



Activities and Interventions of the Coastal Municipalities Water Utility during the war on Gaza 2023-2026

March, 2026

Abstract

Since the beginning of the war on the Gaza Strip on 7th October, 2023 which resulted in severe damages in all aspects of life, including water and sanitation services, which are among the most important components of life and resilience, the CMWU has been working since the first day in cooperation with PWA, its partners, and international humanitarian institutions to provide the minimum life-saving water and sanitation services, through production, transportation and distribution of drinking water to IDPs shelter and networks as well, the CMWU has been distributing the potable water to IDPs and residents by existing networks and its 53 owned water trucks, the produced and distributed water from desalination plants up to date is more than **9.86** million cubic meters. Moreover, the CMWU has rented 28 trucks and installed water tanks on them to be used in transporting and distributing water in order to enhance the system capacity in various areas.

Also, the CMWU, through daily operational activities, has been able to pump domestic water from wells through the distribution networks in an amount of **46.56** million cubic meters since the onset of the war till March 2026, whereas the wells' production is still no more than 20% of the needed demand, in addition the CMWU continues to maintain and fix the damages of facilities and infrastructure in the accessible areas of Gaza Strip, including desalination plants, wells, sewage pumping stations, water and sewage networks, WASH generators, and electromechanical maintenance.

Since the announcement of the ceasefire on 11 October 2025, the CMWU through its partners support has started to assess the damages of water and wastewater infrastructure and facilities in accessible zones in Gaza, North Gaza, the Middle Area, and Khan Younis. In addition, the CMWU in cooperation with PWA, through UNICEF support has initiated two consultancy services to assess the WASH facilities' damages and develop the needed tender documents for repairing and reconstruction of the affected facilities. The first covers the Middle Area and Khan Younis governorates, while the second covers Gaza and North Gaza. Both consultancy services are ongoing, with daily follow-up by CMWU technical teams to ensure the work is carried out efficiently and in accordance with required standards. Such services are important to support the service providers after the severe losses in all resources, meanwhile the CMWU is still working to fix the damages and re-operate the critical services in cooperation with PWA.

On the other hand, the work is still ongoing to secure power sources for critical facilities, mainly water wells which cover most of domestic water production. The CMWU has repaired number of electrical generators, hired others from local market and purchased secondhand generators, also works with its partners to supply new ones with various capacities. The recent supplied generators by UNICEF, have been distributed to the repaired water wells in Gaza, Beit Lahia, Jabalia, Al Moghraka, Al Zahra, and Al Qarara. This intervention has resulted in a significant improvement in water supply in these areas, which are still hosting thousands of IDPs.

In the same context, and with all electricity supplies being cut off by the Israeli side, in addition to stoppage of Gaza power plant since the beginning of the war, the CMWU, through cooperation with various partners, was able to distribute till March 2026 around **11.45 million liters of fuel** in order to ensure the operation of standby generators, to run water production and pumping facilities, sewage pumping stations. However, the quantities that entered remain insufficient to meet actual demand. At the same time, Israel has continued to block the entry of essential materials and spare parts, which hinder the repairs and daily operations of WASH facilities. These constraints have negatively affected the provision of water and wastewater services across the entire Gaza Strip.

Fuel is still provided by UNICEF then the CMWU stores it in central tanks before distributing it to around **190 water and sanitation facilities**, including plants, wells, sewage pumping stations, and water reservoirs. The distribution process is closely monitored through a system managed by UNICEF, with oversight from a local field consultant and UNOPS.

The CMWU has also worked to receive and distribute water tanks of different sizes, which are being installed in places of displacement as emergency response measures which is considered as one of the most important activities that the CMWU is still carrying out. In addition, the CMWU ensures the process of sterilizing and disinfecting water sources by distributing the chlorine to various wells and desalination plants, whereas more than **344,434 liters** have been distributed since the beginning of the war, in order to avoid the spread of more diseases and epidemics.

Throughout March 2026 many repairs have been carried out by CMWU, PWA and WASH cluster and other initiatives are still ongoing. All these efforts aim to improve essential water and wastewater services and protect the public health throughout providing safe and acceptable WASH services for residential areas and IDPs shelters to alleviate the suffering of Gaza people after months of deterioration.

Lack of materials is still a challenge hindering most of repairs as Gaza local market has depleted and the essential materials for repairs are not available, leaving water and wastewater services in a catastrophic condition. Also losing the CMWU water sector central warehouse during this war hindered many repairs. However, the CMWU was able, with the support of international partners, to gradually return its O&M activities and overcome to some extent these major damages and materials shortage, and it continued to provide services according to the available capabilities and resources.

The continuous follow-up and assessing the levels of infrastructure destruction in various areas, and according to initial estimates, the process of repairing and rebuilding various facilities, systems and infrastructure and reviving the system again in all governorates of the Gaza Strip is estimated at approximately **900 million USD** whereas this amount is subject to increase as there are still inaccessible zones in Gaza not assessed yet. The reconstruction of water and wastewater infrastructure and the operation of WASH facilities are among the highest priorities throughout the reconstruction phase, in order to enhance the resilience of the population, protect public health, and limit the spread of epidemics and diseases, according to a matrix of interventions starting from the current and urgent repairs, and reaching the restoration and reconstruction stage.

The continuation stressful state of war and the weakness of available resources have created a state of catastrophic depletion of the remaining functioning water and sanitation facilities and systems. This is not evidenced by the consumption of electricity generators, which have become the heart of the system in light of the cut-off all electricity supplies since the onset of the war. The continued subjection of supplies through the crossings to the dual-use mechanism and standards has completely prevented the entry of any equipment and spare parts for the water sector, which will lead to the gradual cessation of many facilities that are still operating and have not been destroyed by military action. Numerous appeals have been made to humanitarian and international organizations to support and facilitate the entry of the necessary materials to keep WASH facilities operational.

1. Introduction:

As a result of the war that started on October 7th, 2023, more than two million people were forcibly displaced from Gaza City and the North Gaza Governorate to the southern areas of the Gaza Strip, following evacuation instructions issued by the IDF. This unprecedented displacement occurred in parallel with a complete shutdown of electricity and water supplies, creating a catastrophic humanitarian crisis. The conflict led to the widespread destruction of key water and sanitation infrastructure, including wells, water pipelines, reservoirs, wastewater pumping stations, desalination

plants, and treatment facilities. Additionally, the Israeli-imposed restrictions on the entry of essential materials, equipment, fuel, and spare parts severely hampered the ability to operate or repair critical facilities.

Throughout the hostilities and after the ceasefire, the water and wastewater sector in Gaza is still operated under extreme duress. Communities, particularly IDPs sheltering in overcrowded areas and UNRWA shelters, faced dire shortages of potable water and sanitation services, which increased the risks of disease outbreaks and public health emergencies. Despite these challenges, the CMWU, in close coordination with international humanitarian partners, local municipalities, and service providers, exerted extraordinary efforts to maintain minimal functionality of key services under the most constrained conditions.

CMWU adopted a multi-faceted emergency response strategy to mitigate the crisis and keep as many facilities operational as possible. This included rapid damage assessments and emergency repair operations on severely damaged key water facilities, sewage networks, and desalination plant often carried out using available materials and limited stock of spare parts due to blockade conditions. Besides operating the main two seawater desalination plants in the middle area, CMWU also facilitated the installation of small-scale, modular desalination plants to serve communities with no access to safe water, particularly in displacement shelters, also mobile water tankers are being deployed across the Gaza Strip to ensure emergency water distribution to the most vulnerable populations.

Additionally, CMWU supported the continuity of municipal services by coordinating the delivery and distribution of essential resources, such as fuel, chemicals for water treatment, spare parts, and heavy machinery required for excavation and repairs' activities. These interventions were critical in stabilizing the sector amidst the war and laying the groundwork for early recovery.

Following the ceasefire in October 2025. The carried out rapid assessment showed the severe destruction of most WASH facilities in Gaza and North Gaza which requires extra efforts from all concerned parties to restore the essential services in these areas to secure safe water access and sewage disposal for returnees

In response to these dire circumstances, the CMWU rapidly scaled up its emergency and recovery operations. Efforts were directed toward rehabilitating damaged infrastructure, restoring service pipelines, and increasing water production and distribution capacities in areas hosting large numbers

of returnees and IDPs. CMWU response prioritized the reactivation of non-functional wells, the rehabilitation of main water carriers, and the repair of damaged wastewater systems to mitigate environmental hazards and public health risks especially amid the severe deterioration of all aspects of daily life.

