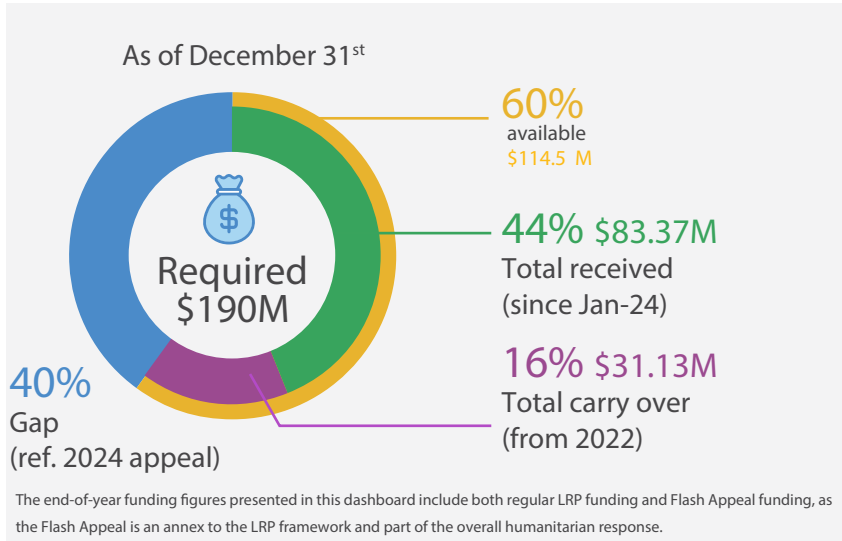




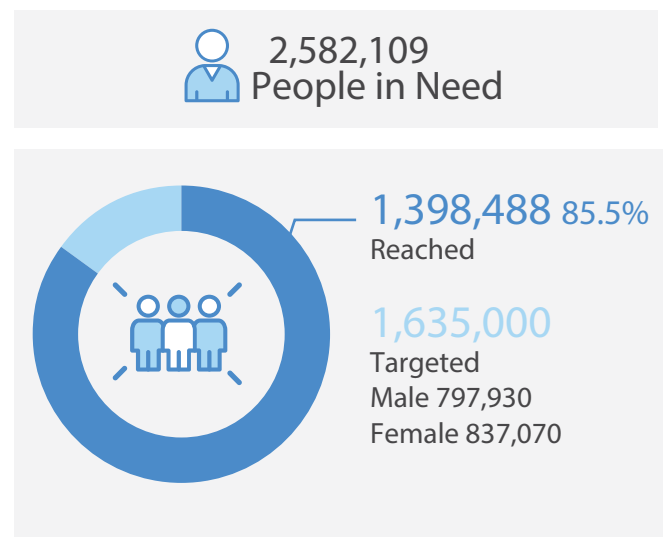
The 2024 WaSH sector end-year dashboard summarizes the progress made by WaSH sector partners involved in the Lebanon Response Plan (LRP), identifies key challenges and priorities, and highlights trends affecting people in need. The WaSH sector in Lebanon is working to: Outcome 1: Strengthen national, regional and local public institutions' capacities to deliver improved public policies, goods and services (water and sanitation). 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.

This dashboard is based on information reported by WaSH sector partners operating under the sector strategy discussed with and endorsed by the Ministry of Energy and Water.

