



Water, Sanitation and Hygiene (WASH) in Syria

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Question

Provide a brief overview of the current situation with regard to Water, Sanitation and Hygiene (WASH) in Syria.

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The K4D helpdesk service provides brief summaries of current research, evidence, and lessons learned. Helpdesk reports are not rigorous or systematic reviews; they are intended to provide an introduction to the most important evidence related to a research question. They draw on a rapid desk-based review of published literature and consultation with subject specialists.

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1. Overview

Syria is a water scarce country, whose water problems have been compounded by the ongoing conflict and mass displacement. Water infrastructure and water supply have been directly attacked or deliberately turned off as a tactic of war, while lack of investment and maintenance of the system during the conflict have also caused problems. Actors in the WASH Sector and others have been carrying out assessments of the current situation in different areas of the country.

The key findings include:

Current situation

- As a result of the conflict two thirds of the population do not have consistent access to safe drinking water.
- The water network is only able to cover roughly half the needs of beneficiaries, who have to turn to alternative sources for water.
- Families spend one quarter of their income on clean water.
- Basic hygiene items are generally available, but are expensive.
- People living in besieged and hard to reach areas often face problems accessing sufficient water and higher prices for sanitation and hygiene items, when they are available.
- Poorer households, especially those living in vulnerable shelter types, are more likely to report water shortages or a lack of access to bathing and latrine facilities (as well as damage, and adequacy issues).
- Displaced households often face more problems accessing water and sanitation.
- Water shortages are more commonly reported in areas relying on water trucking rather than the water network.
- People responded to having insufficient water to meet their needs by reducing consumption of water for purposes other than drinking, and modifying hygiene practices.
- Access to water is a bigger concern than access to sanitation, and households headed by females are particularly affected.
- Lack of female hygiene products and clean water are reported to have led to health problems for women.
- Polio reemerged in 2013 for the first time in 18 years, and new cases have been confirmed in June 2017. There have also been outbreaks of cholera and other water borne diseases.

Humanitarian assistance

- In 2016, the UN reports that 13.1 million people were reached with direct humanitarian WASH assistance and 16.4 million people benefited from support to the operation and maintenance of WASH systems.
- Humanitarian organisations have repaired water and sewage systems; rehabilitated and equipped ground wells; provided water trucking; supported the upkeep of WASH facilities in internally displaced persons (IDP) shelters; provided WASH non-food items (NFIs) such as hygiene kits and jerry cans ; installed water storage tanks; carried out hygiene promotion activities; provided disinfectant to treat public water networks; and provided fuel to operate water pumps.
- Lack of funding, access and security concerns, and multiple and frequent displacements mean meeting WASH needs is challenging.

2. WASH in Syria

Syria is a water scarce country, with comparatively low rainfall and water abstraction above its sustainable level¹ (Saleh et al, 2016, p. 30). As a result of the conflict, two thirds of the population do not have consistent access to safe drinking water (OCHA, 2017b, p. 1). Problems with the water network meant that in 2016 almost 50 per cent of the population met the majority of their water needs from alternative sources, including costly commercial water trucking and unsafe open wells (UNICEF, 2017). Families in Syria spend one quarter of their income on clean water (OCHA, 2016). While WASH goods and services are widely available they are very expensive, which pushes families to rely on alternative sources (OCHA, 2017b, p. 5).

Water as a weapon of war

Water continued to be used as a weapon of war during 2016 (UNICEF, 2017). Water infrastructure and water supply were directly attacked or deliberately turned off as a tactic of war on approximately 30 different occasions, which led to water shortages in major cities including Aleppo and Damascus (UNICEF, 2017; see also Whole of Syria ISG, 2017, p. 54; Sparrow et al, 2016, p. 3).

In late December 2016, OCHA (2016) reported that four million people in Damascus and surrounding areas had been cut off from the main water supply since 22nd December. Deliberate targeting had damaged the infrastructure of Wadi Barada and Ain-el-Fijah which provide clean and safe water for 70 per cent of the population in and around Damascus (OCHA, 2016). The water tower in the ISIL²-held Mansura town was reportedly blown up by ISIL on 29 May 2017 (OCHA, 2017c, p. 2).