The commitment of CMWU and its partners during this critical period has been essential in alleviating human suffering and initiating the restoration of essential services in post-war Gaza, despite ongoing challenges related to access, security, and resource limitations.

2.0 Activities of the Coastal Municipalities Water Utility during March 2026:

2.1 Operation of Water Supply Facilities

2.1.1 Desalination plants

1- Al Bassa seawater desalination plant – Middle Area

The CMWU is still operating the seawater desalination plant in the Middle area (Al-Bassa) depending completely on the existing generators. The average daily water production during **March 2026** was reported of around **1177 m3**.

The CMWU supplies water through its owned water tankers, besides the rented private tankers, which represented a turning point in covering the needs of the population and citizens with desalinated water, in addition the desalination plant are provided with 23 filling points and recently the CMWU has installed additional 10 filling points all around the desalination plant to facilitate filling the water.



2-Southern Gaza seawater desalination plant (SGDP)

Since 17th November 2024, the CMWU started operating SGDP depending completely on the newly connected power line instead of electrical generators which increased the daily production of the plant from 2000 m³/day to approximately 17000 m³/day. Connecting the plant with the dedicated power line 5 MW was a result of great efforts exerted by the CMWU and PWA in order to operate the plant with its full capacity to cover part of the high-water demand during the current situation. However, the power line frequently suffers damage, leading to some drop in water production. In March, the average daily water production was **12,194 m³/day**.



3- Emirati Desalination plant to the Saudi water tank

A desalination plant with a capacity of 2,400 cubic meters per day was established at the Egyptian side financed by the United Arab Emirates through the Emirates Red Crescent and was operated in December 2023. The pipeline was connected to the closest water network and also a filling point has been installed. Since May 2024 till August 2025 the plant was out of operation due to the Israeli invasion to Rafah area and the destruction of the water carrier lines. However, during this period the Emirati Red Crescent has expanded and increased the production capacity of the plant in the Egyptian side to reach 10,000 m³/day, this expansion aims to secure a safe source of drinking water for southern governorates.

Recently and to meet the water demand in Al Mawasi area, which is fully occupied by IDPs, the CMWU, through Emirati funding, has completed the construction of a 6.7 km water pipeline from this plant to Al Mawasi. The pipeline serves the western parts of Khan Younis and Rafah around

600,000 residents and IDPs and it has been operational since 28th August 2025, whereas **in March** the average daily water supply from this plant was **4,252 m³**

4- CMWU Desalination plant in the CMWU Warehouse west of Khan Younis

Since January 2025 the CMWU has started the operation of the newly constructed desalination plant in its warehouse west of Khan Younis (60m³/hr). This plant enhances the system of supplying safe and clean drinking water to citizens and IDPs in various areas of Al-Mawasi, west of Khan Yunis.

The plant is equipped with a water filling points to serve residents and IDPs of Khan Younis. Moreover, this plant currently serves Rafah IDPs via water trucking as all Rafah residents have forcibly displaced to Khan Younis area which has limited drinking water sources after the severe destruction of most water facilities.

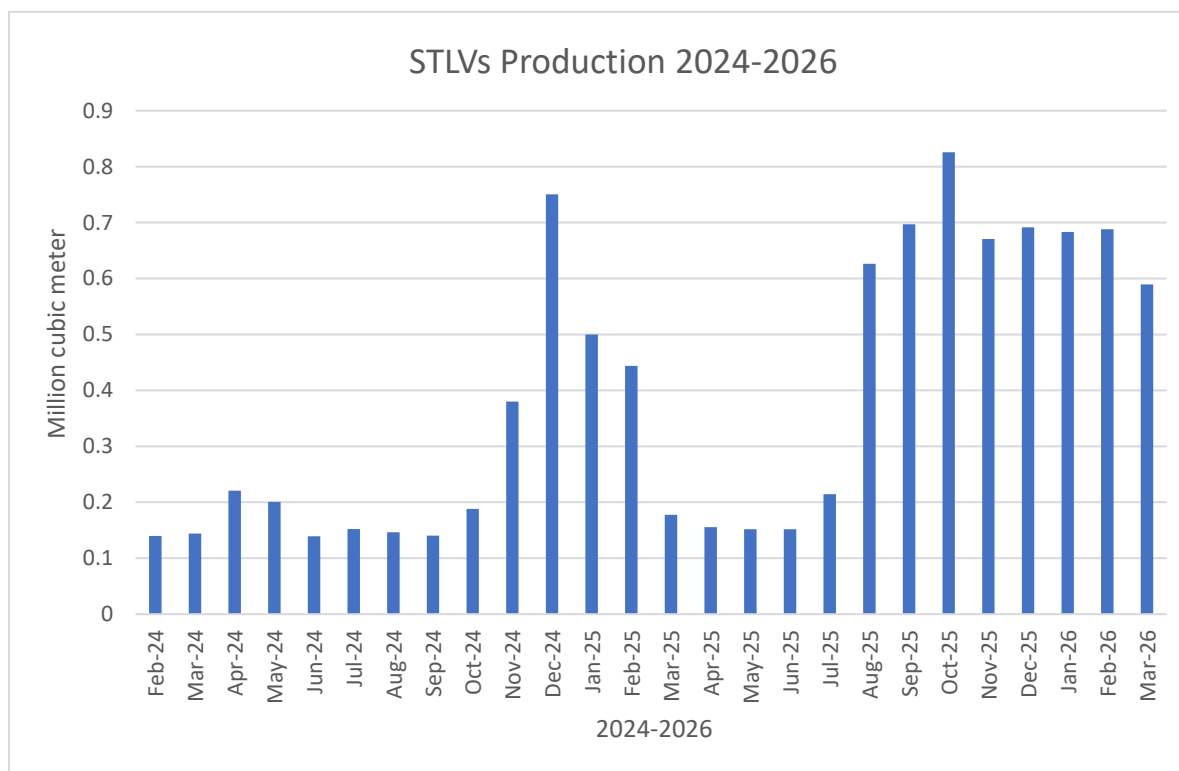
As part of the ongoing efforts to improve water services for both citizens and IDPs, the CMWU, in cooperation with MSF and clean shelter, has expanded the plant's capacity through installation of four additional RO units with a total 60 m³/hr to increase the capacity to 120 m³/hr,



In February, the average daily water production from all wellhead public RO desalination plants in the Gaza Strip was **2022 m³**

The figure below shows the large-scale desalination plants' production from February 2024 till - March 2026. The records indicate a remarkable increase in water production since August 2025 and that referred to re-operating SGDP by F11 power line which allows the plant to work with its full capacity, whereas this power line has previously experienced frequent breakdowns which dropped the plant's production and led the CMWU to increase the operation hours of the electrical generator

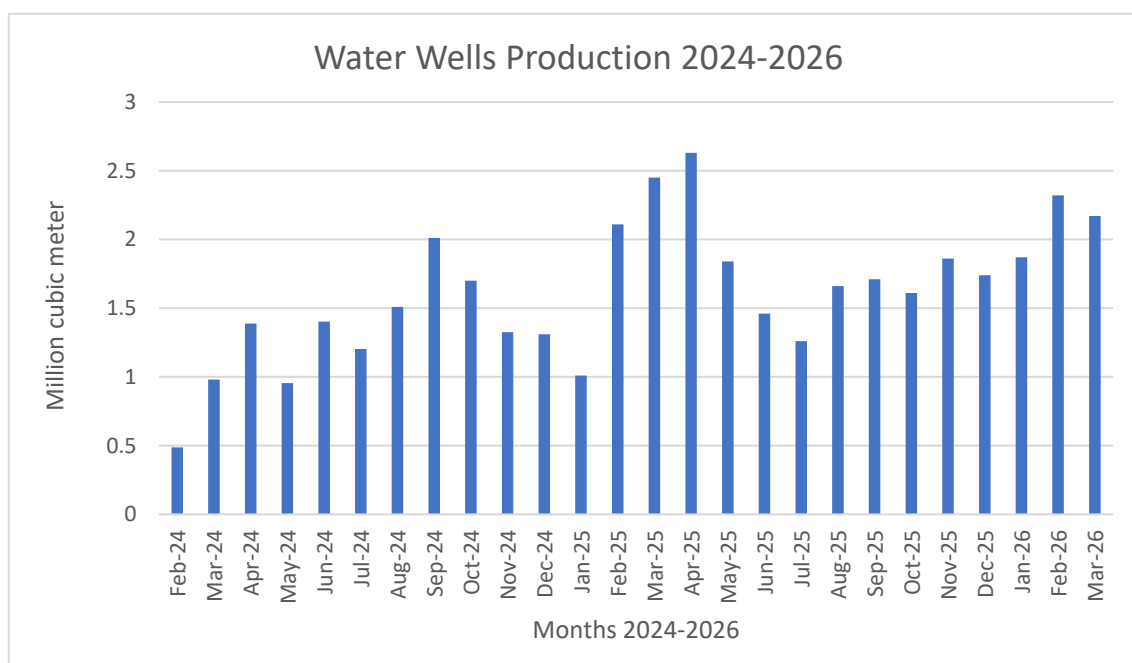
despite the fuel crisis to provide the minimum level of water services and to alleviate the suffering of IDPs and residents.