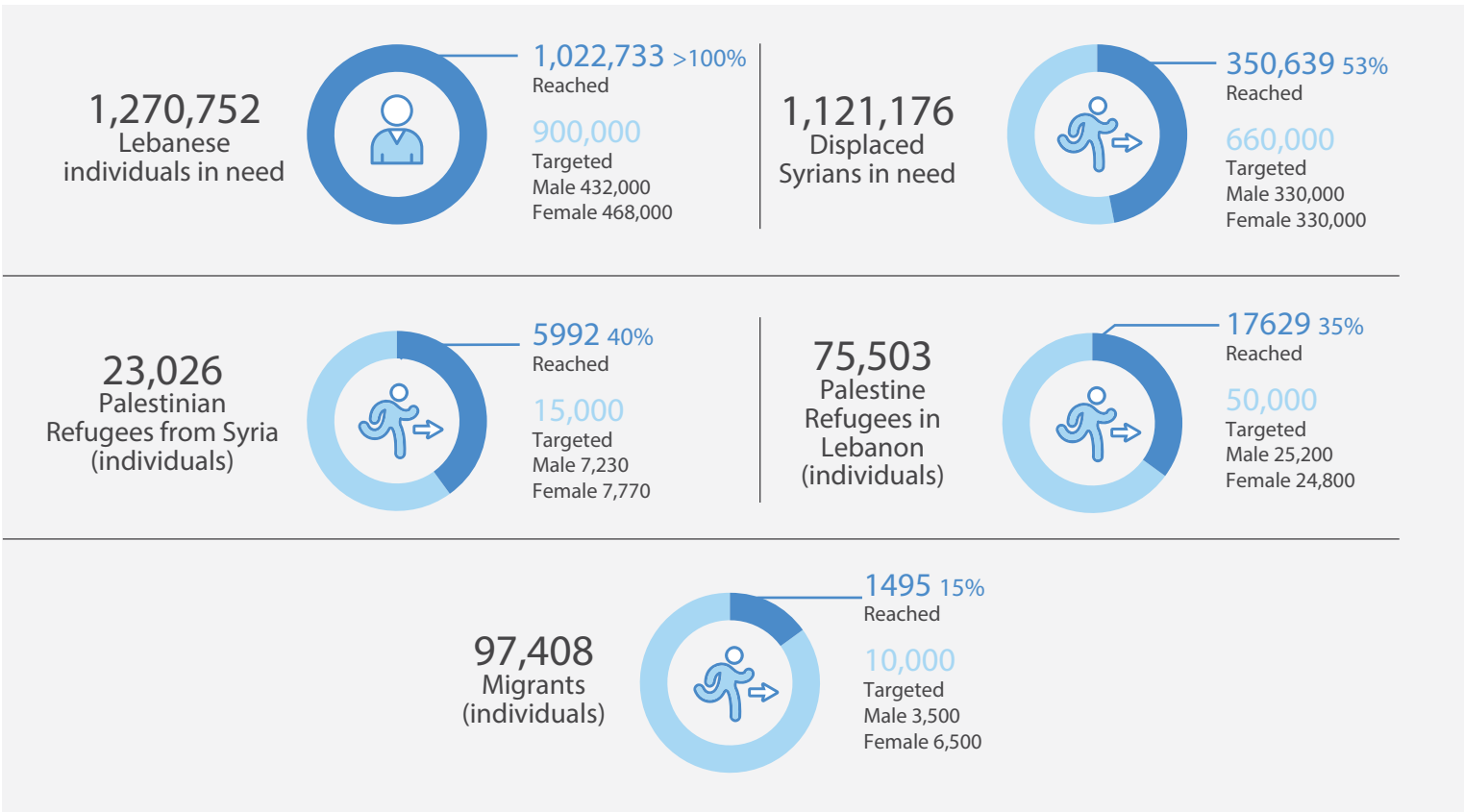
## 2024 Sector Funding Status



## 2024 Population Reached



## 2024 Population Figures by Cohort



## Analysis of Achievements of the Sector at the Output Level

**Output 1.2:** Strengthening institutional governance to adopt key water strategies

The National Water Sector Strategy (NWSS) has been updated for 2024-2035. The main strategy document embeds the priority projects for each Water Establishment and the five-year water sector recovery plan. In terms of supporting water institutions' operations and building their capacity (under Output 1.2, the sector partners continued to second 8 technical staff based in Water Establishments).

**Output 2.1:** The most vulnerable people have secured access to a sufficient quantity of quality, reliable and equitable Water services

The WaSH sector partners provided temporary access to safe water for drinking and domestic use under output 2.1 to nearly 370,000 individuals. Such activities used to be predominantly provided to displaced Syrians in informal settlements however in 2024, given the full-fledged escalation of hostilities and mass displacement, nearly 35 % of the beneficiaries were Lebanese Internally Displaced Persons (IDPs) sheltering in collective shelters across the country. Nearly 700,000 cubic meters of water were provided via the water trucking modality to informal settlements and collective shelters. The support in informal settlements, however, fell short of the agreed minimum standard of 35 litres per capita per day, averaging at only 15-20 litres per capita per day in the second and third quarter of the year. This is primarily attributed to the funding constraints affecting the sector's programs in temporary locations. For permanent locations under Output 2.1, stabilization projects continue to benefit all population groups. Under the 2024 Lebanon Response Plan (LRP) framework, the sector partners reported ongoing or completed solarization activities at 39 water stations, benefiting approximately 515,000 people (375,000 Lebanese and 140,000 Syrians). In total, more than 5,330 kW of photovoltaic panels have been installed.

