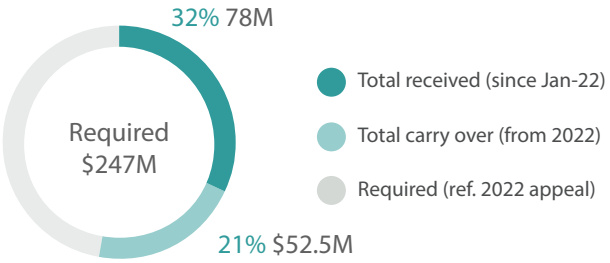
2022 end-year SECTOR DASHBOARD
Water Sector

Inter-Agency Coordination Lebanon

This dashboard summarizes the progress made by partners involved in the Lebanon Crisis Response Plan and highlights trends affecting people in need. The Water Sector in Lebanon is working towards its expected outcome: by 2023, more vulnerable people in Lebanon are accessing sufficient, safe water for drinking and domestic use with reduced health and environmental impacts from unsafe wastewater management.

2022 Sector Funding Status
As of 31st of December 2022



2022 population reached

2,688,071 People in need

48%
991,904 reached
2,067,041 targeted
923,529 female
887,314 male

2022 population figures by cohort

1,500,000 Lebanese individuals in need

47%
558,231 reached
1,200,000 targeted
624,000 female
576,000 male

990,000 Displaced Syrians in need

58%
433,578, reached
754,000 targeted
384,540 female
369,460 male

20,161 Palestinian Refugees from Syria (individuals)

1%
81 reached
11,600 targeted
6,032 female
5,568 male

177,910 Palestine Refugees in Lebanon (individuals)

0%
14 reached
101,441 targeted
52,749 female
48,692 male

Progress against targets

Key Achievements

of affected people assisted in permenant location with improved access to adequate quantity of safe water for drinking and for domestic use
692,175 / 1,706,500

# of affected people assisted with temporary access to adequate quantity of safe water for drinking and water for domestic use
299,729 / 360,541

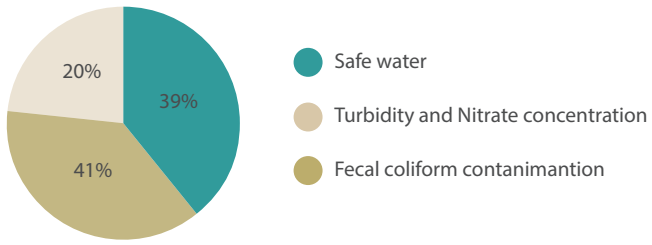
# of affected people with access to improved safe sanitation in temporary locations
299,495 / 270,040

# of rehabilitated latrines to meet environmentally friendly practices
585 / 2,220

# of individuals who have experienced a WASH behaviour change session/activity
228,762 / 615,000

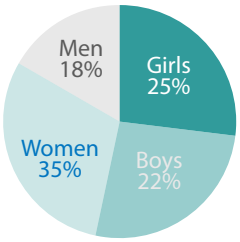
99% of the water sources in lebanon used by informal settlements have been tested. 63% of the overall sites show that the main water source is safe for drinking based on based on the presence of fecal coliforms, turbidity and Nitrate concentration. None of the sites resorting to Water trucking paid for by residents has safe drinking water when Water trucking paid for by NGO is predominantly safe (83%) as the NGOs are ensuring chlorination of the tankers and monitors the source of the water used for trucking.

Many protected boreholes would need additional water treatment as 41% show contamination with Fecal Coliforms. 70% of sites connected to networks have access to safe drinking water.