Water Desalination Production from February 2024 to March 2026

2.1.2 Operation of Water Wells

Limited water wells are still operational during war as most water wells are partially or completely damaged, hence the daily domestic water production from wells over war months did not exceed 25% of the original production. The below figures show the records of monthly water production from February 2024 till February 2026, whereas the fluctuation in water production depends on fuel availability, security issues and status of facility (operational or damaged) during each month. In March 2026, water production increased as additional wells are brought back into operation particularly in Gaza and North Gaza. The CMWU is continuing its efforts to repair more facilities and provide electrical generators to re-operate accessible vital wells. The average daily water production during March reached **72,599 m³**



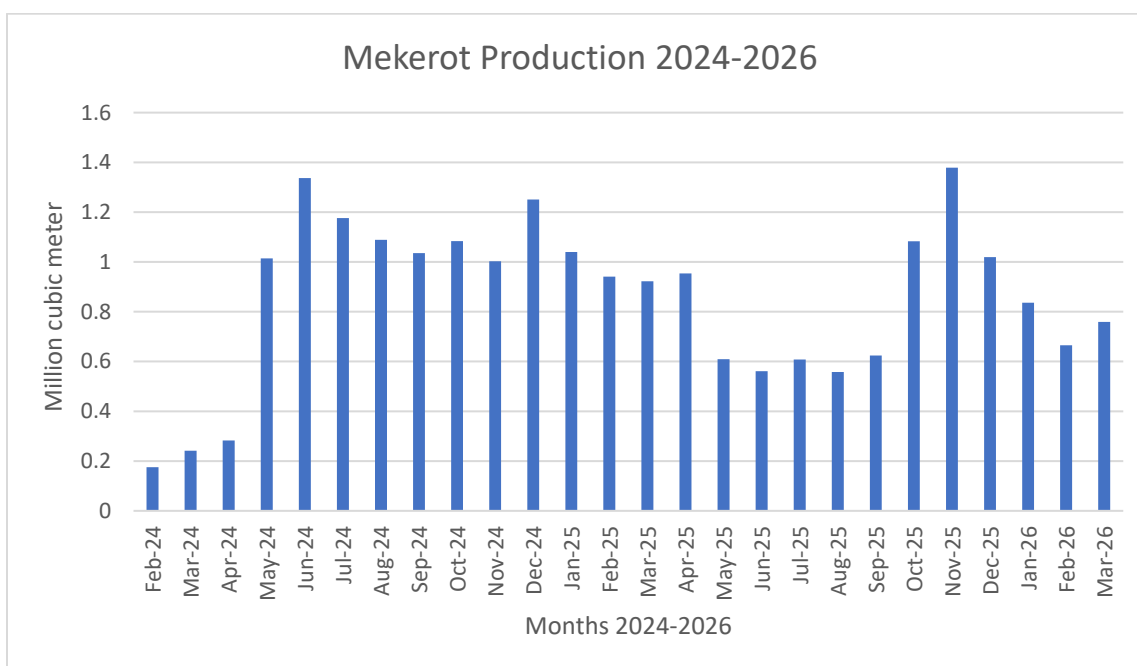
Wells Production from February 2024-March 2026

2.1.3 Mekorot Supply

There are three Mekorot water supply connections from Israeli side as follow:

- The first in the middle governorate called Ben Saed with a capacity 14,000 m³ /day, this source has been non-operational for nearly ten months due to severe damage to the feeding pipeline. In September 2025 PWA succeeded to obtain the approval from the Israeli side to carry out the necessary repairs. The pipeline has been in operation since October 2025. The average daily water production of this Mekorot connection during March 2026 reached approximately **7,121 m³**
- The second is east Khan Younis connection with a capacity of 16,000 m³/day, where it is working during the month with average daily of **8,975 m³**.
- The third for Gaza governorate with 20,000 m³/day capacity, However, during the first two weeks, this connection has not been operational with enough capacity which dropped the average daily production in March to around **9,200 m³**.

Mekorot connections have been partially damaged and interrupted during the war and after negotiation with the Israeli side through PWA, the connections were reactivated again to serve the people and to ensure providing the minimum level of water supply along with water wells and desalination plants. The below figure shows a fluctuation in water production which depends on the status of carrier lines and pumping facilities (operational or damaged) over 2024-2026 months