The large-scale support program to Water Establishments for water infrastructure repair and maintenance was suspended from October 2023 until June 2024, and such activities were very limited and focused mainly on emergency support to the South Lebanon Water Establishment linked to the ongoing cross-border conflict escalation. The large-scale support program to essential water and sanitation services (EU Program) has resumed in June 2024. Until the end of 2024 more than 500 repairs across the country have been conducted, ensuring the delivery of around 400,000 cubic meters per day of water to approximately 4 million people. The repair of 32 chlorination systems maintained proper treatment of nearly 33,000 cubic meters per day and supplied safe water to approximately 400 thousand people.

**Output 2.2:** The most vulnerable people have secured access to sufficient quantity of quality, reliable and equitable Sanitation services

Under Output 2.2, which aims to improve access to sanitation and safely managed wastewater services for the most vulnerable, 226,944 individuals (91% of sector's target) in collective shelters and informal settlements received assistance through desludging, emergency toilets and showers installation, toilet rehabilitation and maintenance of sanitation facilities. Nearly 250,000 cubic meters of sludge have been removed from informal settlements and IDP collective shelters and safely disposed of in wastewater treatment plants. In 2024, for permanent locations, under Output 2.2, the EU program supported the operation of 11 wastewater treatment systems including 35 lifting/pumping stations.

In addition to this, to respond to the escalation in conflict, the sector supported a further nine wastewater treatment systems and three pumping stations for a duration of six months. In total, 931,363 individuals were supported with improved wastewater services. Two wastewater stations that handle the wastewater of more than 40,000 beneficiaries were solarized.

**Output 2.3:** People in need have secured access to critical hygiene items and adopt sustainable and socially responsible WaSH behavior.

In the area of access to hygiene items and WaSH behavior change under Output 2.3, over 294,351 individuals (73% of the sector's target) were supported. That includes distribution of WaSH NFI, such as nearly 80,000 emergency family hygiene kits, over 25,000 hygiene consumables kits, and over 41,000 other hygiene kits (menstrual hygiene, baby kits, elderly/incontinence kits, centres cleaning kits). Some of the hygiene item distributions in 2024 included materials on awareness raising of unexploded ordnance, landmines, and white phosphorus by including LMAC-approved years in the hygiene item distributions. The sector's achievement has increased since 2023 due to the full-fledged escalation of hostilities and mass displacement.

### Mainstreaming activities

**Environment:** Environmental considerations were equally emphasized, with a focus on promoting renewable energy solutions, such as the solarization of water pumping stations and wastewater infrastructure, to reduce reliance on fossil fuels and enhance climate resilience. The sector collaborated with the environmental engineers within the sector to come up with environment-friendly solutions even during the emergency phase of the response. Environmental markers were applied during project planning to ensure sustainability and mitigate risks of pollution or resource depletion, further strengthening Lebanon's resilience to environmental challenges.

### Protection from Sexual Exploitation and Abuse (PSEA)

Protection measures were strengthened through robust community feedback mechanisms, enabling inclusive service delivery and addressing grievances from vulnerable groups, including persons with disabilities and children. The strategy incorporated the Prevention of Sexual Exploitation and Abuse (PSEA) through staff training, awareness campaigns, and ensuring gender-balanced distribution teams. To further reinforce PSEA mainstreaming, the sector appointed two dedicated PSEA Resource Persons to cover all regions of Lebanon. These Resource Persons play a critical role in engaging and supporting affected populations by facilitating community-based awareness initiatives, emphasizing that assistance is never conditional upon sexual favours, and collaborating with NGO focal points to enhance awareness campaigns. They ensure the visibility of NGO focal points' identities, disseminate contact information for SEA reporting, and develop prevention strategies grounded in risk analysis. Their responsibilities include capacity-building efforts such as designing and implementing PSEA training programs for sector partners and collaborating with external organizations to bolster sector-wide capacity. In terms of coordination and partnerships, they actively engage with the gender working group and other relevant bodies to share information, best practices, and challenges, while fostering collaboration with other PSEA focal points for a cohesive approach. Additionally, they maintain accurate documentation of PSEA activities and analyze lessons learned to continuously improve strategies, ensuring that PSEA remains a central component of the sector's interventions.



