



Activities and Interventions of the Coastal Municipalities Water Utility during the war on Gaza 2023-2025

November, 2025

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 **7.21** million cubic meter. Moreover, the CMWU has rented 30 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 **38.45** million cubic meters since the onset of the war till November 2025 , 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 the consultancy service to assess the WASH facilities' damages and develop the needed tender documents for repairing and reconstruction of the affected facilities. Recently, two consultancy services have been launched, the first consultancy covers the Middle Area and Khan Younis governorates, while the second focuses on 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. Mekorot water pipeline in the middle area has returned

operational after 9 months of interruption releasing a remarkable impact on the level of water production.

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. Over the past months 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. During November, 15 generators (15 KVA each), previously supplied by UNICEF, were distributed to operate water wells as follows: Gaza (3 units), Beit Lahia (2 units), Jabalia (5 units), Al Moghraka (1 unit), Al Zahra (1 unit), and Al Qarara (1 unit). The remaining two units have been stored in the CMWU warehouse to serve as mobile generators for urgent needs. These generators aim to ensure a minimum level of water supply for returnees and residents in the affected areas

In addition, four more generators were distributed as follows:

- Two generators of 110 KVA for Gaza
- One generator of 65 KVA for Beit Lahia
- One generator of 200 KVA for Jabalia

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 November 2025 around **9.50 million liters of fuel** in order to ensure the operation of standby generators, to run water production and pumping facilities, sewage pumping stations. The fuel supplies during the last two months improved compared to the previous months. 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 two 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 **290,054liters** have been distributed since the beginning of the war, in order to avoid the spread of more diseases and epidemics.

Throughout November 2025 and with the effectiveness of ceasefire 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 after 24 months of war and blockade 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 **800 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 immediately after the end of the war and 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 from the sector for more than 24 months. 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 24 months of war, 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 November 2025:

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 **November 2025** was reported of around **1708 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 a significant drop in water production. In November, the average daily water production was **14,206 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 has been operational since 28th August 2025, whereas **in November** the average daily water supply from this plant was **4,294 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 Younis.

The plant is equipped with a water filling point 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.

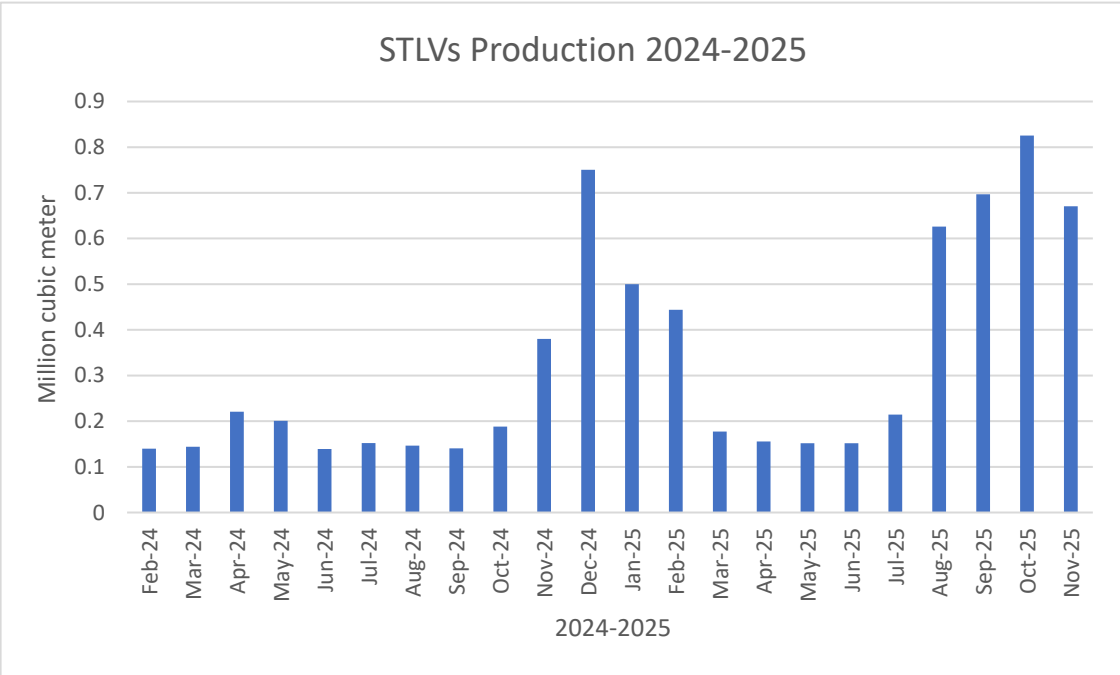
As part of the ongoing efforts to improve water services for both citizens and IDPs, the CMWU, in cooperation with MSF and clean shelter, has expanded the plant's capacity through installation of four RO units with a total 60 m³/hr to increase the capacity to 120 m³/hr, drilling of a new water well, and construction of two permeate water storage tanks with capacities of 100 m³ and 150 m³.



