 2-May-2025. As of 16 April, in Akkar alone: 23,627 individuals (4,870 families) among the new arrivals. Major concentrations are in border-villages near Syria (Massaaoudiye, Hissa, Tall Bire, Tall Hmayra and Tal abass).

8 https://www.worldbank.org/en/country/lebanon/overview

9 https://www.wfp.org/publications/wfp-lebanon-2022-review

10 https://www.unhcr.org/lb/about-unhcr/where-we-work/unhcr-tripoli-field-office

11 https://lebanon.un.org/sites/default/files/2023-06/ENG%20Infographic_Escalating%20Needs%20%281%29.pdf?

In many of the arrival locations: limited latrines, washing facilities are insufficient or absent. Water provision is often via water trucking or informal sources; municipal water supply is not always available in new arrival sites. Waste management / solid waste disposal is often not functioning properly in many collective or temporary shelters. There are gaps in solid waste collection, and sometimes burning of waste is used as a coping mechanism [12].

According to the Voices of Vulnerability 2024 assessment, only 39% of respondents in the regions including Akkar report having sufficient access to drinking water. In Akkar specifically, 43% reported sufficient drinking water access; the rest report it as only somewhat sufficient or insufficient. For water for domestic (household) use, in Akkar 48% say their access is sufficient; 48% say somewhat sufficient; about 4% say access is insufficient. Both Lebanese and Syrian respondents in Akkar report issues with water, sanitation and hygiene; Lebanese communities generally have better access, but still face difficulties especially in rural or border villages.
Many host community households do not have continuous access to safe water, or have to rely on expensive/unreliable water trucking in dry seasons. Hygiene supplies/services may be less available either due to cost or distance [13].
Looking back to the REACH/UNHCR WASH assessment from 2014-15 for Syrian refugee households in Akkar: Over 110,000 Syrian refugees were registered with UNHCR in Akkar at that time. Many households in informal settlements or substandard buildings relied on non-piped or unreliable water sources (protected/unprotected springs, wells, water trucking). For example, trucked water was reported by ~17% of households overall (with higher proportions in substandard shelter types). Treatment of drinking water at household level was rare: approximately 93% of refugee households reported not treating their water before consumption [14].
In response to the evolving situation, Nassej conducted a needs assessment in Akkar, focusing on six villages: Tekrit, Berkayel, Mhammara, Tal Abbas Gharbi, Fnaydek, and Bebnine. The purpose of the assessment was to identify the most pressing needs of the affected communities and to provide evidence-based insights that will inform future programming. The aim is to ensure that humanitarian responses are responsive, inclusive, and equitable, addressing the most urgent priorities on the ground.
By actively incorporating the voices of diverse community members, the assessment promotes accountability and ensures that the perspectives of those directly impacted are reflected in the analysis. This approach will support the design of interventions that are better aligned with the specific needs of Akkar's most vulnerable populations.

Figure 2: Map of the six targeted villages.

[12] https://webarchive.archive.unhcr.org/+/https://reporting.unhcr.org/sites/default/files/2025-05/Flash%20Update%20New%20Arrivals%202%20May%202025.pdf
[13] https://mercycorps.org.lb/wp-content/uploads/2025/04/Needs-assessment-voices-of-vulnerability-A-needs-Assessment-in-Lebanons-Akkar-Bekaa-and-Southern-regions.pdf?
[14] https://www.pseau.org/outils/ouvrages/reach_informing_more_effective_humanitarian_action_reliefweb_unicef_wash_assessment_of_syrian_refugee_households_in_akkar_governorate_2014.pdf

METHODOLOGY

The methodology for this WASH needs assessment was designed to provide a comprehensive, evidence-based understanding of the water, sanitation, and hygiene (WASH) conditions among Syrian refugees and host communities residing in selected villages within Akkar Governorate, North Lebanon. The assessment aimed to capture both quantitative and qualitative insights into existing service gaps, risks, and priorities related to WASH, as well as community-level knowledge, attitudes, and practices (KAP). A mixed-methods approach was adopted, integrating secondary data review with primary data collection through qualitative consultations. This approach ensured triangulation of findings and a deeper contextual understanding of WASH needs in the target areas.

As part of the primary data collection, a total of 24 FGDs were conducted across the six targeted villages in Akkar Governorate. In each village, four FGDs were held with distinct demographic groups: host community women, host community men, Syrian refugee women, and Syrian refugee men. This approach ensured the inclusion of gender- and nationality-specific perspectives on WASH challenges and needs. In parallel, 189 individuals were reached through household-level qualitative consultations, with the sample nearly equally divided between Syrian refugees (96) and Lebanese host community members (93). The overall sample included 90 females and 99 males, as well as 21 elderly individuals (11.1%) and 8 PWDs (4.2%).

The geographic distribution of respondents across Tekrit, Mhammara, Berkayel, Tal Abbas, Fnaydek, and Bebnine was intentionally designed to reflect local population dynamics and ensure broad, balanced representation.

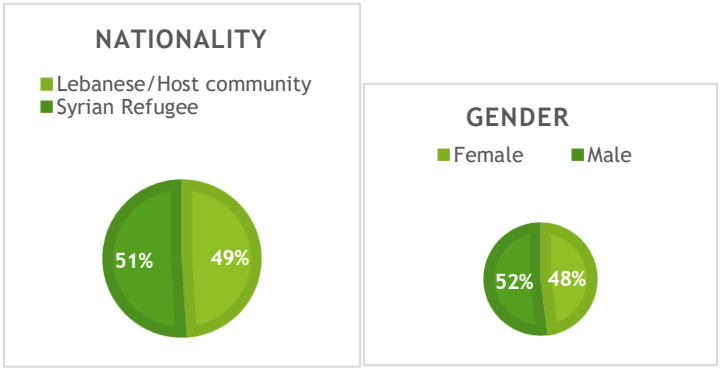

Figure 3: Disaggregation of the overall respondents.

Respondent distribution across the villages was as follows: Bebnine [15] (20%), Tekrit [16] (17%), Berkayel [17] (16%), Tal Abbas Al Gharbi [18] (16%), Fnaydek [19](16%), and Mhammara [20] (15%). This geographic spread was designed to ensure diverse representation and to capture a broad range of WASH needs and service delivery conditions across the governorate.

[15] Bebnine is a coastal town located in the Akkar governorate of northern Lebanon, situated approximately 7 km south of Halba making it one of the region's most densely populated and economically active areas.
[16] Tekrit is a rural town in the Akkar governorate of northern Lebanon, located approximately 10 km southeast of Halba, surrounded by agricultural lands and olive groves and hosts both Lebanese residents and a significant number of Syrian refugee households.
[17] Berkayel is a densely populated town in the Akkar governorate of northern Lebanon, located about 6 km south of Halba, along the main road connecting Tripoli to Akkar's inland villages. The town serves as an economic and social hub for nearby communities, hosting a mix of Lebanese residents and Syrian refugees, and is known for its agricultural activity and small trade businesses.
[18] Tal Abbas Gharbi is a rural village in the Akkar governorate of northern Lebanon, situated near the Syrian border and neighboring the village of Tal Abbas Sharqi. It hosts a mixed population of Lebanese residents and a large number of Syrian refugees, many of whom live in informal tented settlements (ITSs).
[19] Fnaydek is a mountainous town located in the northern part of Akkar Governorate, Lebanon, about 1,200 meters above sea level. The town has a mixed Lebanese and Syrian population, with several refugee households residing in and around its outskirts.
[20] Mhamra is a small town in the Akkar Governorate of northern Lebanon, located near the border with Syria. It hosts a significant population of both Lebanese residents and Syrian refugees, with many refugees living in informal settlements around the town.

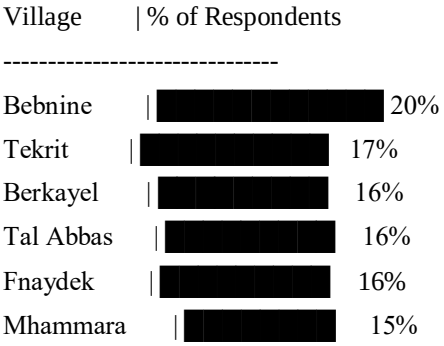

Figure 4: Respondents percentage per village.

The needs assessment was conducted in collaboration with municipal officials who facilitated the gathering of participants by coordinating meetings at municipal premises such as the town hall. This partnership allowed for better capturing of social cohesion dynamics through the use of vulnerability lists provided by the municipalities. The sampling approach employed a simple random selection method, focusing specifically on households with identified vulnerabilities, including women-headed households, families with infants, members with disabilities, elderly members, and displaced or newly arrived refugee families.

Data collection took place over a period of 20 days at the beginning of October 2025. Focus Group Discussions (FGDs) were facilitated by an external consultant with extensive experience conducting humanitarian needs assessments in Akkar since 2020. The majority of the data analyzed and presented in this report is drawn from responses provided by refugee and host community households. The FGDs covered detailed topics including water, sanitation, and hygiene (WASH), health and

protection, coping mechanisms and priorities, as well as waste management (see the FGD questions and template in Annex 1).

In addition, five Key Informant Interviews (KIIs) were conducted in each village with a diverse group of local stakeholders, including municipal leaders, representatives from the North Lebanon Water Establishment (NLWE), healthcare providers, teachers, and NGO WASH focal points. These interviews covered topics such as service delivery, infrastructure status, challenges, coordination, population needs, and demographic insights. A snowball sampling approach was used to map and engage relevant stakeholders across the six villages (see the KII template in Annex 2).

Interviewees included the mayors of the six villages, leaders from Fnaydek and Tekrit, NGO representatives from Women Charity in Bebnine, municipality members from NLWE, teachers in Berkayel and Mhammara, doctors in Tekrit and Fnaydek, and two social activists from Tal Abbas and Mhammara, providing a broad perspective on community needs and leadership voices.

Bebnine	Tekrit	Berkayel	Tal Abass Gharbi	Fnaydek	Mhamra
Municipality Mayor, Women Charity representative, 2 of the municipality board members, 1 from the NLWE	Municipality Mayor, Women Leader, 1 Doctor, 2 of the municipality board members	Municipality Mayor, 1 teacher, PWD member, 2 of the municipality board members, 1 from the NLWE	Municipality Mayor, two social activists, 2 of the municipality board members, 1 from the NLWE	Municipality Mayor, local NGO leader, 2 of the municipality board members, 1 from the NLWE	Municipality Mayor, two social activists, 2 of the municipality board members, 1 from the NLWE

Data collection was conducted face-to-face across six villages, with all interactions carried out in Arabic. Facilitators clearly explained the purpose of the assessment to participants, ensuring informed consent. Respondents were assured that their participation was voluntary and that all information shared during discussions would remain confidential and anonymous. Data emerging from the Key Informant Interviews (KIIs) were transcribed and subjected to thematic analysis to identify key patterns and insights.In addition to FGDs and KIIs, direct observation checklists were used during the assessment to capture on-the-ground conditions related to WASH infrastructure. These checklists were used to assess the condition of water sources. Observations also covered the availability of functional handwashing stations with soap and water, evidence of solid waste management practices and the overall accessibility of facilities for persons with disabilities and the elderly. Safety concerns, including the distance to facilities, adequacy of lighting, and the presence of gender-segregated spaces, were also documented to complement findings from community consultations and interviews. (see the checklist in Annex 3)

CHALLENGES AND LIMITATIONS

The assessment faced several limitations during the data collection phase. Nonetheless, these limitations did not significantly affect the overall quality or reliability of the findings:

Demographic Shifts Post-December 2024

Since December 2024, significant demographic changes have been observed, particularly among Syrian refugee populations. According to UNHCR, approximately 577,266 Syrian refugees have returned to Syria through neighboring countries as of June 2025 (UNHCR Operational Update, May–June 2025) [21]. This large-scale return has led to some inconsistencies in population figures and community perspectives, particularly within the Informal Settlements (ISs), where many Syrians had been residing.