## Conflict Sensitivity

Conflict sensitivity was central to the sector's approach, ensuring that all interventions avoided exacerbating tensions and promoted equitable service delivery. The sector worked closely with the Social Stability sector, utilizing the Tensions Monitoring System to identify and mitigate water-related communal tensions, particularly in mixed, refugee-hosting and IDP-hosting communities. The Do-No-Harm principle was embedded across all programming to foster stability and trust through WaSH activities. Additionally, the sector coordinated with the conflict sensitivity focal point to develop two key tools that enhanced intervention planning and conflict mitigation.

The Cadastre Prioritization Tool - Affected by IDP was developed to support WaSH Sector partners prioritize cadastres impacted by internal displacement. This tool categorizes cadastres and offers critical insights for prioritizing system-level WaSH interventions, such as water and sanitation network maintenance and the establishment of public water points. The second tool, the WaSH Sector Tension Alert for Informal Settlements, tracks shifts in tension dynamics by comparing conditions before and after excluding specific cadastres from targeting. It provides an overview of cadastres at risk of inter- and intra-communal tensions due to budget cuts affecting WaSH services in Informal Settlements. These tools enable data-driven decision-making to ensure that interventions remain equitable and minimize potential conflicts.

## Gender and GBV Risk Mitigation

The sector has developed an annex to the recent one-pager sector alert, focusing on the challenges faced by women. This

annex highlights the critical struggles women face in accessing Water, Sanitation, and Hygiene (WaSH) services in informal settlements in Lebanon. These challenges have been exacerbated by significant funding cuts over the past four years. The declining financial support has directly impacted the availability and quality of WaSH services, disproportionately affecting women and girls who already face substantial barriers in these areas. Continuous decrease in funding is expected to further exacerbate the challenges faced by vulnerable population groups in accessing basic services.

## Advocacy Thematic Group:

Activation of The Advocacy Thematic Group: The WaSH sector has recognized advocacy as a crucial approach to tackling the major obstacles it is currently experiencing, especially the decreasing funding trend as opposed to the increasing needs among the different population groups. This approach was thoroughly highlighted in the recent sector alert paper, through the detailed maps we developed, and the comprehensive presentation delivered at the Humanitarian Country Team (HCT). Furthermore, the Advocacy Thematic Group has been activated with a thorough integration of cross-cutting themes embedded in the LRP. These include disability inclusion, protection, conflict sensitivity, energy, and environment, all of which are directly related to the current challenges such as access limitations faced by displaced Syrians and the ongoing hostilities in South Lebanon. This group comprises participants representing each of the cross-cutting themes, in addition to WaSH experts, and is tasked with the development of advocacy papers aiming to support the sector in overcoming the current challenges, ensuring that our advocacy efforts are holistic and inclusive

## Prioritization and Localization:

The WaSH sector adopted a comprehensive, data-driven, and needs-based approach to prioritize interventions, ensuring that support reached the most vulnerable populations. Central to this strategy were tools like the Cadastre Prioritization Tool and the WaSH Sector Tension Alert – informal settlements, which helped identify areas most affected by internal displacement, hostilities, and funding gaps. These tools enabled the sector to map out and target high-priority regions, focusing on areas where vulnerabilities were compounded by conflict, resource scarcity, and displacement pressures.

The prioritization process also incorporated findings from the Geo-Prioritization Exercise of 2024, which identified waterborne disease risks hotspots, conflict-impacted zones, and underserved communities as critical areas of intervention. During the escalation, the sector concentrated its direct interventions on IDPs residing in collective shelters, with particular attention given to shelters hosting high numbers of children, women, older people, and persons with disabilities. Simultaneously, system-level support was maintained to address the needs of affected populations living outside of collective shelters, ensuring a balanced response across diverse groups.

Vulnerability scoring further refined the sector's targeting efforts, incorporating indicators such as access to water, sanitation, hygiene behavior, environmental risks, and economic conditions. This approach allowed the sector to prioritize populations in informal settlements, collective shelters, and regions heavily impacted by hostilities. Special emphasis was placed on addressing the needs of high-risk groups, including displaced Syrians, women, children, persons with disabilities, and those in communities with limited access to services.

