

Lead agencies: Ministry of Energy and Water, UNHCR &UNICEF **Contact information:** Ross Tomlinson TOMLINSO@unhcr.org, David Adams dadams@unicef.org



PEOPLE IN NEFD 3,365,000



REQUIREMENTS (US\$)



OF PARTNERS

GENDER MARKER

Humanitarian \$121.6 m

Stabilization \$109.8 m

SECTOR OUTCOME

OUTCOME 1: Sustainable and gender appropriate access to safe and equitable water is ensured for the target population in sufficient quantities for drinking, cooking, personal and domestic hygiene.

OUTCOME 2: Increase access to improved, sustainable, culturally and gender appropriate sanitation services for target popula-

OUTCOME 3: Target populations are aware of key public health risks and are capacitated to adopt good hygiene practices and measures to prevent the deterioration in hygienic conditions and to use and maintain the facilities available.

INDICATORS

Proportion of target population that has access to safe and equitable water in sufficient quantities for drinking, cooking, personal and domestic hygiene

Proportion of target population with increased access to sanitation services that are improved, sustainable, culturally and gender appropriate

Proportion of the target population that are aware of key public health risks and are capacitated to adopt good hygiene practices and measures to prevent the deterioration in hygienic conditions



\$127.4 m



\$82.3 m



\$21.7 m



PRIORITY INTERVENTIONS

- 1: Ensuring safe and equitable access to a sufficient quantity of water for drinking, cooking and personal and domestic hygiene.
- 2: Ensuring that the environment in general and specifically the habitat, food production areas, public centres and surroundings of drinking water sources are free from human faecal contamination.
- 3: Water is palatable and of sufficient quality to be drunk and used for cooking and personal and domestic hygiene without causing risk to health.
- 4: Raising awareness of target population of key public health risks and are mobilised to adopt measures to prevent the deterioration in hygienic conditions and to use and maintain the facilities provided
- 5: Strengthen and harmonize national to local level systems in line with the National Water Sector Strategy to increase access to quality water.
- 6: Strengthen and harmonize the systems used by targeted municipalities to increase quality of solid waste services.



FUNDING STATUS

Funding already received for 2015:

\$ 24.3 m

Estimated sector needs for 2016:

\$ 190 m



1. Situation Analysis and context

There is urgent need to move toward more sustainable and cost-effective WASH service delivery. Lebanon's WASH related institutions face numerous challenges in provision and management of services against a massive increase in demand due to the influx. Reform laws have not been fully implemented and responsibilities are scattered and coordination limited. Lebanon is already using two thirds of its available water resources and demand is rising. Wastewater networks are poor in many areas with very low levels of wastewater treatment. In the solid waste sector, waste collection is less than adequate while waste management is very critical; Lebanon has only a few solid waste management facilities that are functioning. As a result, solid waste is often dumped in an unsanitary manner thus posing a public health and environmental threat.

According to the "Lebanon Environmental Assessment of the Syrian Conflict & Priority Interventions, September 2014" report, *de facto* refugees contribute to an increase in wastewater generation between 8 and 14 per cent and it is estimated that demand for water has increased by 8 to 12 per cent by the end of 2014. Pre-crisis, up to 92 per cent of Lebanon's sewage ran untreated into watercourses and the sea and little has improved in the meantime. Decentralized and household sewage systems require frequent and costly emptying services, and run a high risk of groundwater contamination. There are significant water losses due to poor quality networks and high levels of water theft. The incremental annual waste generated by *de facto* refugees is significant and is equivalent to 15.7 per cent of the solid waste generated by Lebanese citizens prior to the crisis; solid waste management is decentralized to the municipality level with limited regulation. The responsible Ministries, Water Establishments (WEs) and Municipalities need a significant capital investment and capacity building to support the implementation of strategies and reforms and to develop plans that ensure reduced impact on the environment and effective, sustainable service provision.