At the same time, new arrivals have been recorded in Akkar, adding further complexity to the local demographic landscape. However, accurate and up-to-date figures remain limited. According to the latest data from the Disaster Risk Management (DRM) unit, Akkar currently hosts approximately 14,949 new arrivals, primarily settled across 30 villages, with a significant concentration in Tal Abbas, which was a key location in this assessment (see Annex 4 – DRM Report).

These dynamic population shifts have implications for the representativeness and accuracy of the data collected, particularly regarding the evolving needs and profiles of both longstanding and newly arrived populations.

Non-availability of Respondents

[21] ihttps://www.unhcr.org/sites/default/files/2025-06/Lebanon-operational-update-may-june-2025.pdf

In some cases, targeted respondents declined to participate in the assessment, often without providing specific reasons. This limited the reach of certain focus group discussions targets.

Partial Data Coverage

In a few locations, data collection was hindered by non-response or gaps in access. Additionally, the use of three separate datasets, as outlined in the methodology section, led to smaller sample sizes in certain areas. However, findings from these limited samples were cross-validated using available secondary sources to ensure a degree of reliability.

FINDINGS

This section presents the main findings from Nassej's household-level WASH assessment conducted in six villages across Akkar Governorate. Each village is analyzed individually, highlighting key issues related to water, sanitation, hygiene, and protection. The section begins with an overview of the demographic composition of both refugee and host community households per village. It then covers four main themes: water supply, including access, quality, quantity, storage, and treatment; sanitation and hygiene practices; protection and health concerns, with an emphasis on the link between them; and finally, coping strategies and household priorities. Waste management is also briefly discussed at the end of this section. Throughout, key informant interviews (KIIs) are used to incorporate stakeholder perspectives and to reflect local efforts and campaigns already underway in these areas.

The whole sample in the six villages included households with the following vulnerabilities, as illustrated in the figure 5 below

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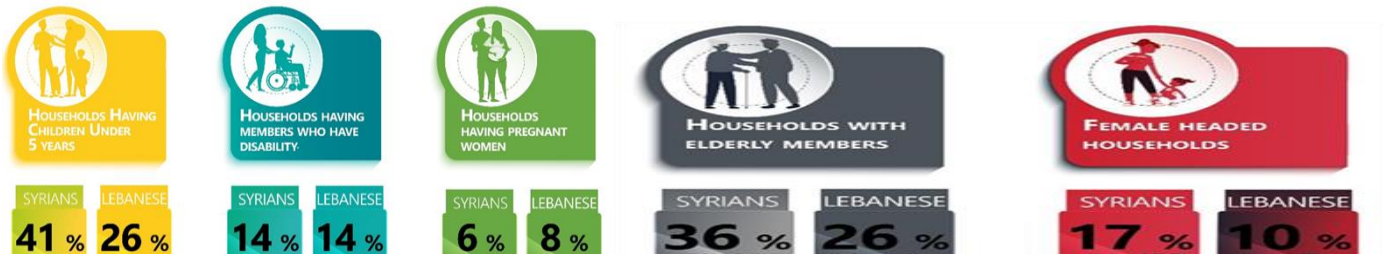


Figure 5: Household vulnerabilities.

BEBNINE

DEMOGRAPHICS

In Bebnine, respondents accounted for 20% of the total assessment sample—the highest proportion among all assessed areas—with a total of 38 participants. The majority were Lebanese, followed by Syrian respondents. Figure 6 provides a breakdown of participants by nationality, gender, and key vulnerabilities.

Lebanese | (22)

Syrian | (16)

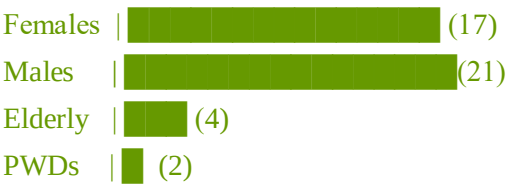


Figure 6: Breakdown of respondents in Bebnine by nationality, gender, and vulnerability.

WATER ACCESS AND QUALITY

As of 31 December 2023, the UNHCR Tripoli Field Office reported 99,533 registered Syrian refugees in the Akkar governorate [22]. In Bebnine specifically, previous estimates from 2013 indicated the presence of approximately 6,000 Syrian refugees, though this number is outdated and likely has changed over time. Refugees in Bebnine are known to live in various shelter types, including rented apartments or rooms within the host community, makeshift shelters in non-residential structures such as garages and storerooms, and in some cases, informal tented settlements, particularly among early arrivals [23].

Figure 7: Sources of drinking water in Bebnine.

While detailed data on Lebanese households in Bebnine is limited, existing reports suggest that host and refugee populations share the same housing market, leading to increased rental pressure and competition for affordable shelter in the area [24]. In the assessed town, both host community members and Syrian refugees primarily rely on a local water well and public water taps as their main source of drinking water. While this water is considered safe and of good quality—with support from UNICEF, which contributed to the installation of a solar-powered system to enhance water access—the supply is not consistent. Water is only available intermittently and is distributed by the government on an irregular schedule. Approximately 78% of respondents reported needing to drive around five minutes by car to reach the borehole area where they fill their drinking water gallons. Filtration systems are reportedly available at these sources (see figure 7). For other household uses such as cleaning and hygiene, water is typically piped to homes through spring-fed systems, though the reliability depends heavily on electricity. When electricity is cut, households—especially those without storage—must purchase water from tanker trucks, which adds to their financial burden. Syrians living in informal settlements occasionally fill water from nearby truckers.
While more than half of respondents feel safe drinking the water, many expressed concerns about the cost of water access, including the transportation costs incurred every couple of days to refill their containers.

SANITATION AND HYGIENE

[22] HTTPS://WWW.UNHCR.ORG/LB/ABOUT-UNHCR/WHERE-WE-WORK/UNHCR-TRIPOLI-FIELD-OFFICE?
[23] HTTPS://WWW.AUB.EDU.LB/IFI/DOCUMENTS/20130705IFI_MEMO_FAFO_IFI_POLICY_BRIEF_SYRIANS_IN_LEBANON.PDF
[24] https://theglobalobservatory.org/2014/03/absence-of-syrian-refugee-camps-in-lebanon-heats-up-labor-competition-and-local-tensions/?

The availability of organized wastewater management systems in Lebanon—such as sewage networks, septic tank services, and treatment facilities—varies significantly across regions, and Bebnine is no exception. According to the World Bank, most municipalities in the country lack proper sewerage systems and wastewater treatment, which is exactly the case in Bebnine, where no official sewage network currently exists [25]. Residents and refugees alike rely on improvised sanitation solutions, such as traditional soak pits dug near their homes or informal settlements.

According to the mayor, these conditions become particularly problematic during both winter and summer, as overflow and odors worsen. Although Bebnine had previously initiated a wastewater infrastructure project with support from Danish and Kuwaiti partners, the network was never completed or maintained. As a result, 86% of respondents reported widespread unpleasant odors throughout the town. Sanitation facilities vary, with most local residents using French-style toilets, while in informal settlements, it is common for 5 to 7 families to share a single bathroom, leading to serious privacy concerns, especially for women and girls, particularly at night. Syrian refugees largely depend on hygiene kits provided by humanitarian organizations to maintain personal cleanliness, including handwashing and sanitation of living spaces. However, 70% of respondents noted that due to reduced cash assistance and fewer hygiene kit distributions, it has become increasingly difficult to maintain adequate hygiene standards.

HEALTH AND PROTECTION

While no recent major health outbreaks have been reported, over half of respondents recalled experiencing skin-related issues, such as scabies, due to water conditions approximately 3 to 4 years ago. In the current assessment, 12% of refugee households reported at least one member suffering from a skin disease, such as scabies, in the past two months. These rates were notably higher in informal settlements (24%) and substandard shelters, compared to apartments (13%). Among Lebanese households, no recent health issues linked to water or sanitation were reported, with one respondent emphasizing, “the safety of water is as important for us as air.” However, protection concerns persist, particularly among refugee women and girls in informal settlements, who expressed feeling unsafe using shared toilets at night, especially due to lack of privacy and lighting.

COPING AND PRIORITIES

When water supply or toilets are not functioning, residents in the town adopt various coping mechanisms. Among Syrian refugees, many reduce or stop hygiene-related activities such as cleaning and bathing when water is unavailable. Only around 20% reported buying water from tanker trucks during these times, while approximately 10% said they would seek access to water or sanitation facilities in nearby households or informal settlements. The most urgent WASH need identified by the community is the establishment of a wastewater and sewage network, or at minimum, rehabilitation and expansion of the existing, non-functional system. Addressing this gap would significantly improve sanitation conditions, particularly in areas lacking proper discharge systems for toilets and greywater.

WASTE MANAGEMENT

Solid waste in the town is managed through a basic collection system, with the municipality contracting a private company to collect and transport waste daily to the Srar landfill. While there are plastic bins placed in different parts of the town, 88% of respondents reported that the number of bins is insufficient, leading to waste accumulation in open areas, often surrounded by dogs, insects, and foul odors. Residents also tend to use one another's bins when theirs are full, further straining the system. Around 55% highlighted that some bins have been stolen, increasing the need for more larger, secured waste containers. According to the municipality, each household is expected to pay a 400,000 LBP monthly fee, but only 40% of residents pay, which puts pressure on municipal resources.

[25] https://documents1.worldbank.org/curated/en/948151468236993770/pdf/PUB6445.pd

The waste collection company charges approximately $15 per ton, making it a costly process, especially in terms of human and operational resources. Challenges also include kitchen oil and leftover food being poured into drains, contributing to sewage blockages, and medical waste being disposed of in regular trash bags, posing health and environmental risks. Though there is no direct evidence of waste contamination affecting water sources, the poor management of waste near residential areas increases potential risks. A key solution suggested by the municipality is to repair and reactivate the town's own waste compactor truck, which would significantly reduce external costs and improve efficiency. Residents also recommend increasing the number of waste bins and not the plastics one (see figure 8) and conducting awareness campaigns on proper waste disposal and recycling practices.

Figure 8: The plastic bins in Bebnine town VS. the recommended one.

TEKRIT

DEMOGRAPHICS

In Tekrit, the total sample represented 17% of the overall assessment, comprising 33 respondents. The majority were Lebanese, followed by Syrian participants. The breakdown of respondents by nationality, gender and vulnerabilities is illustrated in Figure 9.

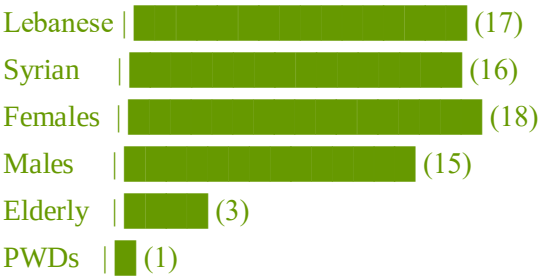


Figure 9:Breakdown of respondents in Tekrit by nationality, gender, and vulnerability.