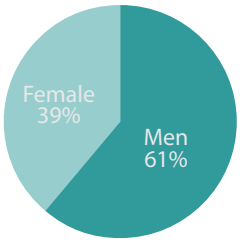


Quality of Water in Protected Boreholes used in Informal Settlements

Age/Gender Breakdown



men/women/boys/girls who have experienced a WASH behaviour change session/activity



# of affected women / men benefiting from WaSH livelihood opportunities

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SECTORAL SITUATION UPDATE

Nearly 2.8 million people in Lebanon are facing growing challenges with accessing safe and sufficient quantities of water for drinking and domestic use, and safe sanitation. The crises are compromising both institutional capacities to supply services as well as household purchasing power, driving poverty, deprivation and inhibiting access to basic services. Water systems are working a few hours a day intermittently. At the same time, the majority of wastewater treatment plants are no longer functioning due to electricity cuts and the unaffordability of fuel to run the backup power generators. In such circumstances, the cholera outbreak in Lebanon ongoing since early October 2022 posed an additional and urgent threat, seriously exacerbating public health risks. The Sector estimates that the WaSH-related needs across all 26 districts in Lebanon have increased by at least 25 per cent during 2022.

Lack of electricity from the public electrical grid impacts the water supply as the public grid forms the main energy source for 87 per cent of the water supply systems across Lebanon. An increased number of people from all population groups reported not having access to enough water. Bottled water remains the highest source of drinking water nevertheless, a noticeable decrease in bottled water use has been observed. The decrease in bottled water use might be linked to a six-fold increase in its price compared to 2021.
A high proportion of households reported issues related to accessing hygiene items (e.g., soap, cleaning products, diapers, etc.) and adopted alternative coping strategies. This reflects the economic conditions and households' impoverishment. Similarly, a significant proportion of women claimed that menstrual materials are too expensive.

KEY ACHIEVEMENTS OF THE SECTOR AT THE OUTPUT LEVEL

The National Water Sector Strategy (NWSS) has been updated in 2022 incorporating the comments from the Strategic Environmental and Social Assessment process and in-line with the five-year recovery plan introduced in mid-2022. This achievement is linked to the sector output 1.1 "Develop institutional governance to adopt key water strategies". In terms of supporting water institutions operations and building their capacity [Output 1.2], in 2022 the Sector provided to the Water Establishments: 11 equipment packages and/or software applications (27 per cent of the target), seconded five technical staff (no target was set), trained 30 employees (43 per cent of the target) of the Water Establishments, and conducted nine emergency repairs in stations to ensure water supply (no target was set).

Nearly 300,000 individuals, mainly displaced Syrians living in temporary locations, have been reached through the provision of adequate quantities of safe water for drinking and domestic use [Output 2.1]. In 2022, almost 1,830,000 m3 of safe drinking water was delivered via water trucking services, and over 160,000 m3 of household water storage was provided. Similarly, nearly 300,000 (83% of the target) vulnerable people in temporary locations have been reached with improved access to sanitation and safely managed wastewater services [Output 2.1]. Since the beginning of the year, over 502,000 m3 of sludge was removed from the informal settlements and safely disposed of in wastewater treatment plants. This amounts to the equivalent of over 200 Olympic size swimming pools of sludge that have been safely removed from the environment. In addition, 586 latrines were rehabilitated or constructed to meet environmentally friendly practices (26 per cent of the target). As part of the Sanitation Action Plan from 2020 to 2022, over 6,650 beneficiaries are served by 66 onsite decentralized wastewater treatment systems in 47 informal settlements and one Lebanese community. However, the plans to double that number by the end of 2022 failed due to the unexpended funding reduction.

In permanent locations, nearly 700,000 people (mainly Lebanese) were assisted with improved access to adequate quantities of safe water for drinking and domestic use through the construction of more than 12 km of the water network, the installation of three water treatment units and the rehabilitation of five springs, reaching 41 per cent of the sector target [Output 2.1]. The LCRP contributed to the solarization of 55 water supply systems across the country supported by the sector, which will contribute to lower reliance on fuel for water provision and will make an important contribution to the reduction of the carbon footprint. The projects are located in areas that align with the 322 cadastres hosting the most displaced and vulnerable Lebanese populations across the country (2022) as well as the Water Sector Vulnerability assessment (2021). In line with conflict sensitivity mainstreaming efforts, many of the locations are assessed through the UNDP Tension Monitoring System as hotspots, including Bekaa, Akkar and North Districts. Through the Stabilization Thematic group, the sector aims to increase the visibility of the stabilization component of the projects under LCRP, aiming to contribute to mitigating rising inter-communal tensions around water and sanitation in different areas of Lebanon.