People most affected by the Syrian Crisis have varying access to WASH services largely dependent on their location as defined by geography, administrative area existing services, and shelter type. The majority of persons displaced from Syria (57 per cent) live in rented apartments, houses or small shelter units and are subject to the similar issues as the host population: water scarcity, ambiguous water quality, poor levels of service in many areas and the increased burden on water authorities. Those individuals not living in rented accommodation have little or no access to such services.

Thirty-eight per cent are projected to be living in sub-standard shelters by end 2014 (Shelter Survey, May 2014), ranging from unfinished apartments, unused garages and shops to worksites. Here again, poor water and wastewater services require context specific solutions.

In addition, 17 per cent are projected to live in Informal Settlements and 2 per cent in Collective Shelters (CS) (October Shelter Survey) by end 2014 which often require a comprehensive WASH response that is gender sensitive, ensures safety, is designed with the meaningful participation of the community and includes water supply, latrines, showers, solid waste disposal and drainage management to minimise risks of disease outbreak.

Twenty-eight per cent of persons displaced from Syria in Lebanon do not have access to safe drinking water and 39 per cent of persons displaced from Syria do not have access to sanitation facilities. The situation for Palestine refugees from Syria or Lebanon is generally similar to that for others living in informal settlements and collective shelters: the majority are in overcrowded apartments or houses with need of significant infrastructure rehabilitation or in camps or gatherings that need rehabilitation or extension of services.

The WASH needs of the most affected Lebanese are most acute in the un-serviced or underserviced areas, compounded by a deprived socio-economic status and the additional pressures of the mass influx of refugees.

To date, water provision is either by trucking (where there is no supply) or beneficiaries are connected to existing networks or wells; 200,000 beneficiaries have been provided water through water trucking, and about 700,000 people (including local Lebanese) have benefited from support to Water Establishments and communal level infrastructure works. Water quality is ensured through filters, purification tablets and chlorine dosers and training municipal staff. Construction and rehabilitation of latrines and showers (in schools, health centres, etc.) benefited almost 200,000 people taking gender, age and specific needs into consideration.

Approximately 600,000 individuals benefitted from: temporary services for collection, storage, and disposal of wastewater; sewage systems connections; septic systems construction; holding tanks installation and rehabilitation of wastewater collection networks. Solid waste is managed through the provision of collection facilities and support of



municipal collection and disposal services for almost 400,000 people. Hygiene Promotion through WASH committees, training outreach hygiene promoters and linking with community health volunteers, Government departments and community centres (alongside building institutional capacity) has reached about 500,000 beneficiaries to date, including 2013, taking in the specific needs of children and women.

There are many challenges. Funding is insufficient and unreliable for longer-term planning. There is a lack of uniform understanding of WASH needs, nationwide, across all shelter contexts and affected populations. The geographic spread and variance in context complicates response. Services are required to be temporary in informal settlements, making sustainability difficult. Security threats and tensions are increasing and changing and are in some cases linked to large populations displaced from Syria, poor or inadequate WASH services and water scarcity. Pre-crisis water and sanitation infrastructure and services were of poor quality and low coverage rates, and municipalities are frustrated with perceived lack of assistance. Institutions under great pressure and lack of data frustrate coordination efforts.

2. Overview of 2015 Response

The overarching objective of the WASH Sector in Lebanon is to mitigate the risk of WASH related mortality and morbidity through the provision of and access to safe water, sanitation and hygiene to agreed minimum standards for the affected population. A three-fold approach is being adopted to achieve this.

- Firstly, it is essential to include a continued emphasis on short-term emergency interventions, which are typically life-saving and temporary in nature.
- Secondly, it is increasingly necessary to adopt longer-term solutions that focus on sustainability and cost effectiveness, which typically add value to and extend existing service provision.
- Thirdly, continued preparedness and disaster risk management activities are required to be able to respond rapidly
 and adequately to significant changes in needs such as those arising from a mass influx of refugees or disease
 outbreak.

Municipalities' capacities should be strengthened, and they should be encouraged to coordinate with organizing committees on waste collection. A long-term strategy that is in line with the current solid waste plan of the Ministry of Environment and Council of Development and Reconstruction that was approved by the Council of Minister and in conjunction with government and international agencies could encourage an effective solid waste management system with goals to reduce, reuse, recycle, and implement environmentally-conscious landfilling. This would be an important complement to strengthen the capacity of the Ministry of Environment and Municipalities.