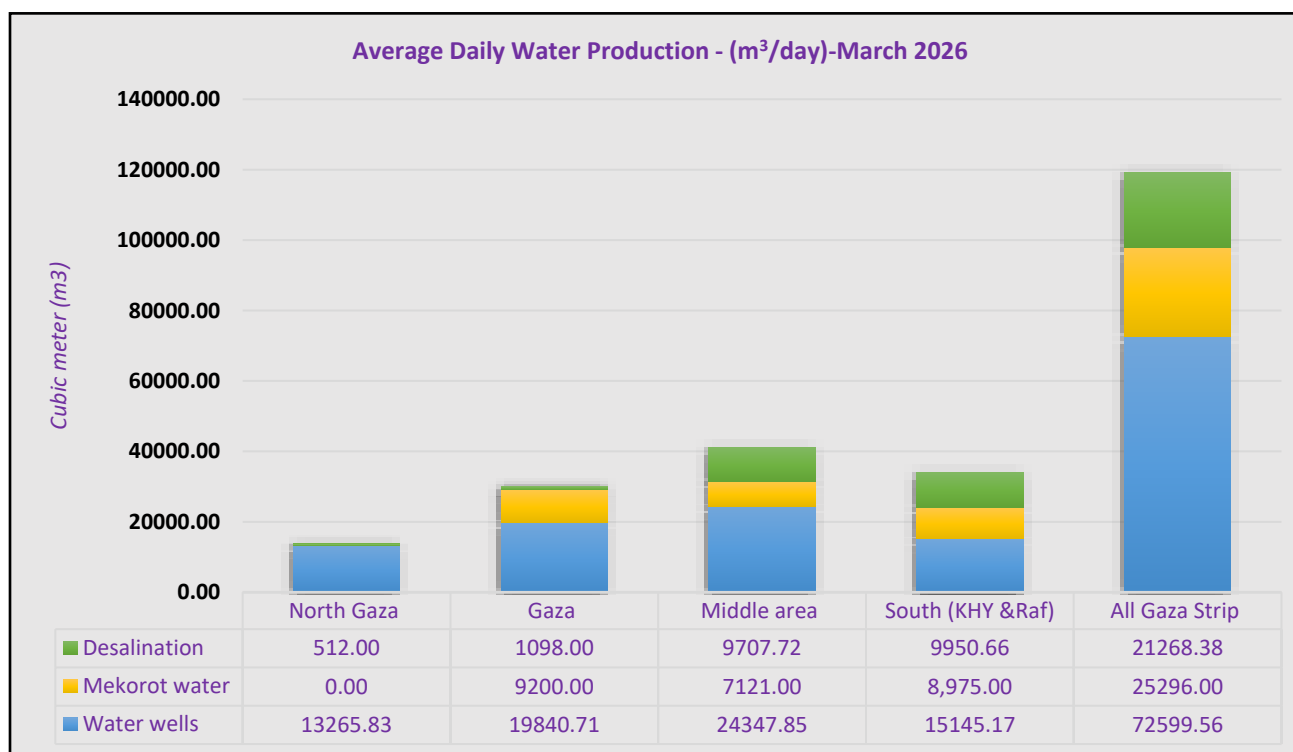


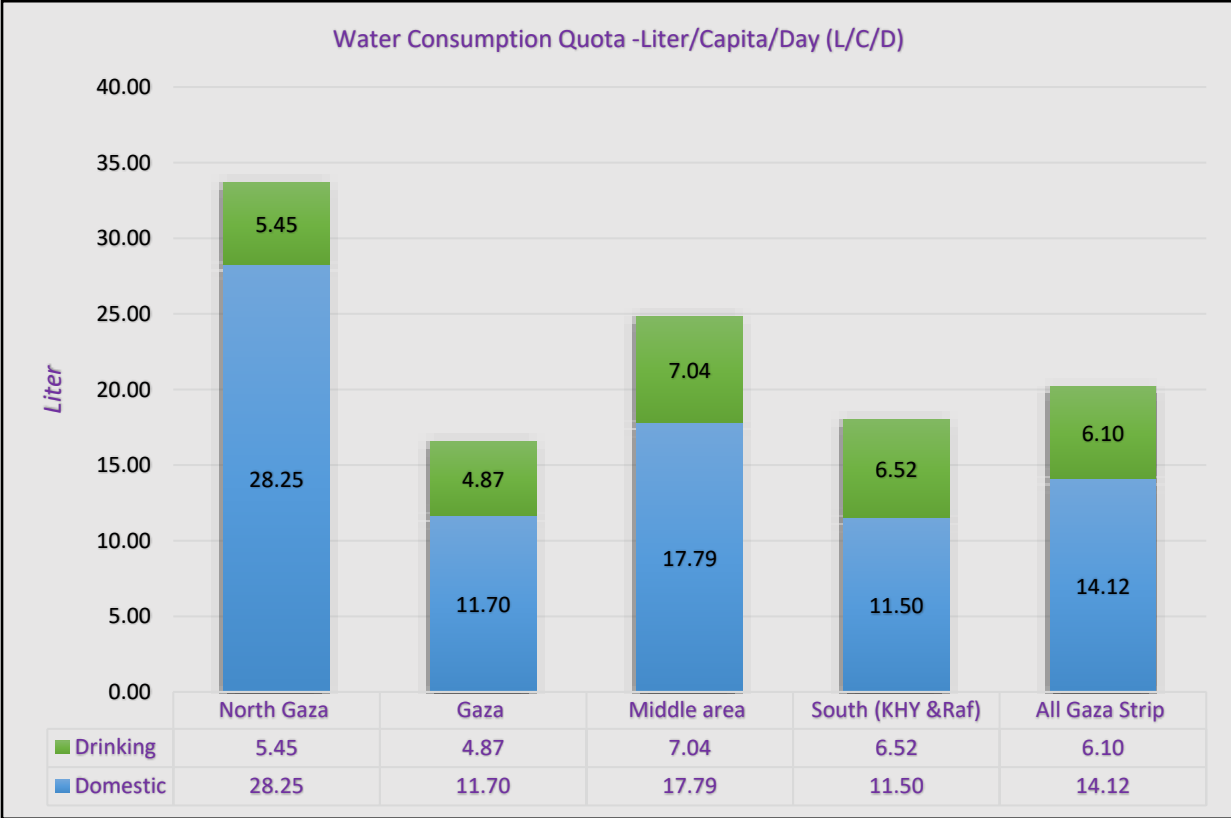
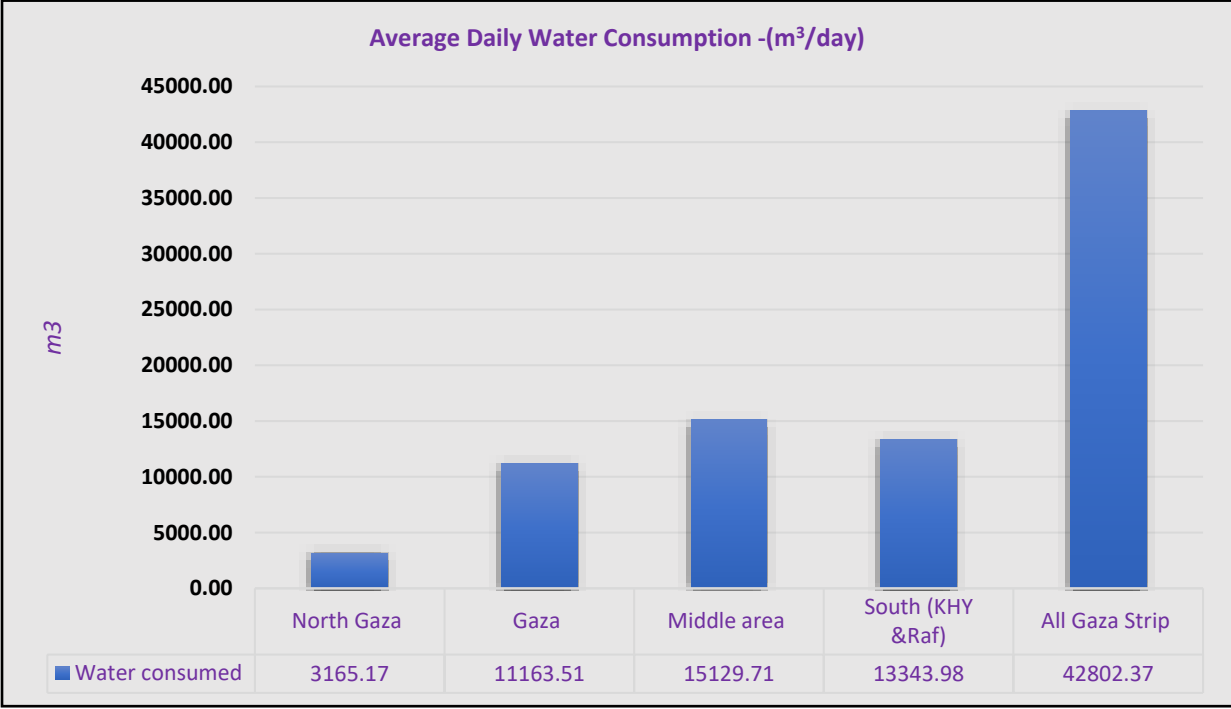
Mekerot monthly production from February till March 2026

2.2 Water Supply and Consumption:

The table below presents the average daily water production from all sources' municipal wells, Mekorot supply, and public desalination plants along with the actual household water consumption for domestic and drinking purposes across the Gaza Strip governorates during March 2026. The total average daily water production reached approximately 119,163.94 m³/day (72599.56m³ from municipal wells, 25296 m³ from Mekorot, and 21268.38 m³ from desalination plants. Despite this combined production, the water availability per capita remains far below the minimum humanitarian standards. Consumption levels varied across governorates, ranging from 33.7 liters per capita per day (L/C/D) in North Gaza to 18.02 L/C/D in the southern governorates (Khan Younis and Rafah), with Gaza governorate recording 16.57 L/C/D and the Middle Area reaching 24.83 L/C/D. These figures remain significantly below the minimum humanitarian standards and are subject to frequent fluctuations due to multiple challenges, mainly the security situation, fuel availability, frequent infrastructure damages, and evacuation orders that render key sites inaccessible or unsafe to operate.

Water availability in March 2026								Actual Consumption Household side m³/day
Governorate	Average Daily Water Production from All Resources			Water Consumption Quota -Household level			Population	
	Water wells	Mekorot	Desalination	Domestic	Drinking	Total		
	m³/day	m³/day	m³/day	Liter/C/D	Liter/C/D	Liter/C/D	Inhabitant	
North Gaza	13265.83	0.00	512.00	28.25	5.45	33.70	93933	3165.17
Gaza	19840.71	9200.00	1098.00	11.70	4.87	16.57	673824	11163.51
Middle area	24347.85	7121.00	9707.72	17.79	7.04	24.83	609355	15129.71
South (KHY &Raf)	15145.17	8,975.00	9950.66	11.50	6.52	18.02	740503	13343.98
All Gaza Strip	72599.56	25296.00	21268.38	14.12	6.10	20.21	2117615	42802.37





2.3 Operation of Sewage Facilities

2.3.1 Sewage Pumping Stations

Limited sewage pumping stations are still operational as most of them are partially or completely damaged especially in Khan Younis, Rafah, Gaza and Northern governorate, which enforces the CMWU to divert the flow directly to Wadi Gaza at the middle area, whereas in other governorates the untreated flow is diverted to the sea and in some areas, where no discharge destinations are exist, the sewage accumulates in streets and usually evacuated and fixed by CMWU and municipal vacuum and suction trucks.