Water, sanitation and hygiene (WaSH) livelihood opportunities were provided to 663 people (258 women, 405 men, of which 352 Lebanese and 310 Syrian), reaching 41 per cent of the annual target.

Nearly 230,000 individuals (56,249 girls, 50,507 boys, 80,603 women, and 41,403 men) had experienced a WaSH behaviour change session/activity covering different aspects of WaSH behaviours and waterborne diseases awareness and prevention.This represents 37 per cent of the sector target. Achievements lower than expected might be linked to the declining COVID-19 preventive and response activities in 2022.

Referral trends:

The Water sector received 2,289 referrals in 2022, representing 1.3 per cent of the total referrals made in Lebanon. 46 per cent of them have been accepted, 14 per cent were acknowledged, eight per cent were rejected, while for the remaining ones no response has been recorded yet. Nearly half of all referrals made to the Water sector were from Bekaa and Baalbek-El Hermel Governorates. Most of the referrals were done in Q1 and Q3 of 2022. In Q4, the Water sector witnessed the highest rate of accepted referrals (63 per cent), which may be linked to the ongoing cholera response.

Mainstreaming activities

The sector has updated its Protection Risk Analysis, which will be broadly rolled out with the 2023 sector strategy.

In terms of gender mainstreaming, in 2022 over 17,881 women and girls were supported with menstrual hygiene management kits in permanent and temporary locations, and 4,019 mothers were provided with diapers and other critical items through baby kits distributions. 571 Latrines have been rehabilitated to meet GBV standards, including safe pathways, privacy and lighting, benefitting more than 1,600 women and girls.

1,089 elderly with special needs were provided with safe access to improved WaSH services in 2022, and 251 elderly kits containing dignity items were distributed.

In 2022, 82 Latrines have been rehabilitated to meet the special needs of people living with disabilities. Overall, a total of 478 individuals living with disability reported improved access to safe WaSH services (270 motor disability, 37 audio, 59 visual, 112 intellectual).

Conflict Sensitivity: Standard Operating Procedures for dealing with issues with landlords, suppliers, and municipalities have been developed by the Sanitation and Community Engagement Thematic Groups of the Water sector. The UNDP/ARK tension monitoring dashboard is shared with Sector partners to be taken into consideration for prioritising interventions. The Sector also works to improve tensions mapping linked to unequal access to water, aiming to support partners' prioritisation of interventions better.

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KEY CONTRIBUTIONS OF THE SECTOR TO LCRP OUTCOME AND IMPACTS

The Water sector partners' activities contributed to the LCRP impact 3 through the sector outcome 1: "Strengthen national, regional and local public institutions' capacities to deliver improved public policies, goods and services (water and sanitation)" (outputs 1.1. and 1.2.), as well as to LCRP impact 2 and 6 through the sector outcome 2: "More vulnerable people in Lebanon are using safely managed drinking water and sanitation services whilst reducing health and environmental risks and improving water quality by increasing the proportion of wastewater that is safely treated" (outputs 2.1. and 2.2.).

The sector contribution to the LCRP Impact 3: "Vulnerable populations have equitable access to quality basic services (health, education, water, energy, solid waste management, shelter and social protection) through national (public and private) systems" was through supporting improvements to water and wastewater systems that are primarily managed by the Water Establishments, while also supporting the Ministry of Energy and Water (MoEW) planning, implementing, monitoring and managing processes. The Sector support included rehabilitation and maintenance of water and sanitation infrastructure, the secondment of five technical staff to the Water Establishments, capacity building with 30 Water Establishments' employees receiving training, and 11 equipment packages and/or software applications provided to Water Establishments during 2022.