WATER ACCESS AND QUALITY

Lebanon's water sector has historically lagged behind other areas of national economic development since the end of the Civil War, particularly in terms of availability and quality. According to a World Bank assessment, 79% of the population had access to potable water prior to the Syrian refugee crisis [26]. At that time, Akkar ranked the lowest nationwide in access to public water networks, with only 54% of households connected—significantly below the national average of

[26] https://documents.worldbank.org/en/publication/documents-reports/documentdetail/925271468089385165

86% [27]. Even in areas with potentially adequate water sources, challenges such as outdated infrastructure and lack of proper water treatment persist. In Tekrit and according to our assessment, 56% of households rely on drinking water obtained from dug wells, while others purchase water or fill their tanks using delivery trucks from nearby towns for daily use. Although there is a public well in the town, it cannot operate consistently due to insufficient electricity. No solar systems are installed to power the pumps. During the summer months, the well often dries up, worsening the situation. Moreover, several residents expressed distrust in the quality of the drinking water due to the absence of filtration systems and the buildup of limestone and sediments in the well. As a result, many prefer to purchase bottled or gallon water. In addition, refugee households generally reported relying on the same water sources for both drinking and domestic use. In 92% of cases, they did not treat the water at the household level before consumption. Key informant interviews with local stakeholders confirm that while water is technically available in the town, additional support is urgently needed, particularly in: installing reliable electricity or solar power systems to ensure consistent pumping, providing filtration systems and conducting regular water quality testing and maintenance of the well. In Tekrit, nearly 60% of residents reported experiencing frequent interruptions in their household water supply. These interruptions are largely due to the issues previously discussed, including the lack of reliable electricity, which prevents water from being pumped consistently into household tanks. Another major issue reported was the frequent stoppage of public water taps in the town. Participants also cited a lack of trust in the public water source, noting that there are no filtration systems in place for public taps. As a result, many households rely heavily on alternative sources, such as purchasing water from tanker trucks or buying bottled water from supermarkets, which adds a significant financial burden.

Overall, the main challenges related to water access and affordability included:

- Electricity cuts that make it difficult to pump or store water at the household level.
- Unreliable public water infrastructure, with inconsistent supply from public taps.
- Concerns over water quality and safety, especially due to the lack of filtration.
- High costs of alternative water sources, including tanker deliveries and bottled water.

SANITATION AND HYGIENE

In the governorate of Akkar, only about 25% of households are connected to a public sewage network — far below the national average of 60%. Meanwhile approximately 64% of villages rely on pit latrines or septic tanks, many of which are prone to leaking [28].

In the town of Tekrit, a public sewage network has been constructed by the government, but it remains incomplete: only around 70% of households can currently access it, and there is no WASH refinery in place. Waste from the town is held for disposal in a communal area called “Gebrael” in Akkar rather than being treated locally.

Regarding sanitary facilities: most residents use Western-style toilets while only a few uses the Arabic squat style. For the refugee households in town, shared toilets are the norm — large families renting the same dwelling rely on communal sanitation facilities. Privacy for women is somewhat managed in many cases, but remains compromised when multiple families share a single toilet. Among host Lebanese households, hygiene items (soap, cleaning supplies) are often prioritized in the household budget similarly to food. In contrast, Syrian refugee families in the town primarily depend on aid-distributions — for example hygiene kits provided by UNHCR, UNICEF or other humanitarian actors. In Akkar, one

[27] https://civilsociety-centre.org/sites/default/files/resources/MADA_Forgotten_Akkar_SocioEconomicReality_Jan08.pdf
[28] HTTPS://WWW.PSEAU.ORG/OUTILS/OUVRAGES/REACH_INFORMING_MORE_EFFECTIVE_HUMANITARIAN_ACTION_RELIEFWEB_UNICEF_WASH_ASSESSMENT_OF_SYRIAN_REFUGEE_HOUSEHOLDS_IN_AKKAR_GOVERNORATE_2014.PDF

assessment noted that basic hygiene items like soap were too expensive for many refugee families, with around 13% reporting that they wash their hands with water only [29].

HEALTH AND PROTECTION

About 30% of respondents in the survey indicated that their town had been affected by a cholera outbreak, and they specifically pointed to the water supply as the main source of the problem. This is consistent with national data: the country experienced its first recorded outbreak of Cholera in nearly three decades when the World Health Organization (WHO) documented the outbreak in Lebanon on 6 October 2022 [30].

While there are concerns about waste management in the streets, particularly due to improper disposal and lack of regular collection, which causes unpleasant odors and environmental pollution, there have been no confirmed medical cases in the past six months directly linked to waterborne diseases or unsafe sanitation, according to the Mayor of Tekrit.

However, the potential health risks remain present, especially given the poor infrastructure, lack of water treatment, and shared sanitation facilities among refugee households. These conditions create a heightened vulnerability to WASH-related illnesses, even if not formally recorded.

As for protection concerns, no major safety incidents were reported. However, the reliance on shared toilets, particularly among refugees, and the need to fetch water from distant or communal sources, can pose risks, especially for women and girls using facilities at night or in overcrowded conditions with limited privacy. These issues underline the importance of improving access to safe, private, and gender-sensitive WASH facilities in the town.

COPING AND PRIORITIES

When water supply is unreliable or toilets are out of service, residents in Tekrit commonly resort to buying water in containers — often in large "gallon" sizes of 10 Liters (see figure 10)— so that households can continue drinking, and buying the tankers for cooking and cleaning. Around 10% of respondents reported needing at least three gallons drinking water per week, while many others said they need even more. The highest-priority WASH need they identified is to repair and upgrade the drinking-water system, install town-wide filters, and add a solar-powered pump system to ensure consistent supply to each household.

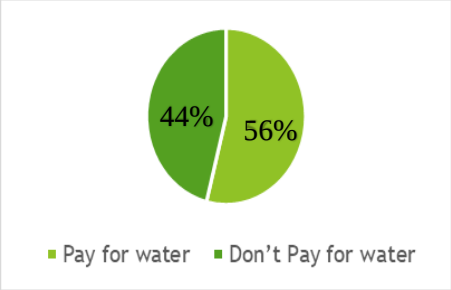


Figure 10: Respondents who pay and don't pay for water in Tekrit.

WASTE MANAGEMENT

In Tekrit, most households have access to public waste bins, but these are insufficient in number and unevenly distributed. About 70% of respondents reported that the bins are located far from their homes and are often surrounded by unpleasant odors, flies, and insects, creating both environmental and health concerns. The municipality currently spends $2,600 per month to manage solid waste collection, contracting a private company that collects waste twice a week and disposes of it at the dump called "Srar".

[29] https://www.anera.org/stories/hygiene-kits-help-syrian-refugees-live-dignity/?
[30] https://www.emro.who.int/lbn/lebanon-news/who-warns-of-deadly-cholera-outbreak-in-lebanon-as-cases-increase.html?

However, not all residents pay the associated service fees, forcing the municipality to cover the costs from its own budget. Additionally, the town previously owned a garbage compactor truck, but it is currently out of service and in need of repairs. Reviving this vehicle could significantly reduce costs and reliance on external companies. Waste mismanagement, such as kitchen oil and leftover food being poured into drains, has reportedly blocked sewage lines, and there are concerns about medical waste being disposed of in regular trash bags, which poses serious public health and environmental risks.

Community members suggested improving waste management by repairing the municipal compactor truck, increasing the number and proximity of bins, and conducting awareness campaigns on safe waste disposal practices to reduce environmental hazards and support municipal efforts.

Figure 11:Syrian refugee FGD in Tekrit.

BERKAYEL

DEMOGRAPHICS

In Berkayel, the sample represented 16% of the total assessment, comprising 30 respondents. The nationality distribution was equal between Lebanese and Syrians. The breakdown of respondents by nationality, gender, and vulnerability status is illustrated in Figure 12.

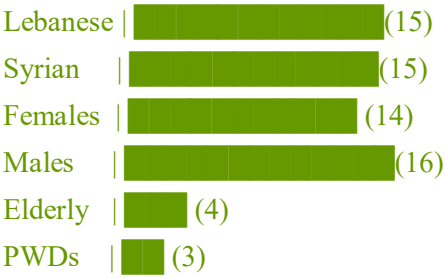


Figure 12:Breakdown of respondents in Berkayel by nationality, gender, and vulnerability.

WATER ACCESS AND QUALITY

In Berkayel, 65% of respondents reported relying on private springs as their main source of drinking water, while others access water through shared wells or public taps. Although residents use these local sources, the town itself lacks a natural water source, as confirmed by the mayor. A previous water project, in collaboration with RMF, aimed to drill a deep well (600 meters), but it was never completed. As a result, Berkayel relies on the North Lebanon Water Establishment (NLWE) [31] to supply water to the area. In times of crisis, NLWE also implements rationing and emergency measures. In June 2025, NLWE launched rationing distribution programs to manage reduced water resources, citing lower rainfall and stressed supply [32]. The town is equipped with its own water reservoirs and a pumping station, which occasionally malfunctions due to high seasonal demand or electricity shortages. For non-drinking purposes, households use stored

[31] https://eeln.gov.lb/en/about/?
[32] https://today.lorientlejour.com/article/1463062/north-lebanon-water-office-announces-several-rationing-distribution-programs.html?

water from private wells, while only 20% of respondents said they resort to purchasing water tankers, mainly during the summer. Refugee households residing in Berkayel—most of whom live in rented apartments or houses—rely on the same water sources as the host community, facing similar access challenges. Regarding hygiene practices, the most common method for cleaning water containers was using water only (45%), followed by soap and water (42%), and chlorine (16%). Very few Syrian refugees treat their water at the household level with traditional methods and instead may apply their own methods they believe will make their water safe [33]. Overall, the water in Berkayel is considered safe, with filters available, and many residents take initiative to maintain hygiene by regularly cleaning their tanks. However, challenges persist, especially related to electricity cuts that limit water pumping to homes, as well as the financial burden of water access and usage fees.

SANITATION AND HYGIENE

In the town, most residents use French-style toilets, with most households connected to the public sewage network. According to the mayor, approximately 90% of homes are linked to the system, while the remaining 10% rely on traditional soak pits near their houses. Although the sewage infrastructure is present, a common challenge reported by residents is that the drainage lines frequently get clogged. To address this, the municipality often rents a jetting machine (see figure 13)—a high-pressure cleaning device used to clear sewer and drain blockages—but this is costly and not always timely. Regarding menstrual hygiene management, privacy is generally maintained as facilities are located within or close to homes. However, some female respondents—particularly among refugee households living in crowded rented spaces—expressed challenges, such as limited access to menstrual hygiene products and lack of designated disposal options.

Figure 13: Jetting machine.

Hygiene practices are relatively well established in the community. Families typically wash hands and dishes with soap and water, and awareness around basic hygiene is high. Nevertheless, barriers persist, especially for vulnerable households who sometimes struggle to afford soap or cleaning supplies, particularly during periods of inflation or assistance cuts. Refugee families, in particular, highlighted a reliance on hygiene kits from humanitarian organizations, which have recently become less frequent in distribution.

HEALTH AND PROTECTION

In Berkayel, it is worth noting that many Lebanese community members expressed concerns about the condition and hygiene of school toilets, both in public and private institutions. Over 60% of parents reported that their children avoid using school toilets, citing past experiences of poor hygiene standards. While some cases of infections were reportedly linked to school sanitation facilities more than two years ago, there have been no recent outbreaks of cholera or skin-related diseases in the town. (see Table 1) As for protection concerns, there were no major safety risks reported in relation to accessing water or sanitation facilities within households or in the community.

[33] Multi Sector Needs Assessment, Phase One Report (Beirut, 2014) http://reliefweb.int/sites/reliefweb.int/files/resources/13June2014-FINALMSNAPHASE1REPORT.pdf

However, continued attention to school sanitation and maintenance was highlighted as a priority need by both parents and local stakeholders.

Table 1: A table or simple bar chart summarizing reported WASH-related illnesses in Berkayel.