Hard to reach and besieged areas

People living in besieged and hard to reach areas have faced problems accessing sufficient water and hygiene and sanitation items (REACH, 2017b). Poorer households, especially those living in vulnerable shelter types as a result of displacement, are more likely to report water shortages or a lack of access to bathing and latrine facilities (REACH, 2017, p. 3). Areas relying on alternative water sources to the water network more commonly face water shortages (REACH, 2017, p. 7). People have responded to water shortages by reducing water consumption and modifying hygiene practices (REACH, 2017, p. 83). Some hard to reach and besieged locations have been supplied with WASH supplies through airdrops and convoys (UNICEF, 2017b, p. 1; UNHCR, 2017, p. 2; USAID, 2017, p. 4). However, some items were removed from diarrheal disease sets in the inter-agency convoys to Yalda, Babela and Bet Sahem (Rural Damascus), and Kfar Laha (Homs), while WASH supplies (aqua tabs and sodium hypochlorite) were not approved for loading to Dar Al Kabireh (Homs) (UNICEF, 2017b, p. 1).

See [section 3](#) for more information on the current situation for WASH in specific besieged, hard to reach, and other areas of Syria available from recent assessments.

¹ Even without the current crisis, its water resources face significant challenges detailed in Saleh et al, 2016.

² Islamic State of Iraq and the Levant (ISIL), also known as Islamic State of Iraq and Syria (ISIS)/ Islamic State(IS)/Da'esh

Displaced and female headed households

Access to water was found to be a greater concern for displaced³ and female headed households than access to sanitation in government controlled areas of Syria, with female headed households particularly affected (Doocy & Lyles, 2017, p. 957)⁴. 36.4 per cent of households reported not having access to water 24 hours a day and 48 per cent that they were without water access for several days at a time in the three months preceding the survey (Doocy & Lyles, 2017, p. 955). Female headed households were significantly more likely to report not having access to water for 14 hours a day than male headed households (42.1 per cent vs 35.2 per cent); and being without water for several days at a time (53.7 per cent vs 46.7 per cent) (Doocy & Lyles, 2017, p. 955).

There were much higher levels of access to improved toilet facilities (86.1 per cent), although unimproved toilet facilities were significantly more common among displaced compared with nondisplaced households (19.0 per cent vs 10.1 per cent (Doocy & Lyles, 2017, p. 955). The majority of households were able to access adequate soap and hygiene products, but displaced households were less likely to access them compared with nondisplaced households (76.0 per cent vs 84.7 per cent) and among female-headed compared with male-headed households (76.1 per cent vs 81.9 per cent). Lack of female hygiene products and clean water are reported to have led to health problems for women, including fungal infections, dermatological problems, and chronic pain⁵.

Water borne diseases

Contaminated water increases the risk of waterborne diseases such as cholera (Sparrow et al, 2016, p. 2). Unhygienic and overcrowded conditions in camps and collective shelters contribute to their spread (Sparrow et al, 2016, p. 2). Polio, which is transmitted by contaminated water and person-to-person contact reemerged in Syria in July 2013 after an 18 year absence, and was ultimately documented in more than half of the country's governorates, although the outbreak was successfully stopped (Sparrow et al, 2016, p. 2). In June 2017, a circulating vaccine-derived poliovirus type 2 (cVDPV2) outbreak was confirmed in the Deir-Ez-Zor Governorate⁶. Suspected cases of cholera began appearing in northern Syria in October 2015 (Sparrow et al, 2016, p. 2). Other waterborne diseases such as typhoid, dysentery and hepatitis A were also identified in 2015 (Sparrow et al, 2016, p. 3).