To ensure that the immediate humanitarian needs of the most vulnerable populations are met (LCRP Impact 2), the Sector was enhancing access to water, sanitation and hygiene, simultaneously mitigating WaSH-related disease outbreaks for all population groups residing in Lebanon. The majority of displaced persons from Syria living in informal settlements were assisted with direct water trucking and dislodging services to ensure immediate and temporary service delivery since the context for implementation of more sustainable solutions remains challenging. In the last quarter of the year, people from all population groups and residing in all location types were reached with the multi-layered cholera response under the case-area targeted intervention (CATI) and community-level support.

The Sector continued working on more sustainable sanitation services for informal settlements and one underserved Lebanese community through the installation of 48 on-site wastewater treatment units benefitting 6,652 people to mitigate and minimize their environmental impact on agricultural lands and water bodies. This activity contributes to the LCRP Impact 6: "Mitigated environmental impact of the Syria crisis to avoid further degradation of the natural eco-system and ensure its long-term sustainability".

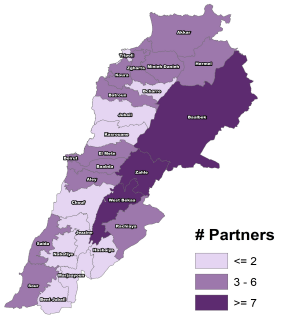
Due to data unavailability by the time of reporting, it was not possible to evaluate the progress against the outcome indicators. The data for outcome indicators: "% increase in proportion of population using safely managed drinking water services (SDG 6.1.1)", "% increase in proportion of wastewater safely treated" and "% increase of boys, girls, women and men with appropriate hygiene knowledge, attitudes and practices" will be collected along 2023 (MICS/JMP/SAP/HCMT assessments), and the results will be available for the final LCRP 2022-2023 reporting.

CHALLENGES, RISKS AND MITIGATION MEASURES

The current economic breakdown and energy crisis have further undermined already weak Lebanese public water supply services threatening the Sector's financial viability and basic operability by sharply rising costs and lowering revenues. The Sector is particularly impacted by extremely low electricity production (with some months with no electricity at all) by the Electricite du Liban (EDL) which forms the main energy source for the vast majority of the water supply systems across Lebanon, which severely increases the water production and distribution costs. The current tariffs are inadequate to the context, while collection and subscription rates are chronically insufficient, contributing to a huge gap between expenses and revenues, resulting in the inability of Water Establishments to cover operation and maintenance costs. Currently, there is virtually no support for Water Establishments coming from the national budget, and the utilities are on the brink of collapse. The sector advocated with the Government to further prioritize energy supply for the Water sector and with donors to maintain operation and maintenance support to Water Establishments. Without public water services, people are left with no choice but to buy water from private sources. The main available alternative is the private water trucking sector, which is able to influence and control the market, imposing inflated fees, with limited oversight from the state. This alternative market has seen rapid growth and risks undermining public service provision. Similarly, the bottled water industry has expanded to an unprecedented scale and is marked by a lack of oversight. In this context, a high portion of the population is forced to rely on water sources of questionable quality. The cholera outbreak that started in early October 2022 poses additional challenges, which the sector has aimed to overcome through the chlorination of private water tankers in collaboration with municipalities and the promotion of household-level water treatment solutions. The Water sector has been increasingly facing funding constraints that severely impact the support to water supply and wastewater treatment infrastructure serving all population groups in Lebanon, as well as WaSH service provision for more than 300,000 displaced Syrians living in Informal Settlements across the country. To mitigate the impact of the perceived funding constraints in 2023 and aim to provide access to WaSH in a more equitable way, the sector has adjusted the strategy for WaSH service provision to Informal Settlements and will roll it out during 2023 focusing on the following four areas: 1) reduce reliance on water trucking provided by humanitarian actors 2) reduce reliance on desludging services 3) manage conflict around access to water and sanitation 4) manage the Increased in theft and selling accidents of WaSH facilities.