During the emergency, when many international sector partners faced significant challenges in delivering assistance to people in need, local partners became the cornerstone for connecting WaSH sector services to affected populations in numerous areas. These local actors, deeply embedded in their communities, played a pivotal role in ensuring that services reached those most in need, often navigating complex and rapidly evolving situations with agility and resourcefulness. The sector has prioritized supporting local NGOs, civil society organizations, and community-based committees, empowering them to play central roles in identifying needs, planning, and implementing WaSH activities. This localized approach leverages their intimate knowledge of community dynamics and ensures that interventions are both culturally sensitive and contextually appropriate. Moreover, recognizing this critical role, the sector has actively advocated for strengthening the technical, financial, and managerial capacities of Lebanon's Water Establishments (WEs) to ensure more sustainable and inclusive service delivery.

To reinforce these efforts, the sector allocated funding and operational support specifically to local responders, ensuring they had the necessary resources and capacity to manage service delivery effectively in under-served and high-vulnerability areas. This approach not only bridged gaps during critical emergencies but also laid the foundation for a more decentralized and sustainable WaSH ecosystem, where local actors are empowered to lead in service provision and resilience-building.

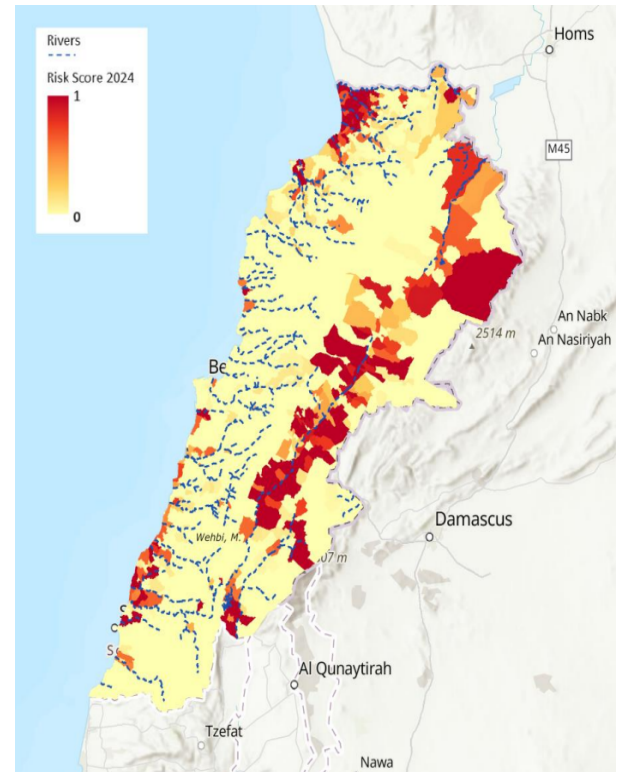
## Water borne Diseases (WBD) Risk Map:

The cholera risk map that was developed in 2022 has served as a crucial tool for identifying high-risk areas and guiding emergency interventions. Building upon this framework, an updated WBD risk map for 2024 has been developed, incorporating a comprehensive set of indicators to assess the vulnerability of different cadastres to waterborne diseases. This updated map highlights areas with dense populations, inadequate infrastructure, and limited access to safe water and sanitation facilities, providing valuable insights for targeted intervention strategies. This map serves as a visual representation of the areas at highest risk for water-borne diseases, providing stakeholders with a clear understanding of the areas that require immediate attention and action. High-risk areas identified on the map should be prioritized for targeted interventions, including:

- **Vaccination campaigns:** High-risk areas should be prioritized for vaccination campaigns to mitigate the risk of outbreaks.
- **Water quality monitoring:** Enhanced water quality monitoring should be conducted in high-risk areas to detect and promptly address contamination.
- **Sanitation improvements:** Infrastructure upgrades and sanitation services should be prioritized in areas with inadequate facilities to reduce the risk of disease transmission.
- **Community education:** Public awareness campaigns should be tailored to high-risk areas, focusing on hygiene practices, safe water consumption, and disease prevention measures.

Reference: Wehbi, M., Pajak, J., & Younes, H. (2024). Update of water-borne diseases risk map as a warning for new threats in Lebanon.