³ One issue that is noted by NRC (2017, p. 17) is that problems have arisen with landowners in relation WASH infrastructure in informal camps or settlements due to lack of clarity about land ownership or rental terms. Adjacent landowners have also at times complained about wastewater entering their property (NRC, 2017, p. 17). In addition, camps that do not have outside financial support for the maintenance of communal WASH facilities, struggle to maintain them, which 'can lead to conflict over access and may impede equal use rights for all beneficiaries' (NRC, 2017, p. 17).

⁴ Based on a survey carried out by Doocy and Lyles (2017) using a sample of 2405 households from 10 governorates in mid-2016 to identify unmet needs and assistance priorities of displaced and female-headed households in government-controlled areas of Syria.

⁵ <http://www.independent.co.uk/news/world/middle-east/syrian-women-under-siege-developing-infections-on-their-periods-without-tampons-or-clean-water-a7388476.html> Retrieved 13/6/17

⁶ <http://reliefweb.int/report/syrian-arab-republic/circulating-vaccine-derived-poliovirus-confirmed-syria> Retrieved 13/6/17

Sparrow et al (2016, p. 3) suggest that the rise in waterborne diseases 'occurs in the setting of long-term neglect of water and sanitation services by the government in areas considered politically unsympathetic to the regime'; mass displacement into crowded and unsanitary conditions; and the targeting of hospitals and public health infrastructure. Airstrikes by the government have also destroyed all laboratories capable of confirming cholera, polio and other threats to public health in northern Syria (Sparrow et al, 2016, p. 3).

The non-governmental Early Warning and Response Network (EWARN) and the Syrian government's (WHO-associated) Early Warning and Response System (EWARS) monitor water quality and the emergence of water borne diseases across different areas of Syria. Sparrow et al (2016, p. 1) compared the quality of their reporting and found EWARN to be more timely and comprehensive. They identified 'significant under-reporting and delays in the government's surveillance' and suggested that 'the government's surveillance is inadequate due to lack of access to non-government held territory, an incentive to under-report the consequence of government attacks on health infrastructure, and an impractical insistence on laboratory confirmation' (Sparrow et al, 2016, p. 1).

WASH assistance

The Whole of Syria Inter-Sector Coordination Group (Whole of Syria ISG, 2017, p. 9) reports that in 2016, 13.1 million people in Syria were reached with direct humanitarian WASH assistance and 16.4 million people benefited from support to the operation and maintenance of WASH systems (see also OCHA, 2017b, p. 5). The WASH sector was able to scale up support to existing water and sanitation systems and to extend it to some besieged and hard-to-reach areas, including ISIL controlled territories (Whole of Syria ISG, 2017, p. 54; OCHA, 2017b, p. 5). However, 'despite substantial efforts, functional or semi-functional networks only cover roughly half of the needs of beneficiaries' and many people are forced to find alternative sources (Whole of Syria ISG, 2017, p. 54). Basic hygiene items were generally available on the market (except in besieged locations) with an approximately 15 per cent increase in price on an annual base (Whole of Syria ISG, 2017, p. 54). The price of water available from the water vendors did not show significant changes, with prices being, on average, reasonably stable, despite the substantial increase in fuel costs (Whole of Syria ISG, 2017, p. 54).

Humanitarian organisations in Syria have responded to problems in the WASH sector by repairing water and sewage systems; rehabilitating and equipping ground wells; providing water trucking; supporting the upkeep of WASH facilities in IDP shelters; providing WASH non-food items (NFIs) such as hygiene kits and jerry cans⁷; installing water storage tanks; carrying out hygiene promotion activities; providing disinfectant to treat public water networks; and providing fuel to operate water pumps (UNICEF, 2017b, p. 3; Whole of Syria ISG, 2017).