- The teams have been working to clean sewage lines and networks from blockages. The focus is also on treating overflow points within residential neighborhoods and removing health hazards that pose a direct threat to the environment and public safety.
- The CMWU continues to utilize its available and recently received suction trucks and mobile pumps to evacuate sewage from flooded areas, particularly where IDPs are concentrated. These trucks are clearly marked and visible.
- CMWU is actively seeking to enhance its operational capacity by providing additional suction trucks and mobile pumps, which are critical for managing floods during this challenging time. These resources and heavy machineries are essential to controlling and eliminating floods especially in shelters where IDPs are vulnerable to disease and other public health risks.

In March 2026, the CMWU teams carried out emergency interventions to address the impacts of sewage floods particularly in IDPs sites in Gaza City, Middle area and Khan Younis through utilization its sewage suction trucks to evacuate the latrines and flooded areas





Besides these rapid responses to emergency cases, the CMWU through its partners support still working on rehabilitation and repairing the affected sewage pumping stations in all Gaza Strip but the lack of materials hinders these repairs. Moreover, a consultancy service has been initiated to assess the damages and develop tender documents for repairs, this project is financed by UNICEF through two lots the first for Middle and Southern governorate and the other for Gaza and North Gaza. Such services provide detailed design and tender documents for most needed repairs to restore sewage services particularly after the severe destruction and deterioration.

2.3.2 Operation of Wastewater Treatment Plants

There were five operational wastewater treatment plants in the Gaza strip, three of them were newly constructed (Khan Younis WWTP, Al Bureij WWTP and North Gaza WWTP), whereas the other two plants are considered intermediate plants located in Rafah and Gaza city.

During the war the operation of the three central plants (KHWWT, BWWT and NWWT) stopped due to the severe destruction in their main structures. Also, the operation staff could not reach these plants as they are located in the yellow area. As a result of this stoppage, currently most of the generated sewage is diverted to the sea without treatment causing pollution along the coastal side.

1- KHWWT

To mitigate the hazards resulted from discharging untreated sewage to the sea and the frequent floods in Khan Younis governorate where most of IDPs concentrated. In year 2024 the CMWU and PWA coordinated for inspection and assessment of the damages of East Khan Younis WWTP

(26,600m³/day). The visual inspection showed that the damage can be handled, and based on that, the CMWU has prepared a proposal for recommissioning of KHWWTWP and shared it with the interested donors to be included in their plans for the coming years. In this regards UNDP has responded and assigned a consultant to assess the needs and develop all needed designs and tender documents to re-operate the plant.

After repeated rejection to visit WWTP. On 17 February 2026, approval was finally granted, and technical staff from UNDP, PWA, and CMWU, accompanied by the assigned consultant, carried out a visual inspection for all plant components. The findings indicated that the damages to the plant are manageable and can be repaired.



2- CGWWTP

In June 2024, CMWU and PWA coordinated for an inspection visit to Gaza Central Wastewater Treatment Plant (GCWWTP). The visual inspection revealed that several plant's components and structures had sustained severe damage.

Approximately two years later, UNICEF, supported by a KFW has requested a coordinated site visit. On 11 February 2026, approval was issued by CLA for UNICEF staff to access the site. The team conducted a visual inspection, which confirmed that multiple structures and components were damaged. However, due to limited time and the extent of destruction, the team was unable to inspect some underground infrastructure, as well as certain rooms on upper floors and rooftops.

The findings from both inspections should be further analyzed by a team of wastewater treatment experts to support the preparation of a comprehensive technical assessment. A detailed assessment

mission, involving a multidisciplinary team, is recommended and would require approximately 2 to 4 weeks on site. This mission should be supported by manual laborers and excavation equipment to enable access to facilities and underground networks currently obstructed by rubbles.



3. Sheikh Ejleen WWTP

In order to mitigate the floods and sewage crisis in Gaza city, the CMWU has launched a consultancy service for assessment and developing the needed tender documents for recommissioning of Sheikh Ejleen WWTP which is the only accessible WWTP. The recommissioning includes two phases, the first for maintenance works to ensure sewage stabilization and anaerobic treatment where the second phase for reconstruction and upgrading works to treat the received sewage from Gaza city within the acceptable standards before discharging to the sea.

in March 2026, the consultant submitted the damage assessment report for CMWU and concerned parties for review and approval to proceed with tender documents preparation.

On the other hand, the CMWU through UNICEF support has launched a project for cleaning and removing rubbles from WWTP to facilitate assessment process and access unseen damages if any



4. NGWWTP

After several attempts, approval was granted to visit and assess the damage at the North WWTP. The approval was limited to a small number of technical staff, and the CMWU was the only local entity present during the visit. The findings of the visit were as follows:

- The administration buildings
- The power system and air blowers building, including generators, transformers, blowers, and electrical panels
- The gas balloon system and its associated components
- The solar PV power system and its accessories
- The odor treatment system
- Various electrical panels across all buildings have been subjected to theft and vandalism

As for the remaining facilities, they have not suffered structural damage; however, most of the electro-mechanical equipment requires maintenance and rehabilitation due to corrosion and prolonged shutdown under harsh environmental and technical conditions.

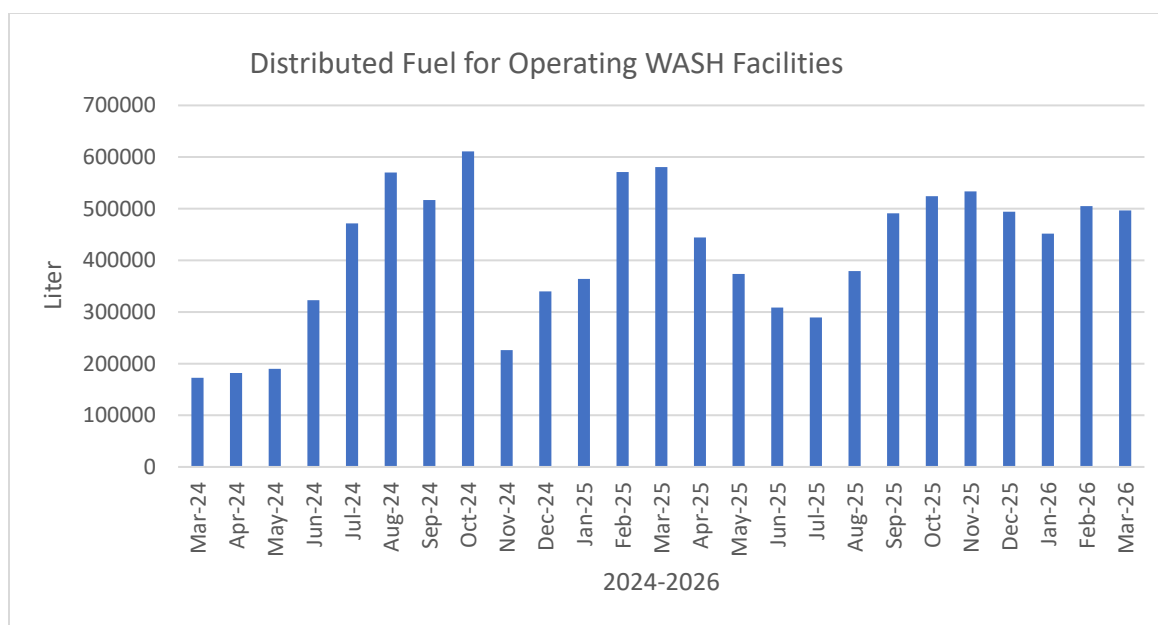
2.4 Providing Fuel to Operate WASH Facilities

Through UNICEF fund, the CMWU in cooperation with UNRWA still provides WASH facilities in the Middle and Khan Younis Governorate with diesel, in order to ensure the operation of these facilities and provide the population with water and sanitation services, especially in light of the continuation of the Israeli war on the Gaza Strip.



The CMWU constantly strives to secure a regular supply of fuel without interruptions, as diesel generators are currently the backbone of all WASH facilities following the complete cutoff of power supplies since the onset of the war. In collaboration with PWA, the CMWU is making every effort to obtain limited quantities of fuel to maintain minimal operation of the facilities. This situation has significantly impacted wastewater services and water supply, which have been already deteriorating over the past months.