Type of Concern	Reported Cases	Timeframe
School-related infections	Yes	>2 years ago
Cholera	None	Not reported
Skin infections (e.g., scabies)	None	Not reported

COPING AND PRIORITIES

During water outages in Berkayel, most residents — including both host and refugee households — rely on purchasing water tankers to fill their home storage tanks. However, this coping mechanism is financially burdensome, especially during the summer months, when both tanker prices and overall water fees increase.

Refugee households particularly noted that water costs in Berkayel are higher than in other areas of Akkar (see Table 2), pushing many to reduce their daily consumption to essential uses only, such as drinking and cooking.

The most urgent WASH needs raised by the community include ensuring a more stable and affordable water supply and addressing long-term sustainability. A commonly proposed solution is to install a solar-powered system to support water pumping operations across the town. This would reduce dependence on electricity, improve water availability, and lower household expenses.

Additionally, respondents — especially parents — stressed the importance of better hygiene monitoring in school toilets. While most homes have access to sanitation, many children reportedly avoid using school toilets due to poor hygiene conditions. Improving cleanliness, regular maintenance, and oversight in school WASH facilities was highlighted as an immediate priority to protect children's health and dignity.

Table 2: Average Cost of Water Tankers in Akkar (2025 Summer).

Area	Avg. Price per Tanker (20,000 LBP)
Berkayel	1,400,000 LBP
Halba	1,000,000 LBP
Bireh	950,000 LBP
Qobayat	1,050,000 LBP

WASTE MANAGEMENT

Solid waste in Berkayel is primarily managed through municipal collection, using designated public bins placed around the town. The municipality owns its own waste compactor truck and employs local staff to collect waste daily, transporting it to the Srar landfill. However, the system faces operational and financial challenges, including the high cost of fuel, the need for rehabilitation of the compactor truck, and limited resources to sustain regular operations.

Although collection occurs daily, the number of bins is insufficient, and residents frequently report overflowing garbage, attracting flies, rodents, and producing toxic smells. Many respondents also noted that people from nearby towns come to dispose of their trash in Berkayel's bins, worsening the problem.

While residents are expected to pay a monthly fee of 300,000 LBP, the municipality confirmed that only around 40% of households contribute, making it difficult to cover operational costs. In some cases, improper disposal of kitchen oil and food waste has blocked wastewater drains, impacting sanitation infrastructure. The municipality previously launched a recycling initiative after the 2015 national waste crisis, but it was discontinued due to funding gaps and logistical challenges [34].

From the refugee perspective, community belonging and responsibility also play an important role. A Syrian woman with a disability shared: "I cannot return to Syria — I have no home there, and in my condition, it would be too difficult. Berkayel is my home now, and I respect all the rules of this town. Her words reflect a strong sense of integration and contribution, emphasizing the need for inclusive services and municipal support for all residents, including vulnerable groups like PWDs. The municipality identified several urgent needs to improve solid waste management in Berkayel.

These include acquiring a jetting machine to clear frequent drainage blockages, providing more plastic bins in densely populated areas, and supplying cleaning equipment and street sweepers to maintain hygiene in public spaces. Additionally, there is a need for community outreach and awareness to improve fee payment compliance, as only a portion of households currently contribute to waste management costs.

Lastly, the municipality emphasized the importance of reviving sustainable recycling practices to reduce the overall waste burden and promote environmental responsibility (see Table 3).

Table 3: Priority Waste Management Needs in Berkayel.

Need	Priority Level
Jetting machine	▲ Very High
More plastic bins	▲ Very High
Street sweepers & tools	▲ High
Community fee awareness	▲ High
Recycling revival	□ Medium

[34] https://www.aljazeera.com/news/2016/3/8/lebanons-trash-crisis-explained

Figure 14: Host community FGD in Berkayel.

TAL ABASS GHARBI

DEMOGRAPHICS

In Tal Abbas Gharbi, the sample accounted for 16% of the total assessment, with 30 respondents participating. The distribution of nationality was evenly split between Lebanese and Syrian individuals. Additionally, the town has recently seen an influx of new arrivals. As of April 2025, Tal Abbas Gharbi, a village in Akkar Governorate, Lebanon, has experienced an influx of displaced Syrians, primarily from coastal Alawite-majority regions. According to official figures from the Disaster Risk Management Chamber, approximately 1,522 individuals (347 families) have settled in Tal Abbas Gharbi, contributing to the broader displacement trend in Akkar, where over 20,000 new arrivals have been recorded since early March 20252. [35] Figure 15 presents a detailed breakdown of respondents by nationality, gender, vulnerability status, and refugee types.

[35] https://daleel-madani.org/civil-society-directory/united-nations-high-commissioner-refugees/press-releases/unhcr-lebanon-flash-update-new-arrivals-north-lebanon-2-april-2025?

Elderly | ▮▮▮ (5)

PWDs | ▮ (1)

Figure 15: Breakdown of respondents in Tal Abass Gharbi by nationality, gender, newcomers and vulnerability.

WATER ACCESS AND QUALITY

Tal Abbas Gharbi relies primarily on three natural springs within the town, from which residents fill their tanks and gallons. A solar system has been installed to assist with pumping water from these sources. However, 70% of respondents reported that they still purchase bottled or tanker water, as the spring water, though tasty, is not filtered. The mayor confirmed that no filtration system is currently in place, but the Lebanese Red Cross (LRC) has promised to provide one soon. For daily non-drinking water usage, households generally have access, but availability is limited—especially following the recent influx of new arrivals. This sudden population increase has put additional pressure on water resources, leading to challenges in both water quantity and quality, and impacting WASH conditions among the newcomers and host community alike. In nearby regions, UNHCR has implemented solar-powered water pumping systems to ensure uninterrupted access to clean water. While not directly in Tal Abass Gharbi, these systems benefit the broader Akkar region and may influence water availability in surrounding areas [36].

SANITATION AND HYGIENE

The town has had a sewage network in place for over 10 years; however, there is no functioning wastewater treatment plant despite previous promises to install one. The municipality is currently spending more than it can manage on maintaining the sewage network and associated medical costs. With the recent increase in collective shelters hosting refugees, the lack of adequate toilet facilities has become a major issue, especially affecting women's privacy and safety. Women and girls face significant challenges in managing menstrual hygiene due to insufficient access to private and safe sanitation facilities. Humanitarian agencies such as UNHCR are providing dignity kits to help address hygiene needs, but the shortage of toilets for new arrivals continues to compromise privacy and dignity. Common hygiene practices include regular handwashing and cleaning of dishes, but barriers such as limited access to water and hygiene supplies remain.

Table 4: Hygiene practices on hand and washing.

Practice	Percentage (%)
Water only	45
Soap and water	42
Chlorine	16

Health AND PROTECTION

Based on the situation in Tal Abass Gharbi, there have been no recent widespread reports of illness directly linked to water or sanitation facilities. However, the lack of adequate sanitation infrastructure, especially for new arrivals and in collective shelters, raises concerns about potential health risks. Women and girls face particular protection challenges, as the limited availability of private and safe toilets makes using these facilities at night risky, increasing their vulnerability to harassment or assault. Additionally, some community members must travel distances to access water sources, which can also pose safety concerns, especially after dark. These factors highlight the urgent need to improve WASH infrastructure and ensure safer, more accessible facilities for all residents.

COPING AND PRIORITIES

[36] https://www.unhcr.org/lb/news/unhcr-funded-solar-panels-ensure-uninterrupted-access-clean-water-25-000-residents-akkar

For Tal Abass Gharbi and the new arrivals, when water or toilets are not functioning, people typically buy water from tankers to fill their household tanks. However, many reduce water usage due to the high costs, especially among refugee families who face greater financial constraints during summer shortages. The most urgent WASH need in the area is establishing a reliable and continuous water supply system, with a strong preference for solar-powered pumping to address frequent electricity cuts. Improving sanitation infrastructure, including expanding and repairing toilets; especially for the increasing number of new arrivals in collective shelters; is also critical. Additionally, there is a pressing need to enhance hygiene facilities and privacy in schools and shelters, as many women and girls face challenges managing menstrual hygiene with limited access to safe and private sanitation options. In informal settlements, many women and adolescent girls have restricted access to safe, private sanitation facilities. The absence of electricity makes nighttime use hazardous, leading many to avoid facilities after dark [37].

WASTE MANAGEMENT

Residents usually put their waste in public bins, which the municipality collects once a week. However, the limited number of bins; especially with the recent population increase; combined with infrequent collection leads to bad odors, flies, insects, and sometimes rodents around the bins. Challenges include high waste collection costs, kitchen waste blocking drains, and medical waste mixed with regular trash, all of which affect sanitation and water sources. To improve waste management, the municipality has proposed placing plastic bins in front of each house to better organize disposal and reduce overflow, along with increasing collection frequency and raising awareness about proper waste handling.

Figure 16: Host community FGD in Tal Abass Gharbi.

FNAYDEK

DEMOGRAPHICS

In Fnaydek, the sample accounted for 16% of the total assessment, with 30 respondents participating. Most respondents were Syrian nationals, followed by Lebanese. Figure 17 provides a detailed breakdown of the respondents by nationality, gender, and vulnerability status.

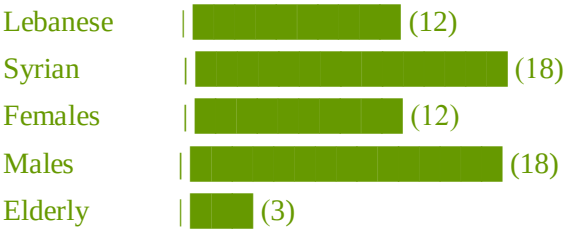


Figure 17: Breakdown of respondents in Fnaydek by nationality, gender, and vulnerability.

WATER ACCESS AND QUALITY

[37] https://lebanese-developers.com/2025/02/28/pilot-research-on-protection-risks-of-dom-refugee-women-in-akkar-lebanon/?

Residents in Fnaydek primarily benefit from the Kamoaa network managed by NLSWE within the town. In addition to this network, many also rely on the Fnaydek spring (see figure 18), particularly during the winter season. However, according to the mayor, only around 40% of residents currently have direct water access reaching their households.

A solar-powered system has been installed for the spring, including submersible pumps and official storage tanks. During the summer months, the community shifts its reliance to the Al-Houweh spring. There is a tender notice for a project titled "Implementation of Water Treatment System in Fnaydek" (Akkar) through the organization Tankamel Sawa. It states that Fnaydek relies on two primary water sources ("Houweh" and "Kahef" according to the notice). It also mentions a 1,000 m³ water storage tank, and a fragmented distribution network (pipes 2-4 inches) in the village. The notice further states that the Houweh sources "dry up for 6 months of the year". The tender refers to the need for a "Chlorine Filtration system to support in providing drinking water to the village households." [38] Despite these sources, approximately 60% of respondents expressed concerns regarding the safety of drinking water, noting the absence of filtration systems and the high calcium content, which affects water quality. (see figure 19)

For other household water uses, residents commonly depend on storage tanks. Additionally, around 50% of respondents reported purchasing water from tanker trucks during the summer due to shortages.

Local stakeholders noted that a water quality test was conducted in the town approximately one month ago, and results confirmed the presence of high calcium levels in the water.

Figure 18: Fnaydek spring.

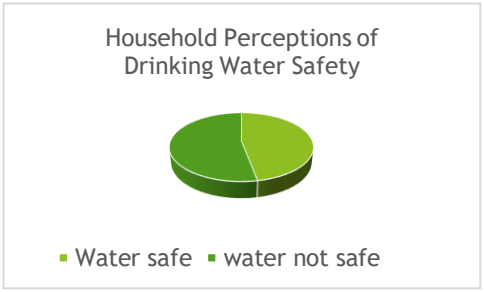


Figure 19: Household perceptions of drinking water safety

SANITATION AND HYGIENE

Fnaydek does not have a public sewage network or a wastewater treatment plant. Instead, wastewater is disposed of in open drainage channels that are directly connected to surface water sources. This becomes particularly problematic during river floods, leading to environmental and health hazards.