Challenges

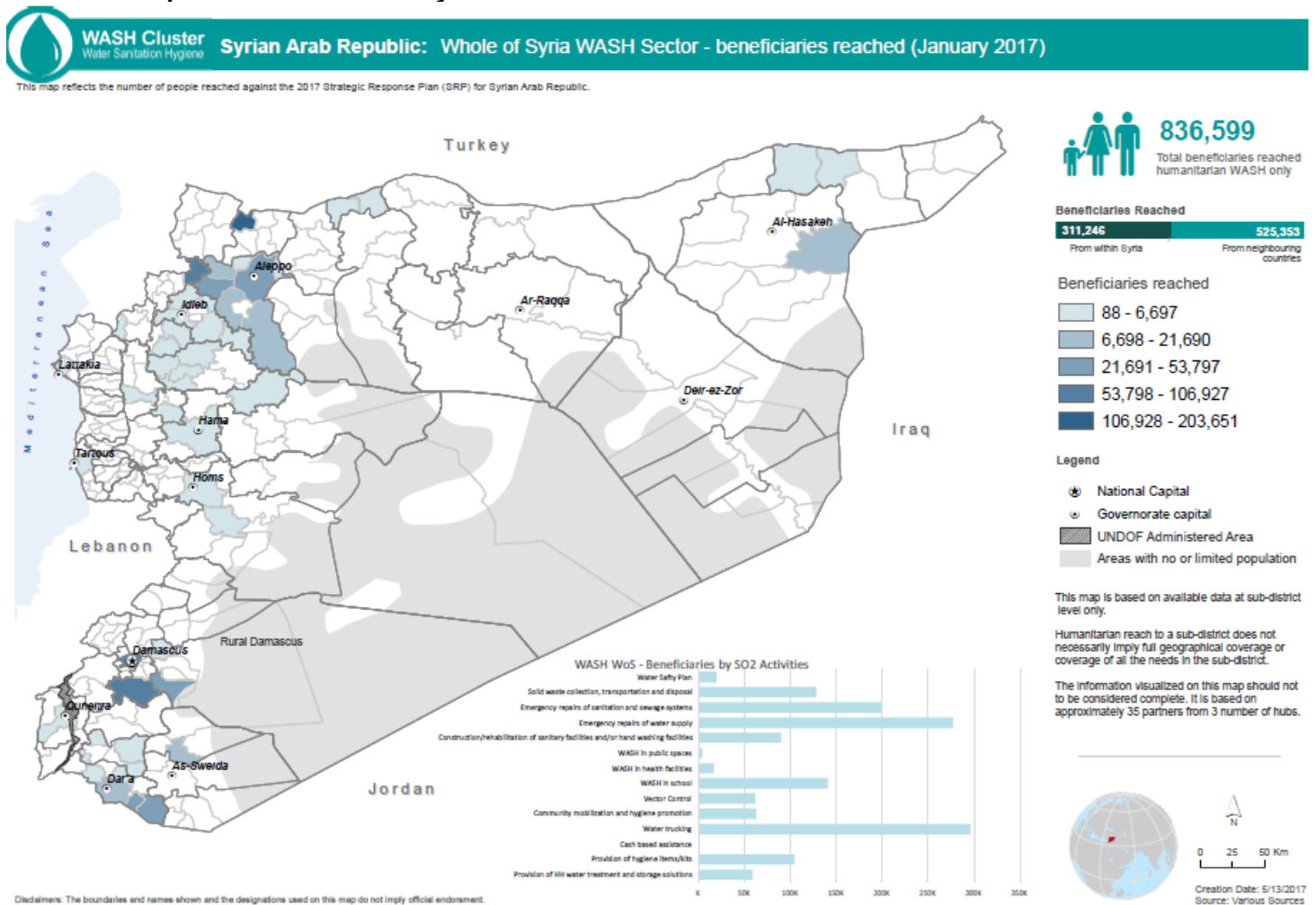
Insufficient funds have prevented 'more comprehensive support to water, sanitation and solid waste systems, which continuously deteriorate due to lack of adequate operation and