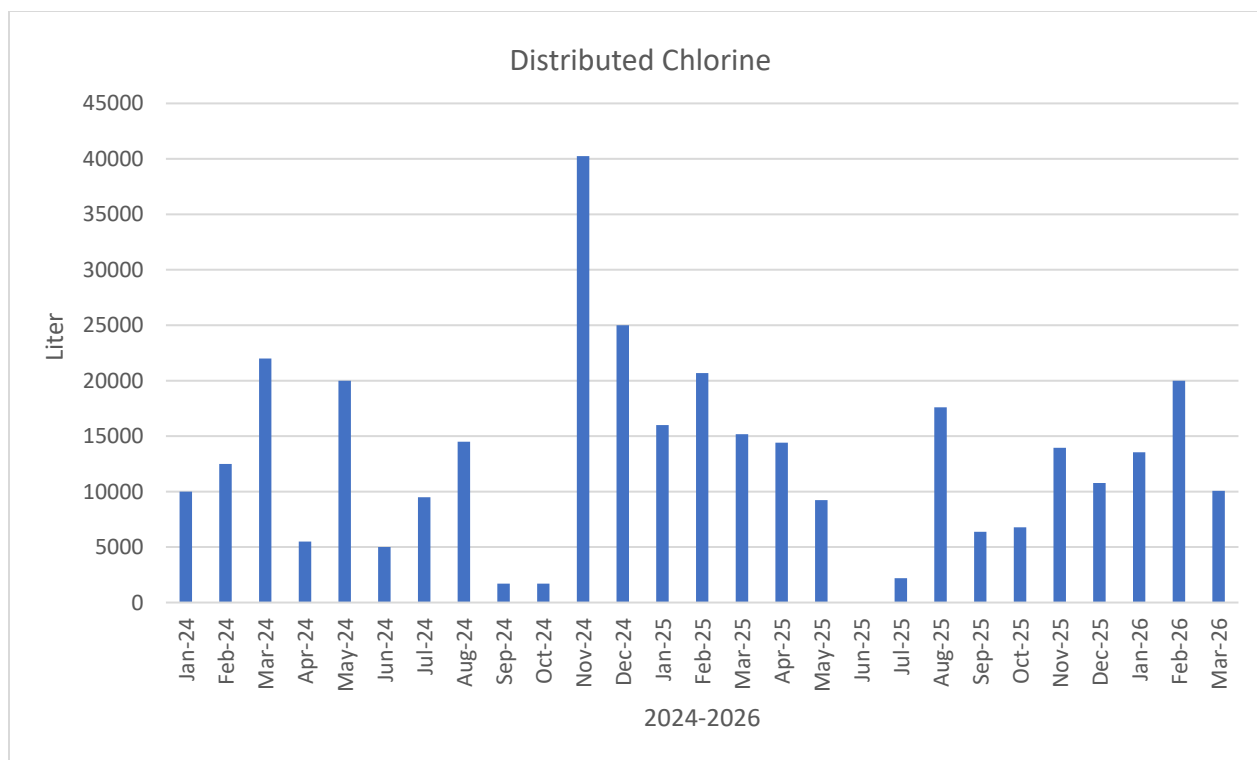
The figure below illustrates fuel distribution to WASH facilities in the middle and southern governorates from March 2024 to March 2026. Fuel distribution remained relatively stable during the last months. The regularity and reliable fuel supply amid the ongoing crisis is critical to ensuring minimum levels of water and wastewater services and to sustaining the operation of recently rehabilitated WASH facilities



Distributed fuel for operation WASH facilities

2.5 Supply Chlorine for Water Disinfection

Through UNICEF and ICRC funds, CMWU has been providing water supply facilities with the needed chlorine solution for water disinfection. over the last months of 2024 there was a remarkable fluctuation in the distributed chlorine and that depends on materials availability, security issues and continuation of military operations in Gaza Strip which resulted in destruction of water facilities. However, the CMWU has been working on repairing the affected facilities to bring them back into operation, therefore in some months the distributed chlorine increased and in others decreased, Moreover, during September and October almost there was no chlorine supply which led the CMWU to raise many appeals to UNICEF and international agencies to secure the needed quantities. UNICEF has responded to these requests and has been successfully supplying adequate quantities of chlorine for water supply facilities as shown in the figure below.



Chlorine Supply during 2024-2026

Under CMWU water quality monitoring Program:

The CMWU laboratory team continues to carry out intensive field inspections to test, calibrate, and adjust chlorination and disinfection systems at various water production wells on a regular basis. This effort aims to ensure the quality and safety of the water supplied to residents and displaced people across different areas of the Gaza Strip. These efforts include close monitoring of all production facilities, contributing to the maintenance of high standards of water quality and public health safety. These efforts reflect CMWU's ongoing commitment to protecting public health and delivering safe and sustainable water services.

2.6 Water Supply and Water Trucking Services

2.6.1 Water Distribution to Various Shelters and UNRWA Schools

The CMWU continues to provide shelters, UNRWA Schools and residential areas with potable water, particularly in response to the growing demand for drinking water amid the ongoing Israeli war on the Gaza Strip. In March 2026 the CMWU in cooperation with international and local partners has distributed approximately **96,280 cubic meters** of water through its owned and hired water trucks.



2.6.2 Installation of Water Bladders and tanks at IDPs site

The CMWU is still working on distribution water tanks and bladders to shelters besides assessing the proposed locations for the new installation. In March 2026 the CMWU has distributed numbers of tanks to IDPs sites:

- 17 tanks of 5 m³ capacity
- In addition to 3 of 10 m³ capacity



2.6.3 Water Trucking Services

CMWU tankers continue to distribute drinking water to residents and IDP shelters across all Gaza Strip governorates to alleviate the suffering caused by the ongoing crisis. Water trucking services remain essential, particularly as Mekorot supply is limited and frequently disrupted due to repeated damages. The CMWU fleet of 53 owned trucks including the newly supplied trucks through UAE are all efficiently operational to serve in all Gaza strip areas to ensure water distribution coverage and improve water services to an acceptable level particularly during this critical time.



2.6.4 CMWU Mobile Lab:

The CMWU still monitors through its portable lab and equipment the quality of distributed water to ensure providing safe water access to IDPs. This Lab was previously provided by WHO after the destruction of the CMWU central lab in Al Zahra city in March 2024.



2.7 Repairing and Fixing the Damages of Infrastructure and WASH Facilities

2.7.1 ICRC Financed Emergency Interventions:

Agreements have been signed among the CMWU and ICRC to implement a group of emergency interventions and activities. Some of these activities were implemented, and others are still ongoing which include:

1- Service Works for Repairs of Water Wells, Production and Pumping Facilities

Repair works in March 2026 took place at the following water facilities:

Location			Work Description
Facility name	Long.	Lat.	
Shublaq well	34.404093	31.473787	Continues the electromechanical maintenance works in Shublaq well.
F203 well	34.407496	31.471100	Continuing the electromechanical maintenance works in F203 well.
Sh.E.5 - Barceloba Well	34.433716	31.503588	Dismantle the vertical hollow shaft 50 HP electrical motor & transfer it to the workshop for maintenance.
Eastern Khawalda Well	34.366526	31.418563	Rewinding of submersible pump 25 HP and install it after performing the necessary maintenance.

Nables Well	34.375766	31.440206	Rewinding of submersible pump, and install it after performing the necessary maintenance.
Marwa Well	34.484421	31.537533	Winding of the vertical hollow shaft 75 HP electrical motor.
Al-Somod camp Well	34.273552	31.345388	Dismantle the submersible pump 20 HP & transfer it to the workshop for maintenance.
El Balad DP well	34.351046	31.415236	Dismantle the vertical hollow shaft 50 HP electrical motor & transfer it to the workshop for maintenance.



2- Hiring Heavy Machineries for water and wastewater Repairs

The completion date of this contract was in January 2026, where it has been extended to cover the urgent repairs of water and wastewater damages in all governorates. The following includes the repairs that have been implemented under this contract in March 2026

Municipality	Description
Khan Younis	The works included: - Install water and wastewater pipe different diameters. - Maintenance works of water and wastewater pipe different diameters. - Clean works for sewage lines and Manholes. - Searching and detection work of sewage manholes. - Remove all waste concrete elements on wastewater line & Open Roads.
Dair Al-Balah	The works included: - Install water pipes of different diameters. - Maintenance works of water pipe different diameters & gate valve. - Remove all waste concrete elements on water line & Open Roads.
Al Nusirat	The works included: - Install water and wastewater pipe with different diameters. - Maintenance of water and wastewater pipes with different diameters. - Cleaning works for sewage lines and Manholes & pumping stations. - assessment and inspection the damages of sewage manholes. - Remove all waste concrete elements of wastewater lines



3- Hiring Water Wells in Khan Younis

Through ICRC support, CMWU has renewed the agreement to hire four private water wells in Khan Younis, increasing their production from 1,200 m³/day to 3,000 m³/day to serve the IDPs at Al Mawasi area, which is now hosting thousands of IDPs.