Addressing water scarcity and solid waste management needs in particular should align humanitarian interventions to public services and infrastructure development in national systems and programmes. Water supply urgently needs to shift from the current dependency on costly water trucking and private boreholes as water sources. Infrastructure projects are required to improve and extend existing networks to reduce water loss and as much as possible the amount of trucking. Larger-scale projects, which should reduce or replace small-scale activities and benefits both the local community and the *de facto* refugee population simultaneously, reducing tensions between the groups, will be undertaken. An increasing focus on demand management should be ensured through awareness and sensitisation for reusing, reducing and recycling water, using alternative water sources, as well as supporting the implementation of consumption-based tariff systems. As water quality is a concern, partners are increasing their level of quality testing at source, collection point, and household levels both for bacteriological and chemical parameters as appropriate to inform the correct treatment regimen/activity and awareness campaigning.

Excreta management and drainage activities should initially be monitored and maintained in informal settlements and large collective shelters by agencies due to the lack of WASH committees in the settlements. However, an increased emphasis is required to build capacity of, and transfer responsibility to, beneficiaries through gender balanced WASH committees, and other local support systems to ensure sustainable management of facilities and reduce the costs of maintenance and repairs.

As part of ensuring sustainability, local NGOs should be more deeply engaged and funded in case the Syrian crisis continues. De-sludging is an on-going necessity, and dumping sites should ideally be within wastewater treatment facilities; should that not be feasible/available, dumping sites should be better managed for vector and waterborne disease control. Interventions should be closely coordinated with landowners, local communities, Water



Establishments and municipalities to ensure that wastewater and solid waste are managed from the point of production to the point of final disposal in a safe and environmentally responsible manner. Due to the density of settlements, informal settlements and collective shelters have greater need for the establishment of WASH committees and guidance on how to integrate with municipal solid waste disposal systems.

Promotional efforts should focus on more environmentally sustainable solutions, such as water conservation awareness campaigns, controlling usage of groundwater as a primary source, and construction of more appropriate excreta and solid waste management infrastructure, newer approaches of hygiene promotion linked with campaigns about water resource management for urban populations. The Ministry of Environment will continue to focus on environmental significance of the increased population on the fragile Lebanese environment.

3. Overall Sector Target Caseload

The institutions, including the Ministries, CDR, Water Establishments and Municipalities, which are responsible for policy, regulation and service provision relating to water, wastewater and solid waste, require technical support, capacity development and assistance to cope with the increased demands and to ensure implementation of strategies and necessary reforms.

The most vulnerable Lebanese are those living beyond Water Establishment or municipal water and wastewater networks. These locations overlap with the poorest Lebanese populations in rural and urban settings. Lebanese returnees have similar concerns of water scarcity and overburdening of services, while those living in informal centres, collective shelters or sub-standard shelter units have more urgent needs.

Persons displaced from Syria living in informal centres, collective shelters, and sub-standard shelter units have the greatest needs. Where they have no services (e.g. 30 per cent have no access to drinking water and 40 per cent have no access to improved latrines), they need the support to install basic facilities and thereafter for service delivery of daily water supply, frequent de-sludging and increasingly autonomous management of services.

Palestine Refugees from Syria are in need of significant WASH support. Prior to the crisis, Palestinian camps and gatherings were overcrowded with low levels of WASH services. The increase in population has brought additional pressure on water supply sources and distribution networks, sewerage and drainage systems, as well as solid waste management operations – all contributing to deteriorating hygiene conditions.

Due to the nature of WASH service provision the sector prioritises geographical locations with the highest concentration of affected people and with no/poor water and wastewater services.

In addition to this; WASH needs and the corresponding response are prioritised according to the type of shelter/context, where affected persons are accommodated, in the following order: informal centres, collective shelters, sub-standard shelter and apartments or houses.

Finally, the sector prioritises vulnerable groups, households and individuals (i.e. children, newly arrived *de facto* refugees, female/child headed households, elderly or disabled persons and minors) using various vulnerability criteria.