⁷ Relief International Turkey set up a pilot, cross-border cash project in Syria to support WASH outcomes between December 2015 and June 2016 (Aggiss, 2016). 2,352 households in Mar'rat An Nu'man, Idlib province in northern Syria, received e-vouchers that they could spend on hygiene items only at five pre-selected vendors (Aggiss, 2016, p. 5). They found that prices were lower than initially planned and beneficiary feedback was positive, while cleanliness levels in houses improved (Aggiss, 2016, p. 6, 7).

maintenance, spare parts and capacity-building', as well as more costly life-saving and emergency WASH facilities to people in need (Whole of Syria ISG, 2017, p. 55). Access and security concerns also make the delivery of WASH services challenging, especially in ISIL-held and besieged locations (Whole of Syria ISG, 2017, p. 55). In areas where the centralised water quality surveillance system has collapsed, it is hard to establish the quality of water sold by private vendors (Whole of Syria ISG, 2017, p. 55). Multiple and frequent displacements made meeting the WASH needs of IDPs challenging (Whole of Syria ISG, 2017, p. 55).

OCHA (2017b, p. 5) notes that there needs to be increased support to enable water and sewage networks to continue to deliver a minimum level of services, as well as increased water quality assurance efforts. They also note a need to scale up activities in ISIL-controlled areas and increase WASH NFI distribution in besieged areas (OCHA, 2017b, p. 5).

Map of WASH Sector in Syria



Source: Saltori et al, 2017, p. 3

3. Current WASH situation in specific areas of Syria

Ar-Raqqa

OCHA has been carrying out regular situation reports for Ar-Raqqa in response to the rapidly developing situation where 169,000 people were displaced during April and May 2017 (OCHA, 2017c). While numerous challenges remain, the WASH sector has responded to extremely fluid displacements with a rise in the provision of emergency water trucking services (OCHA, 2017c, p. 10). Water sources close to the main IDP sites have been identified and rehabilitated in order to increase the quantities of water provided (OCHA, 2017c, p. 10). While emergency sanitation facilities have been constructed in several IDP camps/sites there is still a gap in the number of sanitation facilities as a result of limited access to some areas, high turnover, and the continuous influx of IDPs (OCHA, 2017c, p. 10). The cleaning of WASH facilities in Mabruka and Ein Issa camps has been initiated through Cash for Work (CfW) schemes (OCHA, 2017c, p. 10). Hygiene kits have been distributed and hygiene promotion activities initiated in IDP camps and surrounding areas (OCHA, 2017c, p. 10).

Aleppo city

In April 2017 OCHA (2017, p. 8) assessed the humanitarian situation in Aleppo and found that its drinking water system, sources, and critical stations (Al Khafse, Sulaiman Alhalabi, Bab Alnerab and Tishreen) have not suffered significant damage and are in a technically functional status. However, 'as a result of the limited access to power supply from the national grid, water is currently being pumped and delivered to the entire city of Aleppo by using backup power generators with high fuel cost' (OCHA, 2017, p. 8). The 180,000 people living in newly accessible areas of Aleppo city are still suffering from limited access to water supply due to damage of the water networks (OCHA, 2017, p. 8). Emergency water trucking services from temporary water storage tanks installed in various returnee and IDP neighbourhoods are providing a limited quantity of water (3.5 million litres) (OCHA, 2017, p. 8). The sewage networks in the newly accessible neighbourhoods of Aleppo city need quick repair and rehabilitation to bring them into operational condition (OCHA, 2017, p. 8).

Humanitarian agencies, especially UNICEF, have responded by supporting the Aleppo Water Authority with fuel to operate deep boreholes; carrying out water trucking to vulnerable populations; providing water storage tanks; distributing hygiene kits; implementing hygiene promotion interventions; repairing damaged water and sewage pipes; rehabilitating and providing generators for pumping stations; helped with the management of water purification units; rehabilitated and installing WASH facilities in schools (OCHA, 2017, p. 8, 11). There is also a government led initiative aiming to sample and test water quality in groundwater wells used by the local inhabitants for drinking water (OCHA, 2017, p. 9).