In parallel, CMWU continues its efforts to repair damaged water wells and to connect IDP camps in Al Mawasi area to the public water network, aiming to replace the reliance on hired wells with public services. Recently, CMWU, in cooperation with Oxfam, completed Phase I and II of connecting a number of IDPs camps previously served by hired wells to the UAE pipeline, which supplies desalinated water from the Egyptian desalination plant. In the same time the contract of the hired wells is still ongoing until the installation works are completed to ensure stability of water supply even from the UAE desalination plant or from these hired wells.

2.7.2 Maintenance of Water and Wastewater Network in Different Areas

The CMWU through the rental of heavy machinery and provision of labor supported by UNICEF has maintained and repaired water and wastewater networks and facilities, as well as implementing urgent interventions to protect shelters from the risks of flooding caused by stormwater and sewage. The intervention covered the areas of Jabalia, Beit Lahia, and Gaza City, in addition to the Middle Area and Khan Younis, ensuring that services reach the largest possible number of residents and IDPs across the Gaza Strip.



2.7.3 Maintenance of Water wells in Al Nuseirat

The CMWU, through ICRC support, has carried out maintenance and rehabilitation works for a number of vital water wells in the middle area, as part of ongoing efforts to enhance the sustainability and quality of water services provided to residents.

The works included the rehabilitation of Nablus Well in Al-Nuseirat Camp, which serves approximately 8,000 people living in areas surrounding the southern Nuseirat cemetery. In addition, works were conducted on Al-Sawarha Al-Sharqiya Well in Al-Zawaida, central Gaza Strip.



2.7.4 Floods Mitigation in Jabalia

The CMWU carried out an emergency intervention in Jabalia, to address the impacts of wastewater overflow that had emerged at intersections and along roads in several areas of the city.

The intervention included the deployment of CMWU sewage vacuum tankers, along with specialized technical teams. The work involved pumping out wastewater and cleaning the affected sewer networks, with the aim of protecting residents and IDPs from the risks associated with sewage flooding, particularly under the current challenging conditions in the Gaza Strip in general and the northern governorate in particular.



2.7.5 Maintenance of water and wastewater networks in Khan Younis

The CMWU has implemented a series of maintenance works and field interventions on water and wastewater networks in Khan Younis City, as part of its ongoing efforts to ensure service continuity and improve the quality of water and sanitation services for residents.

The works included the following:

- Installation of new water pipelines along Al-Mujamma Al-Islami Street in Al-Mahatta area, in addition to the maintenance of a sewer line and the construction of a new manhole in the city center near Rafah Garage.
- Technical teams also carried out maintenance of a sewer line and cleaning of several manholes in Al-Amal neighborhood along Al-Zatmeh Street.
- In the Camp area, interventions included maintenance of the sewer network and cleaning of manholes and pipelines along Khalifa Mosque Street, as well as maintenance of part of the water network along Shaheen Street and School Street in Al-Amal neighborhood.
- Furthermore, manholes and sewer networks were cleaned along Barbakh and Abu Shamala Streets in the same area, in order to improve network efficiency and reduce the risk of overflows or blockages that could affect service delivery to residents.



2.7.6 Maintenance of sewage networks in AL Nuseirat

The CMWU through ICRC support carried out maintenance works for 40-meter-long sewer line in the New Camp area, in addition to rehabilitating several sewer manholes in the same area.

The works also included desilting, cleaning, and emergency maintenance of several sewer networks in different locations, most notably along Ayesh Street in Ard Al-Mufti, Khaled Bin Al-Waleed area, and Ard Al-Saftawi area. These interventions aimed to improve network efficiency and reduce overflows and wastewater accumulation that may pose health and environmental risks to residents.

Furthermore, technical teams conducted cleaning and maintenance works at several main wastewater pumping stations to ensure their continuous and efficient operation and to prevent blockages that could affect the performance of sewer networks in the area. These interventions serve more than 11,000 residents in the targeted area



2.7.7 Construction of Drinking Water Lines Branched from UAE pipeline in Mawasi Area– Phase 2

The CMWU through Oxfam support has finished the second phase of connecting number of camps at Al Mawasi area with drinking water network branched from UAE pipeline the work included the following:

- Supply and installation PE drinking water hose pipes 50mm diameter, Length =4930m
- Supply and installation PE drinking water hose pipes 32mm diameter, Length =2953m
- Supply and installation UPVC pipes 110mm diameter, length= 23 meter
- Supply and installation Complete concrete manhole diameter 60cm, No.=12.
- Installation of water dispensers equipped with four plastic water taps, No.=43.
- Supply and installation PE Clamp saddle 50/32mm, No=30.



2.7.8 Operation of Al Manshia RO Desalination Plant

The CMWU through ICRC support has recently completed the construction of Al Manshia RO desalination plant in Gaza City which comes as part of ongoing efforts to increase the availability of potable water and improve service levels for residents, in light of the current challenges facing the Gaza Strip, particularly following the extensive damage to water facilities in the city.

The project included (a) drilling a dedicated water well to supply the plant, (b) constructing two steel tanks with a capacity of 80 m³ each one for collecting raw water extracted from the well and the other for storing desalinated water and (c) installing a desalination unit with a production capacity of approximately 50 m³/hour. This will enhance CMWU's ability to meet the population's needs for safe drinking water.

All the plant's components have been installed and are operational and in April the plant will be able to produce 350 cubic meter daily to be distributed via water trucking to residents and IDPs.



2.7.9 Flood Mitigation at Al Baraka area in Deir Al Balah

The CMWU carried out several field interventions in Deir Al-Balah through ICRC support, as part of ongoing efforts to improve water and sanitation services and mitigate health risks facing residents and IDPs due to sewage frequent floods. The works took place in Al Baraka area which is one of the hot spot points that experiences stormwater and wastewater floods.



2.7.10 Repairing of Water and Wastewater Networks at different areas in Gaza City

The CMWU through ICRC support, carried out a number of emergency maintenance works for water and wastewater networks in various areas of Gaza City, as part of ongoing efforts to maintain the continuity of essential services and mitigate the impacts of damage to infrastructure.

The works included the following:

- Maintenance of a water line near Sheikh Radwan Pond
- Maintenance of a water line in Sheikh Radwan – Third Street near Rumouz Al-Nakheel
- Maintenance of a water line near Bank of Palestine – Al-Nasr neighborhood
- Maintenance of a water line in Al-Rimal neighborhood opposite Taiba Tower 3
- Maintenance of a water line east of Al-Sinaa Street opposite Al-Rahma Mosque
- Maintenance of part of the sewer network near Jordanian Hospital – Tel Al-Hawa
- Desilting and cleaning of sewer manholes and networks around Al-Furqan Mosque – Tel Al-Hawa
- Desilting and cleaning of sewer manholes and networks in Al-Nasr neighborhood opposite the Meat City Mall
- Desilting and cleaning of sewer manholes and networks in Al-Zeitoun neighborhood – Al-Basateen Street

- Carrying out maintenance and cleaning works for water and wastewater networks in several other areas across the city

This intervention comes as part of the continuous efforts undertaken by CMWU, in cooperation with municipalities and international partners, to ensure the provision of minimum water and sanitation services to residents under the difficult conditions and extensive damage to infrastructure.



2.7.11 Maintenance of RO Desalination Plants at Jabalia and Al Nuseirat

The CMWU carried out emergency maintenance works on several water desalination plants in Al-Nuseirat Camp in the middle area and in Jabalia in the northern part of Gaza. The aim of these interventions was to ensure the continued operation of the plants and the provision of safe drinking water to residents and displaced people.

In Al-Nuseirat Camp, CMWU conducted maintenance works on Al-Shaqqi and Hamad desalination plants. Al-Shaqqi plant has a production capacity of approximately 5 m³/hour and serves Camp 2 and displacement camps in the area, benefiting around 21,000 people. Hamad plant

has a production capacity of about 2 m³/hour and serves parts of Camp 1, with approximately 3,500 beneficiaries.