<https://data.unhcr.org/en/documents/details/109156>



## Key Contributions of the Sector to LRP Outcome and Impacts

By bolstering capacity-building efforts and enhancing institutional governance, water institutions can develop and implement improved policies and strategies. This, in turn, facilitates the maintenance of services at national, regional, and local levels—aligning with LRP Strategic SO3: Support service provision through the national system, including national rapid response capacity, and SO4: Reinforce Lebanon's economic, social, and environmental stability. Additionally, such efforts contribute to providing WaSH services to vulnerable populations residing in permanent locations, aligning with Strategic Objective 2. On the other hand, supporting vulnerable populations in all their diversity, including gender, age, and disability, to ensure equitable and inclusive access to water and wastewater services. This support, coupled with the promotion of sustainable and responsible social and WaSH behaviour, works to reduce health and enhance the protection of the vulnerable population. This dual approach contributes to addressing SO1: Enhance the protection of the vulnerable population and SO2: Provide immediate humanitarian assistance to the vulnerable populations to ensure their critical needs are met.

At the sectoral outcomes level, they support and complement each other. Sector outcome 1 seeks to improve policies and public institutions' capacities to deliver services, thereby promoting more equitable access to services for vulnerable populations in all their diversity under Sector Outcome 2. Conversely, actions implemented under Sector Outcome 2 (rehabilitation of water pumping stations, solarisation, operation and maintenance support to wastewater treatment plants, etc.) not only support the delivery of safe WaSH services to vulnerable populations but also contribute to the public institutions' performance optimisation and increasing cost recovery under Sector Outcome 1. Due to data unavailability at the time of reporting, it was not possible to evaluate the progress against the outcome indicators. The data for outcome indicators: "percentage increase in proportion of population using safely managed drinking water services (SDG 6.1.1)", "percentage increase in proportion of wastewater safely treated", and "percentage increase of boys, girls, women and men with appropriate hygiene knowledge, attitudes and practices" will be finalized in 2025 (MICS, WAP 2.0 assessments), and the results will be available for a mid-year review of the 2025 Lebanon Response Plan.



## Challenges, Risks and Mitigation Measures

The significant decrease in funding puts the vital WaSH services provision for informal settlements at risk, which may result in suspending water trucking and desludging services for some informal settlements. This further exacerbates public health and tension risks.

Between September 2023 and June 2024, no broader repair and maintenance support to Water Establishments has taken place and it was mainly limited to emergency support to the South Lebanon Water Establishment linked to the cross-border escalation of hostilities. Repair and maintenance support to wastewater treatment plants across the country enables wastewater treatment only at the primary and secondary levels. More funds and capacity building are required to increase the level of treatment to tertiary. Due to the high-scale escalation of hostilities, a total of 14 water and wastewater utility staff were killed and two injured whilst carrying out their duties in operating and maintaining water and wastewater systems, most of these in the south of Lebanon. Approximately 1.5 million people were directly affected by the impact of the damage to water and wastewater infrastructure. At least 45 water facilities (including one after the cessation of hostilities) and extensive sections of water and wastewater networks were damaged or destroyed. The internal displacement of 899,725 people resulted in sudden surges in demand for

limited water and wastewater services, impacting the availability of water and increasing environmental risks. Due to the conflict, water and wastewater services were also suspended for many displaced Syrians residing in informal settlements.

Initial assessments suggest at least US\$51 million is urgently needed to resume basic water and wastewater services for 1.5 million people, although systems in borderline localities remain inaccessible and other facilities require Unexploded ordnance (UXO) clearance prior to assessments and repairs being made. Without the resumption of facility operation, the full extent and impact of the damages are yet to be made, with initial government estimates of US\$200 million needed for full reconstruction. Reduction in the collection of water fees further exacerbates the functionality and viability of water and wastewater services and a reliance on humanitarian assistance. Among others, several tools were provided to sector partners to prioritize areas of intervention and minimize the risks, such as water-borne disease outbreak risk, including cholera. The 2024 water-borne diseases risk map and index was one of the products that contributed to the Health sector prioritization for the Oral Cholera Vaccination campaign, or to the IPC exercise of the Food Security Cluster.