Al Thawrah, northern Syria

Residents of Al Thawrah in northern Syria, were reported by OCHA as of the 15th May to be lacking in essential goods and services, including water, sanitation, and hygiene (WASH) infrastructure, most of which was destroyed during clashes (USAID, 2017, p. 2). The water supply has been restored across most of the town (USAID, 2017, p. 2).

Al Hol camp

An assessment by REACH in April 2017 found that inadequate access to WASH services was a primary concern for populations living in Al Hol camp (USAID, 2017, p. 5). Approximately 50 per cent of surveyed households reported water quality concerns with the communal water taps at the site, where an estimated 17,000 people, including more than 700 IDPs and 16,200 Iraqi refugees, were residing as of mid-May (USAID, 2017, p. 5). Approximately 12 per cent of surveyed households did not have access to latrines, while 75 per cent of those surveyed lacked access to showers (USAID, 2017, p. 5). As a result, humanitarian organisations began installing additional latrines and showers in late April (USAID, 2017, p. 5).

Dayr az Zawr

A market monitoring exercise jointly carried out by the Cash-Based Responses Technical Working Group (CBR–TWG) and REACH Initiative in April 2017 found that residents in Dayr az Zawr had faced a lack of safe drinking water and hygiene supplies for the last several months (USAID, 2017, p. 4).

Aleppo, Idleb, Hama, Homs, Deir-ez-Zor, Ar-Raqqa, Dar'a and Quneitra

REACH (2017), together with the Shelter/NFI Cluster and UNHCR, carried out a comprehensive assessment of shelter and NFI needs across Syria in late 2016, covering 83 of the 156 sub-districts within Aleppo, Idleb, Hama, Homs, Deir-ez-Zor, Ar-Raqqa, Dar'a and Quneitra governorates, in opposition controlled areas only⁸. Households reporting water shortages or a lack of access to bathing and latrine facilities (as well as damage, and adequacy issues) generally had lower average incomes and were more likely to either rent their shelter, live for free or reside in vulnerable shelter types (informal settlements, camps, collective centres and unfinished buildings) (REACH, 2017, p. 3).

In Homs, Hama, Deir-ez-Zor and Ar-Raqqa, the most common main source was the general water network, whilst in Aleppo, Idleb, Dar'a and Quneitra water trucking was most common as the water network which they used before has suffered damage (REACH, 2017, p. 7, 81).

Households in Idleb and Aleppo, where water trucking is the primary source of water for the majority of households, were most likely to report water shortages in the form of spending two or more days without water (49 per cent and 40 per cent respectively), followed by those in Dar'a (26 per cent) and Quneitra (22 per cent) (REACH, 2017, p. 7, 82). Shortages were less prevalent in Homs (15 per cent) and Hama (4 per cent) (REACH, 2017, p. 7). In Ar-Raqqa, key informants in 25 per cent of communities reported that people had intermittent access problems (REACH, 2017, p. 7). In Deir-ez-Zor, water access was more problematic; key informants in 66 per cent of communities faced intermittent access problems and 11 per cent reporting that nearly everyone faced water access issues (REACH, 2017, p. 7). Prevalence of water shortages was more common for those living in damaged homes, in rural areas, for IDP households and those who did not own their homes (REACH, 2017, p. 8, 83).

⁸ They used a mixed methods approach, including household surveys, focus groups, and key informant interviews, with findings for Aleppo, Idleb, Hama, Homs, Dar'a and Quneitra representative, whilst findings for Deir-ez-Zor and Ar-Raqqa indicative only.

Households typically reported that most members had access to bathing facilities (REACH, 2017, p. 8). Households in rural areas, households with IDPs, and populations living in more vulnerable shelter types were slightly more likely to report some or all members not having access to bathing facilities (REACH, 2017, p. 8, 83).

Households in Homs (24 per cent), Quneitra (21 per cent) and Aleppo (15 per cent) were most likely to report not having access to a fully functional toilet (REACH, 2017, p. 8, 84). In Deir-ez-Zor and Ar-Raqqa, key informants reported that in 27 per cent and 9 per cent of communities, respectively, some households did not have access to a fully functioning toilet (REACH, 2017, p. 8). Damaged households and vulnerable shelter types were more likely to report some or all members not having access to facilities (REACH, 2017, p. 8, 85).