Approximately 80% of respondents reported having a pit latrine located near their homes. However, these facilities pose challenges, especially related to odors and gas leakage into households, which can affect living conditions and raise health concerns. Overall, sanitation infrastructure is limited, and safety and hygiene around toilet facilities remain a concern for many residents.

Given the existing issues with waste disposal and toilet odors, it is likely that managing menstruation in a private and hygienic way is difficult, especially for girls in schools or women in larger households. Disposal of menstrual products may also be problematic in the absence of proper sewage and waste collection systems.

Most families try to maintain basic hygiene practices such as handwashing and dishwashing, but they face significant challenges. More than 70% of respondents said they buy soap depending on their economic situation and ability to afford it. This indicates that access to hygiene products is not consistent and is heavily influenced by income levels.

[38] https://daleel-madani.org/civil-society-directory/tankamel-sawa/calls/itb-lb-2021-06-implementation-water-treatment-system-fnaydek-akkar?

According to the 2020 report by UNHCR on WASH conditions among Syrian refugee households: In Akkar, only 72% of households reported access to "improved sanitation facilities" (which means flush toilets or improved pit latrines with slabs) [39].

HEALTH AND PROTECTION

In the past year, no major illness outbreaks related to water or sanitation have been reported in Fnaydek. However, during the recent cholera outbreak, the town did experience some confirmed cases of infection. While these were not widespread, they raised community concerns about the safety of water sources. In one assessment, the outbreak's attack rate in Akkar was estimated at 8.9 per 1,000 people [40].

Many respondents expressed ongoing concerns about the potential contamination of water — especially the mixing of wastewater or sewage from toilets with river water, particularly during flooding. This remains a significant worry for residents, even in the absence of recent outbreaks.

COPING AND PRIORITIES

When households do not receive water through their usual sources, the most common solution is to purchase water from tanker trucks. According to recent feedback, 30% of respondents reported buying water from tankers during the summer of 2025 to cope with shortages. This practice, while necessary, places a financial burden on families especially those already struggling with the rising cost of living.

Residents and local stakeholders consistently emphasized the urgent need for a proper sewage and wastewater management system. The lack of a public sewage network leads to environmental pollution, unpleasant odors, and health risks, particularly with waste flowing into open drains or mixing with surface water.

According to a May 2024 investigative report by The Public Source, in the Akkar governorate only around 62% of households are connected to a public sewage network, leaving nearly 38% reliant on septic tanks (≈ 30%) or open drainage into canals or rivers (≈ 8%). The article further documents that due to these infrastructural failures, farmers in Akkar are irrigating with raw sewage or contaminated river water, a practice driven by lack of cost-effective alternatives.

For the town of Fnaydek, which falls within this governorate, these findings suggest the local sanitation and wastewater situation is likely to follow the same pattern: fragmented infrastructure, uncontrolled waste-water discharge, and risk of contamination of water and agricultural produce." [41]

Figure 20: Khaled al-Masri rides his motorcycle on a road filled with sewage water. Akkar, Lebanon. November 26, 2023. (Marwan Tahtah/The Public Source.

WASTE MANAGEMENT

39 https://ialebanon.unhcr.org/vasyr/files/vasyr_chapters/2020/VASyR%202020%20-%20WASH.pdf?
40 https://academic.oup.com/ofid/article/12/8/ofaf428/8206003?
41 https://thepublicsource.org/sewage-irrigation-water-akkar

In Fnaydek, solid waste is generally disposed of in designated bins placed around the town, but respondents and stakeholders noted a shortage of plastic bins, which limits cleanliness and proper waste segregation. While a basic municipal collection system exists, the community faces several challenges, including high waste collection costs, improper disposal of kitchen oil and leftover food into drains (causing sewage blockages), the presence of flies and rats around waste areas, toxic odors, and unsafe disposal of medical waste in regular trash bags. These issues have directly impacted water sources and sanitation facilities, with waste often blocking drainage and contaminating surface water, especially during floods.

Although the mayor mentioned that the COOPI organization, -summary for "Sustainable waste management in Akkar" — gives local pilot cost figure and scale for Akkar district- [42] has proposed a recycling project, it has not yet been implemented. In Lebanon, the average generation of municipal solid waste (MSW) is about 0.85 kg per person per day in rural areas, and between 0.95-1.2 kg per person per day in urban areas. [43] The community has also suggested increasing the number of waste bins and acquiring a street-cleaning machine to help maintain a cleaner environment.

Figure 21: Host community FGD in Fnaydek.

MHAMARA

DEMOGRAPHICS

In Mhamra, the sample comprised 28 respondents, representing approximately 15% of the total assessment. The nationality distribution was skewed in favour of Syrians over Lebanese. Recently, many Syrian families have returned to their home country, and it has been reported that some informal settlements in Mahamra were vacated, with residents even moving their facilities to Syria. Local estimates indicate that the number of families remaining in these settlements has been reduced to about one-third of the original population. The United Nations High Commissioner for Refugees (UNHCR) Lebanon "External Update – May-June 2025" reports that 177,430 Syrians from or via Lebanon returned to Syria since 8 December 2024 [44]. The figure 22 below presents a detailed breakdown of respondents by nationality, gender and vulnerability status.

[42] https://coopi.org/en/lebanon-sustainable-waste-management-in-akkar.html?
[43] https://www.readkong.com/page/country-report-on-the-solid-waste-management-in-lebanon-4822487?
[44] https://www.unhcr.org/lb/sites/lb/files/2025-06/UNHCR%20Lebanon%20-%20External%20Update%20-%20May-June%202025.pdf

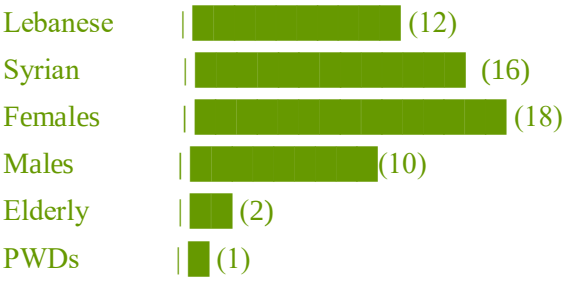


Figure 22: Breakdown of respondents in Mhamra.

WATER ACCESS AND QUALITY

In Fnaydek, Lebanese households primarily rely on piped water supply, which they store in tanks at home for daily use. However, they occasionally experience interruptions in water availability, often linked to electricity outages, which affect the operation of water pumps. In contrast, 100% of Syrian respondents reported that they purchase packaged water for drinking, as there are no available water sources within their informal settlements. Previously, some Syrian families had access to water tanks filled by UNHCR or other actors, but respondents noted that this is no longer the case. Additionally, some reported that these tanks were removed or taken by landlords, leaving them without storage or access solutions for sanitation and household water use. This has significantly increased their dependency on purchased water, raising both access and affordability concerns. In informal settlements across Akkar, water access and sanitation facilities are often inadequate. Many households rely on water delivered by tanker trucks, and the quality of water can be questionable due to lack of proper storage and treatment [45].

Water Source	Percentage of Households (%)	Notes
Piped water supply	45%	Mainly Lebanese households with tanks
Tanker trucks	30%	Mostly Syrian households during summer
Springs	15%	Seasonal reliance, mainly in winter
Bottled/packaged water	10%	Primarily used for drinking by Syrians

Table 5: Household Water Sources in Mahamra per respondents.

SANITATION AND HYGIENE

For residents living in apartments and houses, many have access to the public sewage network, which reaches most homes. However, approximately 30% of households still rely on latrine pits located near their houses. In contrast, refugee families living in informal settlements (ISs) reported that they previously shared toilets and sanitation facilities, with about 5 to 7 families using one toilet. Recently, the number of functioning toilets in the ISs has decreased significantly, as many returning families took the sanitation equipment with them back to Syria.

In ISs in Akkar, the most common disposal methods for wastewater: public sewer network ~ 37% of households, open dumping ~ 30%, draining into open channels ~ 15% [46].

Regarding menstrual hygiene management, women and girls in the ISs face severe challenges due to the lack of privacy, with almost no private spaces available to manage their monthly periods. This lack of facilities makes it difficult to maintain hygiene and dignity. In terms of general hygiene practices, families typically keep their hands

[45] https://www.solidarites.org/en/live-from-the-field/lebanon-innovative-wash-solutions-for-syrian-refugees/?
[46] https://civilsociety-centre.org/sites/default/files/resources/wash-akkar-report.pdf

and dishes clean when possible; however, many face difficulties such as limited access to soap and water, particularly during water shortages. This situation poses ongoing barriers to maintaining proper hygiene within the community.

HEALTH AND PROTECTION

Syrian refugees living in informal settlements (ISs) in Mahamra reported cases of scabies, which were attributed to poor hygiene conditions and limited access to clean water and sanitation. In addition, several respondents expressed fears about using toilets at night, citing the presence of rats coming from toilet pits and roaming inside the ISs.

These concerns highlight not only the health risks but also the protection and safety challenges faced by vulnerable populations, particularly women and children, when accessing WASH facilities under unsafe or unsanitary conditions. In the 2014 "Multi-Sector Community-Level Assessment of Informal Settlements – Akkar" it was found that in ISs: 98% of settlements reported mosquitoes, 95% reported flies, and 92% reported rats as vectors in or around the settlement [47].

COPING AND PRIORITIES

When water or sanitation services are unavailable, host community members often purchase water from tanker trucks to fill their household tanks. In contrast, Syrian refugees in informal settlements reported having to buy small water gallons from outside sources, which they use for both drinking and domestic purposes due to the lack of direct access to water in their shelters (refer to Table 6).

The most urgent WASH need reported by Syrian refugees is to have adequate and sustainable water and sanitation infrastructure inside their settlements. This includes access to clean water, functional toilets, and basic hygiene equipment. Refugees also emphasized the importance of ensuring ongoing maintenance of these services to improve their living conditions and support their ability to remain in place with dignity and safety.

Table 6: Key WASH Indicators Among Host and Refugee Populations in Mhamra.

Indicator	Value	Notes / Source
% of Lebanese households relying on tanker trucks during shortages	30%	Based on field data and respondents (Summer 2025, host community)
% of Syrian refugees who buy water in gallons from shops/vendors	100%	Based on field data and respondents (Summer 2025, host community)
% of respondents who reported lack of adequate toilets in ISs	60–70%	Based on field data and respondents (Summer 2025, host community)
% of Syrian respondents who consider WASH their top priority	75%	Reported priority during your consultations
Average no. of families sharing a toilet in ISs	5–7 families	Based on current field observation
% of Syrian respondents with no hygiene kits or menstrual products	60%	Based on field interviews with women and girls
% of IS households that reported safety concerns at night (e.g. rats, privacy)	80%	Protection risk noted in multiple interviews

[47] https://alnap.org/help-library/resources/system/files/content/resource/files/main/32-reach-lbn-report-akkargovernorate-multisectorassessmentofinformalsettlments-nov2014.pdf

WASTE MANAGEMENT

In Mahamra, solid waste is primarily managed by the municipality, which collects garbage twice per week from designated public bins used by both the host community and Syrian refugees. However, due to insufficient bin coverage, particularly around informal settlements (ISs), many Syrian households resort to burning waste near their shelters or using makeshift pits for disposal. According to field observations, over 60% of respondents in ISs reported challenges accessing waste bins, and nearly 40% admitted to burning their waste. Key challenges include the high cost of transportation to reach waste collection points, overflowing bins, and the resulting spread of flies, rats, and toxic odors. Some residents also noted improper disposal of kitchen oil and food leftovers into drainage systems, which contributes to sewage blockages. These practices not only raise public health concerns but may also contaminate nearby water sources and sanitation infrastructure. Residents recommended increasing the number of waste bins near ISs, supporting the municipality with better equipment, and launching awareness campaigns and small recycling initiatives to improve overall waste management.