In Jabalia, the CMWU carried out maintenance works in Qarmout desalination plant. The plant has a production capacity of approximately 36 cubic meters per day and is the only operational plant in the area, serving large numbers of residents and contributing to the provision of safe drinking water amid increasing demand.



2.7.12 Rehabilitation and Maintenance of Water Wells in Jabalia

The CMWU through UNICEF support, is still carrying out maintenance works for two water wells in Jabalia UN4 and Al Marwa which experienced severe damage during the war. The works includes dismantling and maintenance the wells' pumps, electromechanical repairs for the existing and replacing the damaged equipments, operating both wells will provide water access for at least

10,000 residents. Moreover the CMWU is working to provide AL Marwa well with 35 m3/hr RO unit to serve the communities and water tankers as the plant will be equipped with filling points.

It is expected to operate this plant in May 2026 once the power source « electrical genertor » is secured



3 Needs Assessment of Water and Wastewater Infrastructure throughout the Gaza Strip

Through UNICEF support, two consulting firms signed contracts with UNICEF to conduct the needs assessment and prepare the tender documents for the WASH damages. A team from PWA, CMWU, and municipal staff have been dedicated to closely following up on the progress of both assignments. The progress of the two assignments is as follows:

- ✓ **Provision of Consulting Engineering Services for Detailed Needs Assessment and Tender Documents for Water and Wastewater Infrastructure in Southern Area; Khan Younis and Deir El Balah**

The Consultant submitted the Damage Assessment Report for 69 assessed water wells for review and approval, with the aim of confirming the specific wells to be taken forward for the preparation of the Bill of Quantities (BOQ), Also, 17 sewage pumping station have been assessed, and the assessment for the water tanks and stormwater pumping station is ongoing as the below table:

Type	Contract Qty	Assessed
Water Wells	65	69

Wastewater Pumping Station	24	17
Water Tanks and Pumping stations	23	21
Stormwater pumping stations	3	3

The field visits to Water and Wastewater networks that were completed by the Consultant's Team are shown in the dashboard as per the link below. The Consultant's Team was accompanied by Khan Younis municipality's engineers, See link below for further dashboard presentation <https://dash.rai-consult.com/Unicef-enhanced-dashboard>



✓ **Provision of Consulting Engineering Services for Detailed Needs Assessment and Tender Documents for Water and Wastewater Infrastructure in Southern Area; Gaza and North**

Significant progress has been achieved in the assessment of groundwater wells, water reservoirs and booster stations, wastewater pumping stations, and stormwater pumping stations.

- **Water Wells:** A total of 80 wells has been assessed, primarily located in the municipalities of Gaza, Jabalia, and Beit Lahia.
- **Water Reservoirs and Booster Stations:** Water reservoirs and their associated booster stations were identified across Gaza, Jabalia, Beit Lahia, Beit Hanoun, Al Mughraqa, and

Wadi Gaza municipalities. Assessment completion in Gaza, Jabalia, and Beit Lahia municipalities currently ranges between 50% and 75%.

- **Wastewater Pumping Stations (WWPSs):** A total of 32 wastewater pumping stations were identified within the municipalities covered by the scope of work. Assessment completion rates range from approximately 50% to 89% in Gaza, Jabalia, and Beit Lahia municipalities.
- **Stormwater Pumping Stations (SWPSs):** A total of 5 stormwater pumping stations were identified in Gaza and Jabalia municipalities.
- The assessment process has produced a standardized, georeferenced dataset and interactive dashboards, enabling rapid visualization of damage patterns, operational status, and emerging priorities across the assessed municipalities.

- ✓ An interactive GIS dashboard has been developed as part of the assessment to provide UNICEF and partners with direct access to detailed, georeferenced assessment results for WASH facilities. The dashboard supports rapid visualization of damage, operational status, and priority needs and is available at :
- ✓ **Wells** :
<https://giscep.site/gisportal/apps/dashboards/f1dfb0d08ded429c8b039499a1759e4b>
- ✓ **Water Reservoirs and Booster Stations :**
<https://giscep.site/gisportal/apps/dashboards/45e5ee2552cf473bb309cb069110e027>
- ✓ **Pumping Stations :**
<https://giscep.site/gisportal/apps/dashboards/e3d8acc41d6a46779e39cc8c93d1b129>
- ✓ **Username:** guest01 **Password:** guest@20298%\$#

4 Challenges:

3.1. Targeting and destroying the CMWU Central Warehouses: The CMWU communicated with governmental, international and authorities such as the Palestinian Water Authority, OCHA and UNICEF in order to coordinate with the Israeli side in order to consider the CMWU central warehouses as a de-conflicted location. All aforementioned institutions confirmed that the warehouses are de-conflicted location upon the approval of the Israeli side. materials, equipment, and trucks continued to be stored in the warehouses accordingly. However, on January 21, 2024, at 11:12 p.m., the central warehouses were bombed with a guided missile likely by a reconnaissance plane, and the next morning direct bombardment of the warehouses continued, and the warehouses caught fire with all what they are containing materials, equipment, tools, electrical and electromechanical spare parts, and heavy machinery

The damage resulted from targeting the CMWU warehouses are estimated to be at around 9 million USD, in addition to the construction value of the warehouses.

3.2. Lack of materials: As a result of the indiscriminate bombing of a large part of the infrastructure of the water and sanitation sector and the lack of materials, this led to an exacerbation of the problem and the inability to repair what was destroyed except for a small part of it. On the other hand, the Israeli side is still preventing the entry of materials necessary to operate the water and sanitation system, especially generators, generators spare parts, and spare parts for networks and desalination plants.

3.3. Cutting off Mekorot water: frequent cutting off the water supply of the three connections of Mekorot Company's water, affects severely on water supply in the three governorates especially Khan Younis which has destroyed infrastructure and water sources.

3.4. Cutting off the electricity supply: Since the beginning of the war, cutting off electricity from all lines supplying the Gaza Strip, in addition to stopping operation of the only power plant in Gaza from working, has led to damage on the water supply system, which has resulted into reducing the operation of WASH facilities in a reduced capacity by using the already overloaded diesel generators as this led to a reduction in the amount of water from 100 liters to an average of less than 18 liters per person per day.

3.5. The systematic Israeli destruction of infrastructure: Since the first day of the war, the IDF deliberately to destroy the water sector infrastructure , whereas sewage treatment plants, pumping stations, the desalination plant in northern Gaza, the main lines, machinery and equipment were destroyed, especially in Gaza, Khan Younis and the north Gaza, which led to the difficulty of supply water through networks which led to a state of thirst among many people of Gaza and the north, in addition to the sewage flooding in many areas and neighborhoods, especially areas surrounding the Sheikh Radwan rainwater basin in Gaza City and Abu Rashid pond in Jabalia.

3.6. Difficulty of coordination during the war: Despite numerous attempts by the CMWU, PWA and international institutions such as OCHA, UNICEF, and the Red Cross to coordinate with the Israeli side to enter the necessary materials, equipment, and machinery to operate and maintain water and sewage systems. All these attempts did not succeed in convincing the Israeli side to approve the coordination requests.

3.7. Targeting crews working in the water sector: The Israeli side deliberately targeted crews working in the water sector, as 7 workers in the CMWU, including engineers and field workers,

were martyred, the last of which was targeting two water distribution workers in water tankers serving the displaced population.

3.8. The deterioration of the financial situation of the CMWU: As a result of the war on Gaza, all resources of funding for the CMWU activities stopped, especially after it stopped issuing water bills due to the inability of the population to commit to paying their water bills. This is in addition to stopping the implementation of all projects, which negatively affected the CMWU ability to finance its various expenses, such Operating, maintaining, and paying the salaries of its employees and workers who are still performing their duties in operating and maintaining water and sanitation facilities to serve the residents of the Gaza Strip, especially in places of displacement. This is in addition to the inability of the CMWU to pay the dues of the CMWU sub-contractors from the private sector.

3.9. Fuel Shortage:

As a result of the continued Israeli ban on the entry of materials into Gaza since the collapse of the ceasefire in March 2025, a severe fuel shortage has occurred. This has directly impacted on the operation of water and sanitation facilities, which rely on fuel to power their generators.

3.10. Accessibility and Security Challenges:

Military operations and the location of several facilities near the yellow line have also severely affected access to water and wastewater facilities, hindering their operation. This has significantly disrupted service provision, particularly in light of the already limited water resources.