25 per cent of all households assessed in Aleppo, 24 per cent in Idlib, 7 per cent in Hama, 14 per cent in Homs, 17 per cent in Dar'a and 2 per cent in Quneitra reported having insufficient water to meet their needs (REACH, 2017, p. 83). REACH (2017, p. 81) found that 'in households which reported having insufficient water to meet their needs, the most common strategy used to deal with this was reducing consumption of water for purposes other than drinking, and modifying hygiene practices'. As a result of the prevalence of water shortages, households in Aleppo and Idlib were most likely to report that they had changed their hygiene practices in the 30 days prior to assessment (30 per cent and 37 per cent respectively) (REACH, 2017, p. 83). Changes to hygiene practices included bathing and doing laundry less (REACH, 2017, p. 83). IDP households were more likely to report having changed their practices in Aleppo, Hama, Idlib and Quneitra.' (REACH, 2017, p. 81).

REACH (2017, p. 8) found that collective centres in Homs lacked bathing facilities, latrines, and drinking water, amongst other things.

Communities facing restrictions on civilian movement and humanitarian access

REACH (2017b), together with members of the Syria INGO Regional Forum (SIRF), collected data on 40 communities facing restrictions on civilian movement and humanitarian access (18 of which are classified as besieged) from 175 community representatives inside Syria at the end of March and beginning of April 2017.

Ar Rastan, Talbiseh and Taldu

In March 2017, water insufficiency was reported in the communities of Ar Rastan, Talbiseh and Taldu⁹ due to a lack of fuel to operate pumps and an increase in water needs for bathing and cleaning as weather improved (REACH, 2017b, p. 2). This was the first time the communities reported insufficient water since assessments began in June 2016 (REACH, 2017b, p. 3).

⁹ Situated in the Al Houleh region between the cities of Homs and Hama – the communities have faced access restrictions since 2012 (REACH, 2017b, p. 2).

At Tall, rural Damascus

REACH (2017b, p. 8) found that previous repairs to the water network which was damaged in December 2016 in At Tall, rural Damascus, led to the increased availability of drinking water in At Tall in February, although there was no further improvement in March. Hygiene and sanitary items were more expensive in At Tall than in neighbouring areas (REACH, 2017b, p. 9).

Az Zabdani, Madaya and Bqine in rural Damascus

Az Zabdani, Madaya and Bqine in rural Damascus were found to still have insufficient access to water (REACH, 2017b, p. 11). The water network has been unavailable since at least November 2016, with populations relying on closed wells and negative coping strategies instead (REACH, 2017b, p. 12). Some hygiene and sanitation products were delivered as part of the humanitarian aid which reached the communities in mid-March, including sanitary pads for women (REACH, 2017b, p. 14). Prior to that, all such items had been unavailable in the communities since the closure of all markets in December 2016. No hygiene and sanitation products have been available for purchase in Az Zabdani since October 2016 (REACH, 2017b, p. 14).

Bait Jan, in rural Damascus

Bait Jan, in rural Damascus, continued to report sufficient access to water from closed wells and the main water network (REACH, 2017b, p. 18).

Burza, Jobber and Tadamon, in eastern Damascus governorate

Access to water in Burza, Jobber and Tadamon, in eastern Damascus governorate, improved in February 2017, following reparations to the Ein Elfijeh water station in Wadi Burda (REACH, 2017b, p. 22). Availability of hygiene and sanitary items decreased in Burza and Jobber in March, especially disposable diapers and sanitary pads (REACH, 2017b, p. 24).