Figure 23: Syrian refugee FGD in Mhamra.

CONCLUSION AND RECOMMENDATIONS

This FGD-based assessment has provided valuable insights into the current water, sanitation, and hygiene (WASH) conditions affecting Syrian refugees and host communities in selected villages of Akkar Governorate. By combining secondary data with primary qualitative and quantitave methods—namely focus group discussions (FGDs) and key informant interviews (KIIs) the study identified critical service gaps, risks, and priority needs for future WASH programming.

While many challenges are shared across the targeted locations including limited access to clean water, inadequate sanitation infrastructure, and gaps in hygiene awareness, the findings also highlight important variations tied to shelter type, levels of vulnerability, and local community dynamics. Through the integration of firsthand community perspectives, observational fieldwork, and existing data, this assessment offers a comprehensive and context-sensitive view of the WASH situation in one of Lebanon's most underserved regions.

The data collected serves as a crucial foundation for humanitarian actors working to design responsive, inclusive, and sustainable WASH interventions. Grounding these efforts in the voices of affected communities ensures that proposed solutions align with real needs and lived experiences. Ultimately, this assessment underscores the urgent need for coordinated, targeted action to enhance access to safe water, improve sanitation facilities, and promote hygiene practices in Akkar with particular emphasis on supporting the most vulnerable groups.

The sections that follow summarize the key findings across each WASH category, along with practical recommendations and community-driven solutions identified during the FGDs.

WATER

As the data from this assessment indicates, difficulties in accessing safe drinking water are widespread across the targeted villages, though the severity and nature of these challenges vary by location. For example, in Mhamra, this issue is particularly pronounced, with a significantly higher proportion of households relying on purchased water compared to other areas.

Overall, while water is generally available in the six assessed villages, there remain key limitations, such as the need for solar pumping systems, electricity supply, filtration mechanisms, or improved water network infrastructure. In contrast, in the informal settlements (IS) included in the assessment, access to water is a more pressing concern. Of the 189 households that participated in the discussions, approximately 120 reported facing difficulties accessing sufficient water.

Refugees residing in informal settlements often resort to purchasing water, yet they may consume water of poor quality, which is frequently stored under unsafe conditions—posing significant health risks. This highlights the urgent need for targeted interventions to improve both the quality and accessibility of water, particularly in IS settings.

Based on field observations and discussions with stakeholders, several targeted and low-cost interventions are recommended to address water access and quality issues across the assessed villages. In Tal Abbas and Tekrit, the installation of basic water filters can significantly improve water quality. In Fnaydek, similar small-scale solutions to treat calcium-heavy water would be sufficient. In Berkayel, identifying a reliable water source within the village and using it to supply neighboring areas could improve overall availability. In Bebnine, improving the electricity supply, expanding solar-powered systems, and increasing the number of public taps would reduce the burden of water transportation on residents. In Mhamara, placing water points closer to informal settlements and ensuring regular monitoring and maintenance are essential to enhance access and sustain functionality. These localized interventions—though relatively modest—can result in significant improvements in WASH conditions when tailored to the specific needs of each community.

SANITATION AND HYGIENE

Sanitation and hygiene conditions across the six assessed villages remain inadequate and unresolved, with no area achieving full coverage or functionality. While some villages like Berkayel and Tekrit are connected to public sewage networks, these systems are often poorly maintained and insufficient to meet the needs of the population. Others, such as Bebnine, lack formal networks entirely and rely on rainwater drainage channels, which are ineffective and pose health risks. In Tal Abbas, the construction of a wastewater treatment plant is seen as a necessary solution. Even in areas with existing sewage networks, only around 60% of households report benefiting from them, while the rest rely on traditional pit latrines, as is the case in Mhamara and Fnaydek. There is a widespread need to improve both access to and the quality of latrines, particularly

among refugee households. In informal settlements (IS), access remains a major issue, with many households lacking a private or functional latrine. Latrine maintenance is also urgently needed, especially in substandard shelters and areas dependent on pit latrines, where privacy concerns are most acute. Additionally, many refugees in poor housing conditions lack proper access to bathing facilities, while those in IS often require upgrades to the limited facilities they currently use such as in Mhamara.

In informal settlements (IS), overcrowded and poorly maintained toilet facilities remain a serious concern, particularly impacting the safety, dignity, and wellbeing of women and girls. Based on VASYR results conducted in 2024, 24 % of toilets in non-permanent shelters (e.g., informal settlements) are shared with another household, which presents heightened privacy and protection risks — particularly for women and girls [48]. This lack of safe and private sanitation is especially problematic for females during menstruation, leading some to avoid using the facilities altogether or resort to unsafe coping mechanisms. Even when awareness of hygiene practices is high, financial limitations and competing priorities often prevent families from purchasing these essential items. These conditions not only increase the risk of disease transmission but also heighten protection risks, particularly for women, adolescent girls, PWDs and children living in vulnerable and overcrowded environments.

[48] https://ialebanon.unhcr.org/vasyr/files/vasyr_reports/vasyr-2024-executive-summary.pdf?

SOLID WASTE MANAGEMENT

Across all six targeted villages, a common gap identified in the waste management sector is the complete absence of any recycling systems or structured efforts toward waste segregation. Nationally, only about 8 % of MSW is recycled, while roughly 51 % goes to landfills and 26 % to open dumps [49]. Residents and local stakeholders consistently highlighted the need for additional waste bins in public areas to reduce the burden of transporting waste over long distances. In some locations, such as Bebnine, communities proposed establishing a local waste compactor to reduce collection costs and improve efficiency. In Tekrit, the recommendation was to repair an existing compactor for the same purpose. These local solutions are viewed as essential to minimizing reliance on distant or costly landfills, which currently strain municipal budgets and delay waste removal. Additionally, villages like Berkayel, Fnaydek, and Mhamara reported a shortage of basic tools and equipment—such as brooms and cleaning supplies—needed by municipalities to maintain public hygiene. Addressing these gaps through low-cost, community-driven interventions could significantly improve environmental health, reduce health risks, and promote cleaner and more dignified living conditions in these underserved areas.

GENERAL RECOMMENDATION

A coordinated and collaborative approach among NGOs, local authorities, and community actors is essential to ensure that assistance efforts in the six targeted villages are efficient, complementary, and equitable. Clear communication and joint planning help prevent duplication of services, ensure optimal use of available resources, and enhance the overall impact of interventions. Regular coordination meetings, up-to-date service mapping, and alignment with sector standards and recommendations are critical to achieving this. Improved coordination also enables effective referral pathways between organizations, increasing the quality of response and reinforcing a sense of fairness among the affected population. This is particularly important in contexts like these villages, where many projects are interdependent or build on one another, and where existing efforts can be maximized through better integration. Some initial steps toward improved coordination are already in place, but further strengthening of these mechanisms will allow communities to fully benefit from every resource and initiative available.

[49] https://lebanonworks.net/spaces/lp-policies/com?

NEXT STEPS

After identifying the main needs and gaps through this report, as well as findings from the Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs), Naseej will organize six roundtable discussions—one in each of the targeted villages. These sessions will bring together approximately 150 participants in total (25 participants per discussion; 30% Lebanese, 70% Syrian, and at least 40% women).

The roundtables will engage community members, local leaders, technical experts, and municipal representatives to collaboratively identify and prioritize small-scale WASH interventions valued between EUR 5,000 and 10,000. Through these participatory dialogues, stakeholders will jointly analyze local water and sanitation challenges, exchange insights, and plan practical, community-led solutions that respond directly to identified needs.

The ASPIRE intervention proposed by Naseej directly responds to the critical WASH gaps and vulnerabilities identified in Akkar. By working closely with communities and public authorities, Naseej aims to expand equitable access to safe water, sanitation, solid waste management, and hygiene services for Syrian refugees and host communities, groups disproportionately affected by deteriorating infrastructure, service interruptions, and rising costs. Through small-scale but impactful WASH improvements, such as rehabilitating or installing inclusive sanitation and handwashing facilities, Naseej will ensure accessibility for persons with disabilities and other marginalized groups. In parallel, the distribution of tailored hygiene kits, including menstrual hygiene materials and infant care items, will address specific needs of women and children, who face higher exposure to infection and barriers to adequate hygiene practices. Naseej will also conduct a targeted needs assessment and apply clear vulnerability-based selection criteria to identify households living in poor conditions within informal Syrian refugee settlements, prioritizing those most affected by water scarcity, unsafe sanitation, and limited access to basic services. By aligning these activities with community engagement and behavior change efforts, the ASPIRE intervention will contribute to reducing disease transmission, strengthening community resilience, and improving overall living conditions in one of Lebanon’s most underserved regions.

ANNEXES

Annex 1: FGD Template

Focus Group Discussion: WASH assessment in Akkar (6 villages)

Facilitating and Guiding Questions

Themes:

1- water access, sanitation facilities, hygiene practices, health impacts, coping strategies, and priority needs.
2- Identify the main challenges, gaps, and needs of both refugees and host community members, in order to inform future programming and improve services.

Target Group: Refugee + host communities (Women, men). Elderlies, youth and PWD members are encouraged to be included. It is preferable to implement specific and separate groups for each nationality to prevent any tension that may occur. In addition, it is important that the group doesn't get influenced by others while sharing their opinions such as Lebanese women and Syrian youth…

Introduction and objectives: Welcome participants and thank them for their presence.
Briefly explain the purpose of the focus group: *My name is Joelle, and I am part of Naseej Foundation's assessment team. We are conducting a WASH assessment to understand better the situation of water, sanitation, and hygiene services in your community. Your participation in this discussion is completely voluntary—you may skip any question or stop at any time without any consequences. The conversation will take approximately [30 minutes], and everything you share will remain confidential; your answers will not be used to identify you personally. The information you provide will help us identify key challenges, gaps, and needs faced by both refugees and host community members, informing future programming and improving services. Please note that while your input is extremely valuable, there is no direct or immediate benefit or aid guaranteed from participating in this interview.*
اسمي جويل، وأنا جزء من فريق التقييم التابع لمؤسسة نسيج. تقوم حالياً بإجراء تقييم في مجال المياه والصرف الصحي والنظافة
لفهم وضع خدمات المياه والصرف الصحي والنظافة في مجتمعكم بشكل أفضل
مشاركتكم في هذا النقاش طوعية تمامًا—يمكنكم تخطي أي سؤال أو التوقف عن المشاركة في أي وقت دون أي تبعات. ستستغرق هذه المقابلة حوالي [30 دقيقة]، وكل ما ستشاركون به سيبقى
سرّيًا؛ ولن تُستخدم إجاباتكم لتحديد هويتكم الشخصية
المعلومات التي تقدمونها ستساعدنا في تحديد التحديات والفجوات والاحتياجات الأساسية التي يواجهها كل من اللاجئين وأفراد المجتمع المضيف، مما سيساهم في تحسين البرامج المستقبلية
وتطوير جودة الخدمات
يرجى ملاحظة أنه بالرغم من أن مساهمتكم ذات قيمة كبيرة، إلا أنه لا توجد أي فائدة أو مساعدة مباشرة أو فورية مضمونة نتيجة المشاركة في هذه المقابلة
Consent:
Do you provide consent to document, use, store, and share the information provided for reporting and communication purposes?
☐ YES ☐ NO (if NO, say thanks and let the person leave)