Reporting Partners for 2022

The achievements described in this dashboard are the collective work of the following organizations: UNICEF, ACF Spain, ACTED, ADRA, ANERA, ArcheNova and Tankamel Sawa, CISP, DPNA, Leb-Relief, LOST, NRC, OXFAM, SAWA Group, Save the Children, Solidarites International, Tabitha-dorcas and World Vision (WVI).



CASE STUDIES

Lebanese Organization for Studies and Training (LOST) - Manar and the joy of handwashing

"I can wash my hands by myself", that is what Manar Hamad Hamoud told the WaSH team of the Lebanese Organization for Studies and Training (LOST), a WaSH sector partner active in Baalbek el Hermel governorate. This came about after Manar, a 6-year-old girl with Down's Syndrome, attended one of the many ongoing Health Promotion sessions of the UNICEF-funded program, at the IS Haour Taala 015 in Baalbek El Hermel. Intrigued by her enthusiasm, the Health Promoter asked Manar to show how she washes her hands, so she stood up and demonstrated how it is done proudly with motivation and excitement. After finishing with the hand movements, Manar was not done, as she added "I use water to wash my hands, my face and to drink, my mother uses water to wash dishes and clothes". The ever-shy child seemed to be in her element, she attended another session on personal hygiene and handwashing, in which she played with the other kids, showing off her handwashing techniques. "She is rarely this confident and excited about any activity" her mother told us at the end of the visit.

Action Against Hunger - Improved access to WaSH

ACF actions have a positive impact on the lives of many habitants of the Bekaa valley, not only on the displaced Syrians but also on the Lebanese host community, thus helping alleviate the risk of tensions between the two parties. Like many displaced Syrians, Suleiman came to Lebanon in 2012 with his wife and four children to find safety and asylum. Upon their arrival, the situation was very chaotic, the site where he settled was severely unequipped, and they did not have the means to improve the situation. Our interventions helped address the most urgent needs of the family in the informal tented settlement in which they live. "The wastewater that used to be discharged above the ground outside our settlement caused a lot of tension between our neighbours and our community since the bad smell was very annoying. This led the landlord to give us an eviction notice. However, when the greywater systems were installed by the organization, the discharge of wastewater into the soil was heavily reduced and the bad smell was eliminated. So, today, we don't have tensions with the neighbours, and we are no longer afraid of eviction", he explains.

UN-Habitat - Improving the well-being of host and displaced populations in Maraach sub-neighbourhood in Bourj Hammoud

Maraach, one of the most densely populated areas in the Middle East, has some 6,000 residents composed of roughly 60 per cent vulnerable Lebanese and 40 per cent displaced Syrian and other nationalities. Residents face many challenges including poverty, limited access to water and electricity; few safe, accessible public spaces; and are exposed to unsafe electrical wiring and run-down buildings and common spaces which were badly damaged by the Beirut Port explosion last year. From 2019 to 2022, UN-Habitat - in partnership with the Polish Center for International Aid (PCPM) through funding from Polish Aid and the Government of Japan - rehabilitated 5 alleyways in Maraach, Bourj Hammoud to address some of these challenges. The 5 alleyways in Maraach, Bourj Hammoud were rehabilitated inside and out. In terms of WaSH interventions included the installation of 810 meters network, pavement of 5 alleyways to mitigate water ponding issues and enhance mobility in the area, installation of 750 meters of middle street stormwater channels, upgrading of 55 manhole units of sewers and stormwater channels to avoid future ponding and allow proper wastewater management. Teghrid Khantrashian, mother of three, who has been living in Maraach neighbourhood in Bourj Hammoud area for the past 10 years, said that "passing through our neighbourhood's alleyways felt cold and frightening."

The deterioration of the overall infrastructure systems in the area, and particularly the absence of proper lighting and rainwater drainage systems, limited her capability and other's dwellers as well to wander the alleyways next to their homes. "Although I have lived in the same place for several years, I could not connect to this neighbourhood because I did not feel safe to walk in my surroundings," says Khantrashian. Her children are now finding it easier to walk to school without getting their shoes wet after the new drainage system was installed as it prevents rainwater from flooding the streets.