Joura, Qosour, Deir ez Zor City

People living in Joura, Qosour, besieged areas within Deir ez Zor City, in eastern Syria, have been relying on insufficient amounts of unprocessed surface water from the river, delivered through the water network, which has caused sickness (REACH, 2017b, p. 27). Laundry powder has been available at prohibitively expensive prices since deliveries via airdrops; otherwise the only available hygiene and sanitation item was soap (REACH, 2017b, p. 28). Women have been using cloth in the absence of sanitary pads (REACH, 2017b, p. 28).

Eastern Ghouta, rural Damascus

Communities in eastern Ghouta, rural Damascus, reported sufficient access to water, which was mainly supplied by water trucks (REACH, 2017b, p. 32). However, water reportedly smelled or tasted bad in Arbin, Kafr Batna and Zamalka, where populations relied instead on closed wells (REACH, 2017b, p. 32). While sanitary and hygiene items are generally available, with the exception of disposable diapers, prices are increasing and higher than in nearby communities (REACH, 2017b, p. 34).

Hajar Aswad, rural Damascus

Water supplies in Hajar Aswad, rural Damascus, available from closed wells, have been insufficient since the first assessment in June 2016, with people bathing less in response (REACH, 2017b, p. 36). Hygiene and sanitary items are reported to be sometimes available and more expensive than neighbouring areas (REACH, 2017b, p. 38).

Al Waer, in Homs Governorate

Water access in March 2017 in Al Waer, in Homs Governorate, was insufficient due to damage from shelling to the water network, and communities bathed less as a result (REACH, 2017b, p. 41). Although the prices of hygiene and sanitary items decreased in March, they are still higher than in neighbouring communities (REACH, 2017b, p. 42).

Khan Elshih, rural Damascus

The water network in Khan Elshih, a largely Palestinian community in rural Damascus, was still inoperable in March 2017 but there were sufficient supplies of clean water from closed wells (REACH, 2017b, p. 44). While hygiene and sanitary items are generally available, they are on average more expensive than neighbouring communities (REACH, 2017b, p. 46).

Wadi Burda, rural Damascus

Access to water in Wadi Burda, in rural Damascus has been improving since the signing of a local truce agreement on January 30th which allowed for repairs to water infrastructure (REACH, 2017b, p. 48). All assessed communities reported sufficient access to drinking water in March, an improvement on February (REACH, 2017b, p. 49). Hygiene and sanitation items became generally available in March, although they were significantly more expensive than in nearby communities (REACH, 2017b, p. 52).

Yarmuk, Damascus

The water quality of the Palestinian community of Yarmuk, Damascus, was negatively impacted as a result of damage to the Ein al Fijeh spring network (REACH, 2017b, p. 54). By March 2017, however, there have been positive developments relating to improved water quality of the water trucks used in Yarmuk as a result of repairs to the Ein al Fijeh water network (REACH, 2017b, p. 54). Since the community was first assessed in June 2016, the main water network has been unavailable and residents have used alternative sources of water such as private water trucking instead (REACH, 2017b, p. 55).

Information from sub districts gathered in 2016

In June 2016, REACH, together with ACTED, PAH, and SRN conducted a household assessment of WASH across 41 selected sub-districts in Homs, Hama, Idlib, and Aleppo governorates on behalf of the WASH cluster. Information can be found here:

http://www.reachresourcecentre.info/system/files/resource-documents/reach_syr_factsheet_wash_household_assessment_key_findings_sub-district_december_2016.pdf.

In addition, WASH was considered in a multi sector needs assessment by REACH of the six sub-districts of Ras al Ain, Tal Tamer, Darbasiyah, Amuda, Quamishli and Hasakeh in the Hasakeh governorate carried out between the end of May and beginning of June 2016, which is available here: <http://www.alnap.org/resource/23449>.

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Key websites

- Funding for WASH in Syria - 2017: [https://fts.unocha.org/appeals/526/flows?order=directional_property&sort=asc&f\[0\]=destinationClusterIdName%3A%223300%3AWASH%22](https://fts.unocha.org/appeals/526/flows?order=directional_property&sort=asc&f[0]=destinationClusterIdName%3A%223300%3AWASH%22)

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