Icebreaker (Optional):
Consider starting with a brief icebreaker activity to create a comfortable and engaging environment. This can be a simple question or prompt related to the topic, allowing participants to introduce themselves and share their initial thoughts. Example: *عرف عن نفسك, هل كنت او ما تزال عضوا/مشتركا باي جمعية اخر؟*

Guiding Questions:

Target group:

Questions	Answers
Water Access & Quality	
What are your main sources of drinking water? (piped water/public tap, boreholes, springs, bottled/packaged water) ما هي المصادر الرئيسية لمياه الشرب لديكم؟ (مثل: مياه الأنابيب/الحنفيات العامة، الآبار الارتوازية، الينابيع، المياه المعبأة أو المعلبة)	
What are your main sources of sanitation water? (pipe water supply/public tap, boreholes, dug wells, springs, rivers, lakes, tanker trucks) ما هي المصادر الرئيسية التي تستخدمونها لمياه الصرف الصحي (مياه الاستخدامات المنزلية الأخرى)؟ (مثل: مياه الأنابيب/الحنفيات العامة، الآبار الارتوازية، الآبار المحفورة، الينابيع، الأنهار، البحيرات، صهاريج المياه)	
How reliable and safe is the water supply? (How often does the water supply get interrupted (cut off) in your household?) ما مدى موثوقية وسلامة مصدر المياه لديكم؟ (كل كم من الوقت تنقطع المياه في منزلكم؟ وهل تعتبرون المياه آمنة للاستخدام والشرب؟)	
What challenges do you face with water access and affordability? ما هي التحديات التي تواجهونها في الوصول إلى المياه وتكلفتها؟ (مثل: بُعد المصدر، ضعف التوفر، ارتفاع الأسعار، جودة المياه، أوقات الانقطاع، أو أي صعوبات أخرى) / Share stories and real life scenarios	Priority 1: Priority 2: Priority 3:
Sanitation & Hygiene	
What kinds of toilets do people use here? Are they close to homes and safe to use? ما أنواع المراحيض التي يستخدمها الناس هنا؟	

وهل هي قريبة من المنازل وآمنة للاستخدام؟	
are there any challenges with managing monthly periods (privacy, products, disposal)? هل هناك أي تحديات في إدارة فترة الحيض الشهرية؟ (مثل: الخصوصية، توفر المنتجات الصحية، أو طرق التخلص من القوط المستخدمة)؟	
How do families usually keep their hands and dishes clean? Are there any difficulties (lack of soap, water)? كيف تحافظ العائلات عادةً على نظافة أيديها وأواني الطعام؟ وهل هناك أي صعوبات تواجهونها في ذلك؟ (مثل: نقص في الصابون أو الماء)؟	
Health & Protection	
Have there been times when people got sick because of water or toilets? هل كانت هناك حالات مرض بسبب المياه أو المراحيض؟ (مثل: الإسهال، التهابات، أو أي أمراض مرتبطة بالمياه أو الصرف الصحي)؟	
Are there any safety worries — for example, going far to get water or using toilets at night? هل هناك أي مخاوف تتعلق بالسلامة؟ (على سبيل المثال: الذهاب لمسافات بعيدة لجلب المياه، أو استخدام المراحيض ليلاً)	
Coping and Priorities	
When there are no water or the toilets are not working, what do people usually do? عندما لا تتوفر المياه أو تكون المراحيض غير صالحة للاستخدام، ماذا يفعل الناس عادةً؟	
What are your most urgent WASH needs? ما هي أكثر احتياجاتكم إلحاحًا في مجال المياه والصرف الصحي والنظافة (WASH)؟ يرجى تحديد الأولويات.	Priority 1: Priority 2: Priority 3:
If you could improve one WASH service immediately, what would it be? إذا كان بإمكانكم تحسين خدمة واحدة في مجال المياه والصرف الصحي والنظافة (WASH) على الفور، فما هي؟	
Waste management	
How is solid waste usually managed in your community (collection, burning, dumping, recycling)? كيف يتم عادةً إدارة النفايات الصلبة في مجتمعكم؟ (مثل: الجمع، الحرق، الرمي في أماكن مخصصة، إعادة التدوير)	
Are there designated areas or containers for waste disposal? هل هناك أماكن أو حاويات مخصصة للتخلص من النفايات؟	
What challenges do you face in waste management (frequency of collection, cost, safety, environmental hazards)? (High costs of waste collecting, kitchen oil and leftover food in the drain blocking sewage,	

flies/rats surrounding garbage bins, toxic smells, medical waste in regular trash bags....)؟ ما هي التحديات التي تواجهونها في إدارة النفايات (مثل: تكرار الجمع، التكلفة، السلامة، المخاطر البيئية) (مثل: ارتفاع تكلفة جمع النفايات، تراكم زيت المطبخ وبقايا الطعام في المجاري مما يسبب انسدادها، وجود الذباب أو الفئران حول حاويات القمامة، الروائح السامة، وجود نفايات طبية في أكياس القمامة العادية، وغيرها...)	
Have waste issues affected water sources or sanitation facilities? هل أثرت مشاكل النفايات على مصادر المياه أو مرافق الصرف الصحي؟	
What solutions would you suggest to improve waste management in your community? ما الحلول التي تقترحونها لتحسين إدارة النفايات في مجتمعكم؟	

Closing:

- Thank the participants for their valuable insights, ideas, and suggestions.
- Express appreciation for their time and contribution to the discussion.
- Inform the participants about the next steps, such as the analysis of the discussion and outcomes and any follow-up activities.

Annex 2: KII template

Annex 2 – Key Informant Interview (KII)

My name is [interviewer's name], and I am part of Naseej Foundation's assessment team. We are conducting a WASH assessment to better understand the situation of water, sanitation, and hygiene services in your community. Our goal is to identify the main challenges, gaps, and needs of both refugees and host community members, in order to inform future programming and improve services.Your insights are very important to us because of your role and experience in this community.Before we begin, I would like to emphasize the following:

- Participation is voluntary.
- You may choose not to answer any question or stop the interview at any time.
- All information will remain confidential and will not be linked to your name in any reports.
- The discussion will take about 20–35 minutes.

Do I have your consent to proceed?

Interviewee Information

- Name:
- Position:
- Area coverage:

Water Supply

- What are the main water sources and how reliable are they?
- What are the main challenges with water access and quality?

Sanitation & Hygiene

- What sanitation facilities exist and are they accessible?
- What are the biggest sanitation and hygiene challenges?

Waste management

- How is solid waste currently managed in this area (municipality, NGOs, private actors)?
- What are the main challenges with solid waste collection, treatment, or disposal?
- Has waste accumulation impacted water supply, sanitation, or health?
- What systems (if any) exist for recycling or community awareness?
- What improvements are needed in solid waste management at the local level?

Institutional & Coordination

- Which actors are engaged in WASH here?
- How effective is coordination between actors?
- Do you see duplication or gaps?

Priorities & Recommendations

- What are the top 3 WASH needs in this area?
- What short-term interventions could help?
- What long-term solutions are needed?

Annex 3: Direct observation Checklist

- Condition of water sources (availability, safety, protection from contamination).

- Condition of sanitation facilities (cleanliness, accessibility, lighting, privacy).

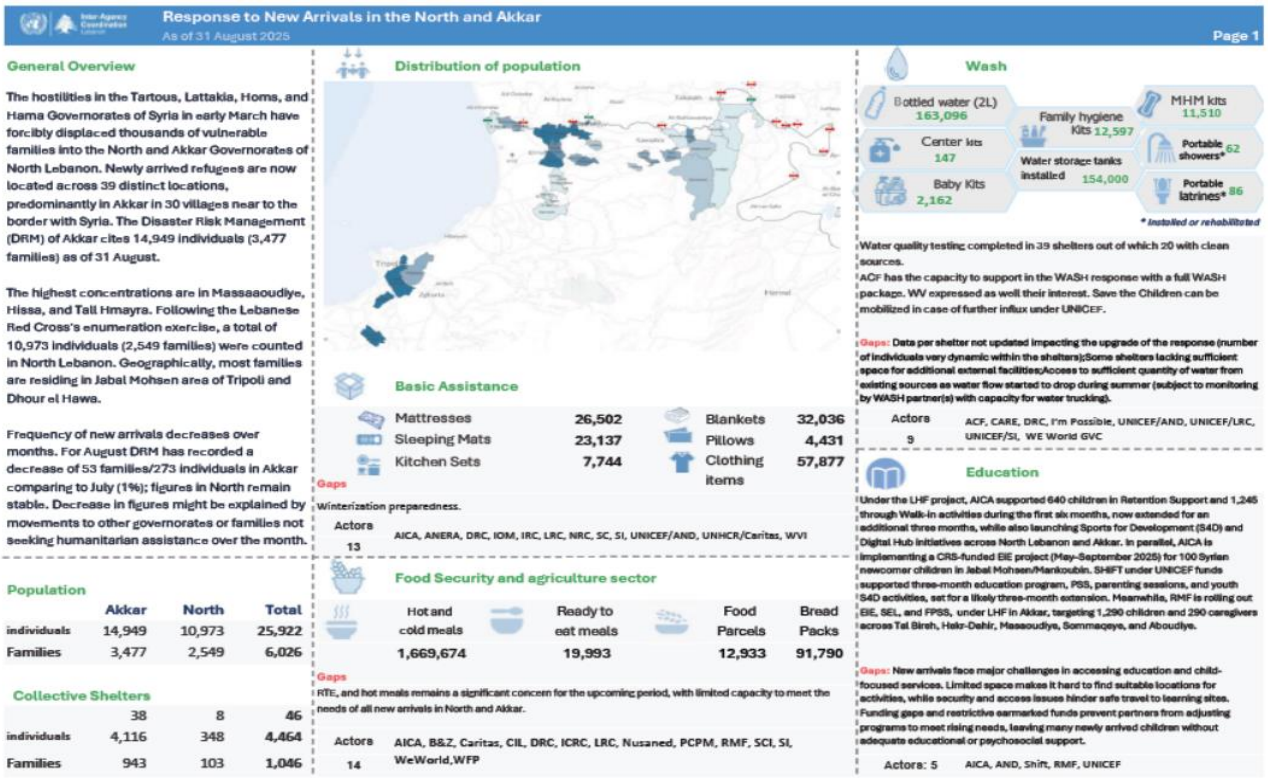
- Availability of handwashing facilities with soap and water.

- Evidence of solid waste management (collection, dumping, burning).

- Accessibility for persons with disabilities and elderly.

- Safety concerns (distance, lighting, gender-segregated facilities).

Annex 4: DRM report for new arrivals



Response to New Arrivals in the North and Akkar
As of 31 August 2025
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General Overview

The hostilities in the Tartous, Lattakia, Homs, and Hama Governorates of Syria in early March have forcibly displaced thousands of vulnerable families into the North and Akkar Governorates of North Lebanon. Newly arrived refugees are now located across 39 distinct locations, predominantly in Akkar in 30 villages near to the border with Syria. The Disaster Risk Management (DRM) of Akkar cites 14,949 individuals (3,477 families) as of 31 August.

The highest concentrations are in Massaaoudiye, Hissa, and Tall Hmayra. Following the Lebanese Red Cross's enumeration exercise, a total of 10,973 individuals (2,549 families) were counted in North Lebanon. Geographically, most families are residing in Jabal Mohsen area of Tripoli and Dhour el Hawa.