## 3W Map (Reporting partners)

The 85 organizations mentioned below contributed to the achievements of the WaSH sector under the 2024 Lebanon Response Plan addressing the pressing WaSH needs for the most vulnerable communities and individuals, including the needs arising from the escalations of hostilities in Lebanon. These partners reported WaSH activities on ActivityInfo: ACF Spain, ACTED, ADRA, AFDC, AICA, Alpha, Al Midan, Ana Aqra, AMEL, AND, ANERA, Archenova and Tankamel Sawa, ARDNA, AVSI, B&Z, Beit el Baraka, Borderless, CARE, Caritas Lebanon, CESVI, Dar Al Zahraa, DCA, DPNA, DRC, Foundation Merieux, GVC, Hadatha, HAND, Hilfswerk Austria International HWA, ICU, ILO, Imam Sadr Foundation, IMC, International Association for Relief and Development (Onsur), Intersos, IOM, IRC, Islamic Relief Lebanon, ISWA, JRS, KAFA, Key of Life, Lebanese Red Cross, LebRelief, Lebanese Social Responsibility - LSR, LOST, LRI, MADA, Makhzoumi, MAP, MDSF, MEDAIR, Medglobal, Mercy Corps, Mouvement Social, MSD, MSF-OCG, MPDL, Naba'a, Nabad, NCA, NRC, Nusaned, Order of Malta, Organization Nationale de Développement Economique et Social - Ondes, OXFAM, Peace Labs, PI (Plan International), PCPM, PU-AMI, RI, Right to Play, RMF, Sama for Development - SFDO, SAMS, Sawa Association, SAWA Group, SBT, SCI, Shift, SIF, Solidarités International, Tabitha-Dorcas, UNHCR, UNICEF, UNRWA, URDA, Utopia, WHH-Hadatha, WVI, Women Now, YMCA, YOU MATTER



## Case Study

Title:- Solarization of Water Infrastructure 2024

Theme: Solar Projects for Pumping Stations

Author: UNICEF

In 2024, UNICEF implemented 14 solar energy projects dedicated to powering pumping stations. These projects collectively generated around 2,232 kWh of solar energy and demonstrated a vital step forward in operational resilience and sustainability of the water sector. The intervention reflects a practical alignment with the National Water Sector Strategy, which seeks to increase power generation from solar PV by 20% by 2028 and 30% by 2035.

### Context and Key Needs Addressed

The intervention was designed to address critical challenges such as rising energy costs, over-reliance on diesel fuel, and the pressing need for sustainable solutions in water pumping operations. In much of Lebanon, dependency on diesel generators not only strained financial resources but also posed significant environmental concerns. Transitioning to renewable energy sources like solar power was a strategic move to mitigate these issues. This initiative aimed to reduce operational costs by cutting diesel consumption, enhance energy security to ensure uninterrupted water pumping operations, and support environmentally sustainable practices in alignment with global climate action goals.

### Target Beneficiaries and Implementing Actors

The intervention directly benefited 369,905 individuals, including all population types, relying on the 14 pumping stations for their daily water needs. Local authorities and water establishments managing these facilities also gained operational and financial advantages, while broader stakeholders in the water and energy sectors benefited from insights into scaling renewable energy adoption. The project was implemented collaboratively by water establishments and technical specialists, supported by private contractors who installed and commissioned the solar PV systems.

### Activities and Results Achieved

The project involved several key activities, starting with site assessments to determine the optimal locations and configurations for solar installations. This was followed by the procurement and installation of solar panels, inverters, and auxiliary systems. Capacity-building initiatives equipped local operators with the skills to maintain and manage the new systems effectively. Finally, monitoring and evaluation mechanisms were established to track energy output and savings after implementation. These efforts resulted in an estimated annual saving of 675,000 liters of diesel, contributing significantly to operational cost

reduction. The project also generated over 2,232 kWh of clean energy, ensuring reliable water supply for communities and reducing carbon emissions.

### Challenges and Lessons Learned

The project faced challenges such as initial resistance from stakeholders due to the high upfront investment required for solar installations. Limited technical expertise among local operators also highlighted the need for additional training and capacity building. However, valuable lessons emerged from these challenges. Engaging communities and stakeholders early in the process fostered stronger ownership and support for renewable energy initiatives, while ensuring the security of solar equipment reduced risks of theft. Aligning the project with national strategies and fostering collaboration among public, private, and civil society actors proved essential for scaling and sustaining similar initiatives.