Population cohorts

Category	Total
Syrians registered with UNHCR as refugees	1,300,000
Palestine refugees from Syria	38,291
Vulnerable Lebanese	1,300,000
Lebanese Returnees	34,000
Palestine Refugees in Lebanon	190,000



Gateways for service delivery

Category	Number	Modality of implementation/ how the institution is engaged	
Institutions (Schools, PHCs, SDCs, etc.)	~200	Permanent services	
Municipalities & Unions of Municipalities	286	Capacity building / technical support	
Water Establishments & Litani River Authority	5	Capacity building / technical support	
Informal Settlements	~1,500	Temporary service provision	
Collective Shelters	~300	Temporary to permanent services	
Unfinished houses (incl. garages, worksites and single room structures)	Pending assessment	Temporary to permanent services	
Apartments, houses and small shelter units	Pending assessment	Permanent services	
Palestine Camps	12	Permanent services	
Palestine Gatherings	42	Temporary to permanent services	
National government ministries and offices.	2	Capacity building / technical support	

4) Mainstreaming of WASH related disease risk reduction, Hygiene Promotion, Social Stability, and Shelter Improvement:

- 1. Education/Health: Addressing water scarcity and solid waste management needs in particular should align humanitarian interventions to public services and infrastructure development in national systems and programmes. A greater focus on sustainable solutions such as support to national and local level public entities in order to strengthen and harmonize systems (water management, wastewater management, solid waste management), repair, augmentation or construction of water and sanitation infrastructure in line with Government priorities and plans will benefit the most vulnerable groups and the wider community at the same time thus reducing completion for resources and promoting social stability.
- 2. **Education:** Improved access to segregated toilets/latrines and shower areas will support efforts against sexual gender-based violence under protection. Child protection is further strengthened by hygiene promotion, rehabilitation of WASH facilities in public schools in coordination with the Education sector.
- 3. Health: Coordination between Health and WASH agencies needs increased attention to maximise risk reduction of WASH related disease outbreaks. Both sectors are working together to ensure vulnerable populations are aware of health risks and maintain good hygiene practices and environment. Development of more systematic referral pathways between Health and WASH staff, preparedness and response training, routine disease monitoring and information-sharing mechanisms, maintaining contingency stocks, and identification of core activities for the alert and response phases of an Acute Water Diarrhoea outbreak are some of the core joint activities.
- 4. **Health and Basic Assistance:** Hygiene promotion activities are closely linked with the Health and Basic Assistance sectors. Proper hygiene habits and sanitary conditions reduce the potential of disease and therefore the need for reactive and costly health interventions. Hygiene promotion should be mandatory for distribution of hygiene kits for beneficiaries to understand the importance and proper use of items. Incorporation of hygiene promotion in association with market-based interventions for ensuring access to hygiene items is required and creative ways of achieving this need to be developed jointly.



- 5. **Shelter:** Shelter concerns tied to WASH activities include storm drainage and flood risk mitigation measures in low-lying and flood-prone settlement areas. Specifically, waterproofing and elevating latrines and their wastewater storage facilities have been undertaken where critical. Generally, Shelter and WASH sectors should strive for better combined planning and implementation on any new sites and development of specific methodologies and standards for achieving effective WASH standards in sub-standard shelter units.
- **6. Protection WASH:** activities will aim to ensure the protection of women and children is considered in the design of facilities.

4. Partnership

This Sector is under the leadership of the Ministry of Energy and Water.

List of Partner Agencies

ACF	CONCERN	Makhzoumi	Safadi Foundation	UNHCR
ACTED	COOPI	Medair Lebanon	Save the Children International	UNICEF
ANERA	GVC Lebanon	Mercy Corps	SI	UNRWA
AVSI	Intersos	Mercy USA	SIF	URDA
CARE	IOCC	NRC	Solidar Suisse	WVI
CISP - Lebanon	IR Lebanon	OXFAM	UNDP	
CLMC Lebanon	Leb Relief	PU-AMI	UNHABITAT	