Frequency of new arrivals decreases over months. For August DRM has recorded a decrease of 53 families/273 individuals in Akkar comparing to July (1%); figures in North remain stable. Decrease in figures might be explained by movements to other governorates or families not seeking humanitarian assistance over the month.

Population

	Akkar	North	Total
individuals	14,949	10,973	25,922
Families	3,477	2,549	6,026

Collective Shelters

	38	8	46
individuals	4,116	348	4,464
Families	943	103	1,046

Distribution of population

Basic Assistance

Mattresses	26,502	Blankets	32,036
Sleeping Mats	23,137	Pillows	4,431
Kitchen Sets	7,744	Clothing items	57,877

Gaps
Winterization preparedness.

Actors 13: AICA, ANERA, DRC, IOM, IRC, LRC, NRC, SC, SI, UNICEF/AND, UNHCR/Caritas, WVI

Food Security and agriculture sector

Hot and cold meals	Ready to eat meals	Food Parcels	Bread Packs
1,669,674	19,993	12,933	91,790

Gaps
RTE, and hot meals remains a significant concern for the upcoming period, with limited capacity to meet the needs of all new arrivals in North and Akkar.

Actors 14: AICA, B&Z, Caritas, CIL, DRC, ICRC, LRC, Nusaned, PCPM, RMF, SCI, SI, WeWorld,WFP

Wash

Bottled water (2L) 163,096
Family hygiene Kits 12,597
MHM kits 11,510
Center kits 147
Water storage tanks installed 154,000
Portable showers* 62
Baby Kits 2,162
Portable latrines* 86

* Installed or rehabilitated

Water quality testing completed in 39 shelters out of which 20 with clean sources.
ACF has the capacity to support in the WASH response with a full WASH package. WV expressed as well their interest. Save the Children can be mobilized in case of further influx under UNICEF.

Gaps: Data per shelter not updated impacting the upgrade of the response (number of individuals very dynamic within the shelters);Some shelters lacking sufficient space for additional external facilities;Access to sufficient quantity of water from existing sources as water flow started to drop during summer (subject to monitoring by WASH partner(s) with capacity for water trucking).

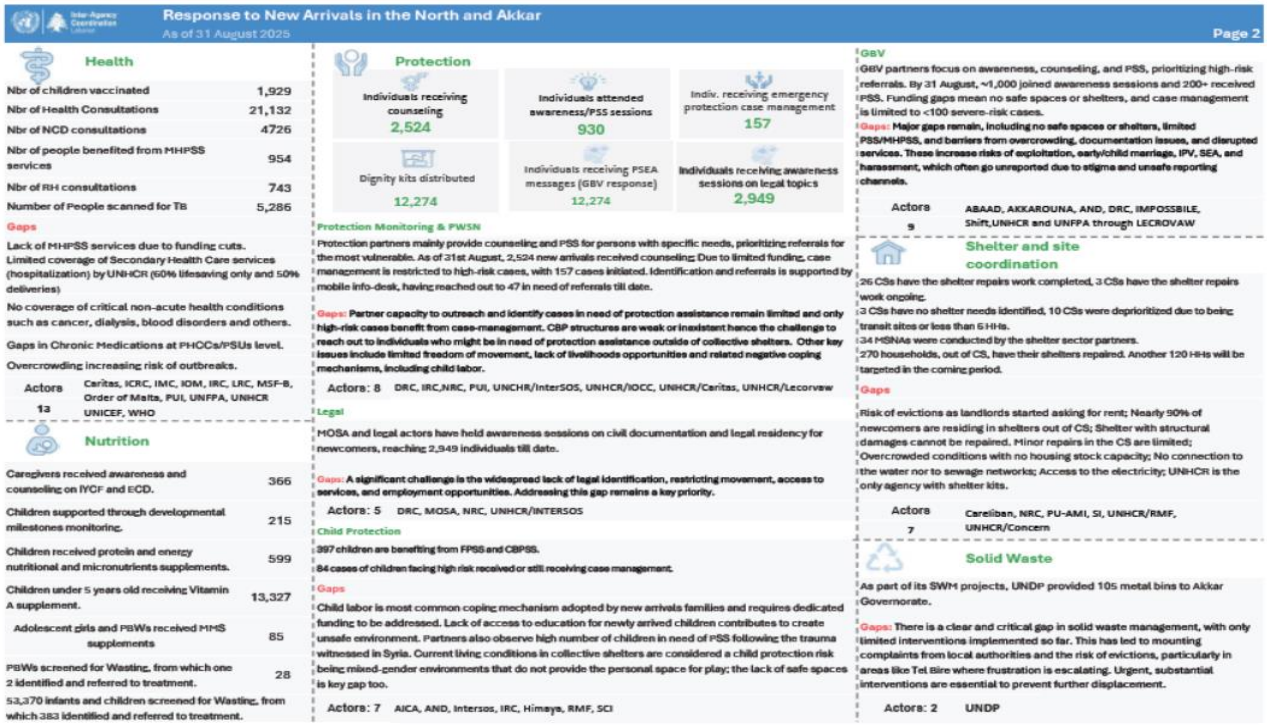
Actors 9: ACF, CARE, DRC, I'm Possible, UNICEF/AND, UNICEF/LRC, UNICEF/SI, WE World GVC

Education

Under the LHF project, AICA supported 640 children in Retention Support and 1,245 through Walk-in activities during the first six months, now extended for an additional three months, while also launching Sports for Development (S4D) and Digital Hub initiatives across North Lebanon and Akkar. In parallel, AICA is implementing a CRS-funded EIE project (May-September 2025) for 100 Syrian newcomer children in Jabal Mohsen/Mankoubin. SHIFT under UNICEF funds supported three-month education program, PSS, parenting sessions, and youth S4D activities, set for a likely three-month extension. Meanwhile, RMF is rolling out EIE, SEL, and FPSS, under LHF in Akkar, targeting 1,290 children and 290 caregivers across Tal Bireh, Hakr-Dahir, Massaoudiye, Sommaqeye, and Aboudiye.

Gaps: New arrivals face major challenges in accessing education and child-focused services. Limited space makes it hard to find suitable locations for activities, while security and access issues hinder safe travel to learning sites. Funding gaps and restrictive earmarked funds prevent partners from adjusting programs to meet rising needs, leaving many newly arrived children without adequate educational or psychosocial support.

Actors: 5: AICA, AND, Shift, RMF, UNICEF



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Health

Nbr of children vaccinated	1,929
Nbr of Health Consultations	21,132
Nbr of NCD consultations	4726
Nbr of people benefited from MHPSS services	954
Nbr of RH consultations	743
Number of People scanned for TB	5,286

Gaps
Lack of MHPSS services due to funding cuts.
Limited coverage of Secondary Health Care services (hospitalization) by UNHCR (60% lifesaving only and 50% deliveries)
No coverage of critical non-acute health conditions such as cancer, dialysis, blood disorders and others.
Gaps in Chronic Medications at PHCCs/PSUs level.
Overcrowding increasing risk of outbreaks.

Actors 13: Caritas, ICRC, IMC, IOM, IRC, LRC, MSF-B, Order of Malta, PUI, UNFPA, UNHCR UNICEF, WHO

Nutrition

Caregivers received awareness and counseling on IYCF and ECD.	366
Children supported through developmental milestones monitoring.	215
Children received protein and energy nutritional and micronutrients supplements.	599
Children under 5 years old receiving Vitamin A supplement.	13,327
Adolescent girls and PBWs received MMS supplements	85
PBWs screened for Wasting, from which one 2 identified and referred to treatment.	28
53,370 infants and children screened for Wasting, from which 383 identified and referred to treatment.	

Protection

Individuals receiving counseling 2,524
Individuals attended awareness/PSS sessions 930
Indiv. receiving emergency protection case management 157
Dignity kits distributed 12,274
Individuals receiving PSEA messages (GBV response) 12,274
Individuals receiving awareness sessions on legal topics 2,949

Protection Monitoring & PWSN
Protection partners mainly provide counseling and PSS for persons with specific needs, prioritizing referrals for the most vulnerable. As of 31st August, 2,524 new arrivals received counseling; Due to limited funding, case management is restricted to high-risk cases, with 157 cases initiated. Identification and referrals is supported by mobile info-desk, having reached out to 47 in need of referrals till date.

Gaps: Partner capacity to outreach and identify cases in need of protection assistance remain limited and only high-risk cases benefit from case-management. CBP structures are weak or inexistent hence the challenge to reach out to individuals who might be in need of protection assistance outside of collective shelters. Other key issues include limited freedom of movement, lack of livelihoods opportunities and related negative coping mechanisms, including child labor.

Actors: 8: DRC, IRC,NRC, PUI, UNCHR/InterSOS, UNHCR/IOCC, UNHCR/Caritas, UNHCR/Lecorvaw

Legal
MOSA and legal actors have held awareness sessions on civil documentation and legal residency for newcomers, reaching 2,949 individuals till date.

Gaps: A significant challenge is the widespread lack of legal identification, restricting movement, access to services, and employment opportunities. Addressing this gap remains a key priority.

Actors: 5: DRC, MOSA, NRC, UNHCR/INTERSOS

Child Protection
397 children are benefiting from FPSS and CBPSS.
84 cases of children facing high risk received or still receiving case management.

Gaps
Child labor is most common coping mechanism adopted by new arrivals families and requires dedicated funding to be addressed. Lack of access to education for newly arrived children contributes to create unsafe environment. Partners also observe high number of children in need of PSS following the trauma witnessed in Syria. Current living conditions in collective shelters are considered a child protection risk being mixed-gender environments that do not provide the personal space for play; the lack of safe spaces is key gap too.

Actors: 7: AICA, AND, Intersos, IRC, Himaya, RMF, SCI

GBV
GBV partners focus on awareness, counseling, and PSS, prioritizing high-risk referrals. By 31 August, ~1,000 joined awareness sessions and 200+ received PSS. Funding gaps mean no safe spaces or shelters, and case management is limited to <100 severe-risk cases.

Gaps: Major gaps remain, including no safe spaces or shelters, limited PSS/MHPSS, and barriers from overcrowding, documentation issues, and disrupted services. These increase risks of exploitation, early/child marriage, IPV, SEA, and harassment, which often go unreported due to stigma and unsafe reporting channels.

Actors 9: ABAAD, AKKAROUNA, AND, DRC, IMPOSSIBLE, Shift,UNHCR and UNFPA through LECROVAW

Shelter and site coordination
26 CSs have the shelter repairs work completed, 3 CSs have the shelter repairs work ongoing.
3 CSs have no shelter needs identified, 10 CSs were deprioritized due to being transit sites or less than 6 HHs.
34 MSNAs were conducted by the shelter sector partners.
270 households, out of CS, have their shelters repaired. Another 120 HHs will be targeted in the coming period.

Gaps
Risk of evictions as landlords started asking for rent; Nearly 90% of newcomers are residing in shelters out of CS; Shelter with structural damages cannot be repaired. Minor repairs in the CS are limited; Overcrowded conditions with no housing stock capacity; No connection to the water nor to sewage networks; Access to the electricity; UNHCR is the only agency with shelter kits.

Actors 7: Careliban, NRC, PU-AMI, SI, UNHCR/RMF, UNHCR/Concern

Solid Waste
As part of its SWM projects, UNDP provided 105 metal bins to Akkar Governorate.

Gaps: There is a clear and critical gap in solid waste management, with only limited interventions implemented so far. This has led to mounting complaints from local authorities and the risk of evictions, particularly in areas like Tel Bire where frustration is escalating. Urgent, substantial interventions are essential to prevent further displacement.

Actors: 2: UNDP