In November, the average daily water production from all wellhead public RO desalination plants in the Gaza Strip was **2155 m³**

The figure below shows the large scale desalination plants' production from February 2024 till November 2025. The records indicate a remarkable increase in water production from August to November 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

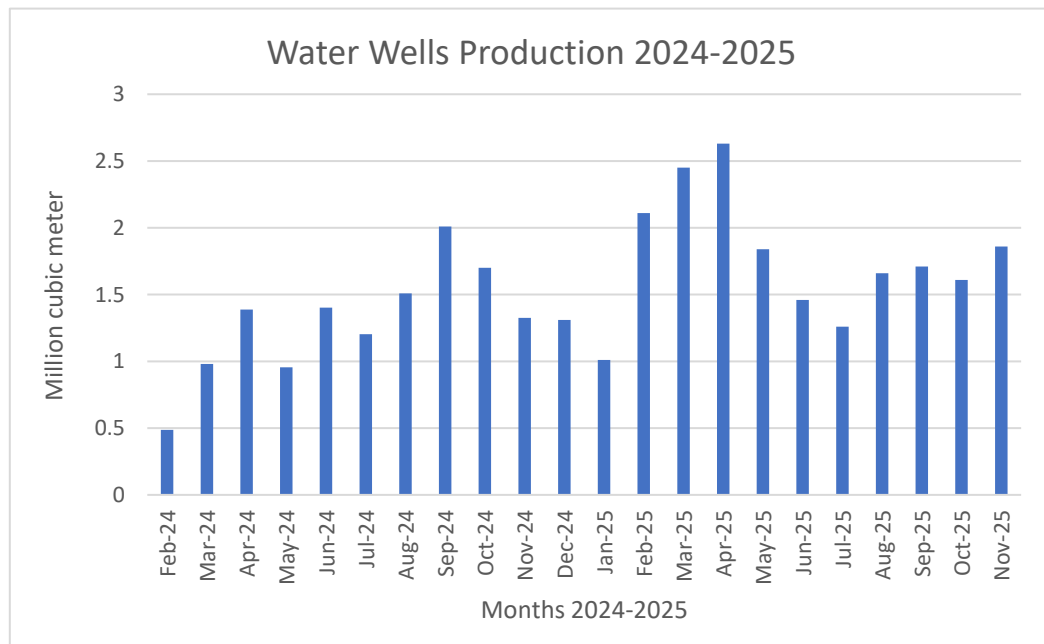
hours of the electrical generator despite the fuel crisis to provide the minimum level of water services and to alleviate the suffering of IDPs and residents particularly during summer months.



Water Desalination Production from February 2024 to November 2025

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 20% of the original production. The below figures show the records of monthly water production from February 2024 till November 2025, whereas the fluctuation in water production depends on fuel availability, security issues and status of facility (operational or damaged) during each month. In November 2025, water production increased as additional water sources became accessible and operational, particularly in Gaza and North Gaza. The CMWU is continuing its efforts to repair more facilities and provide electrical generators to re-operate newly accessible vital wells. Fuel supplies have also remained stable during this period, allowing water facilities to operate for sufficient hours to pump water. The average daily water production during November reached **62,168 m³**



Wells Production from February 2024-November 2025

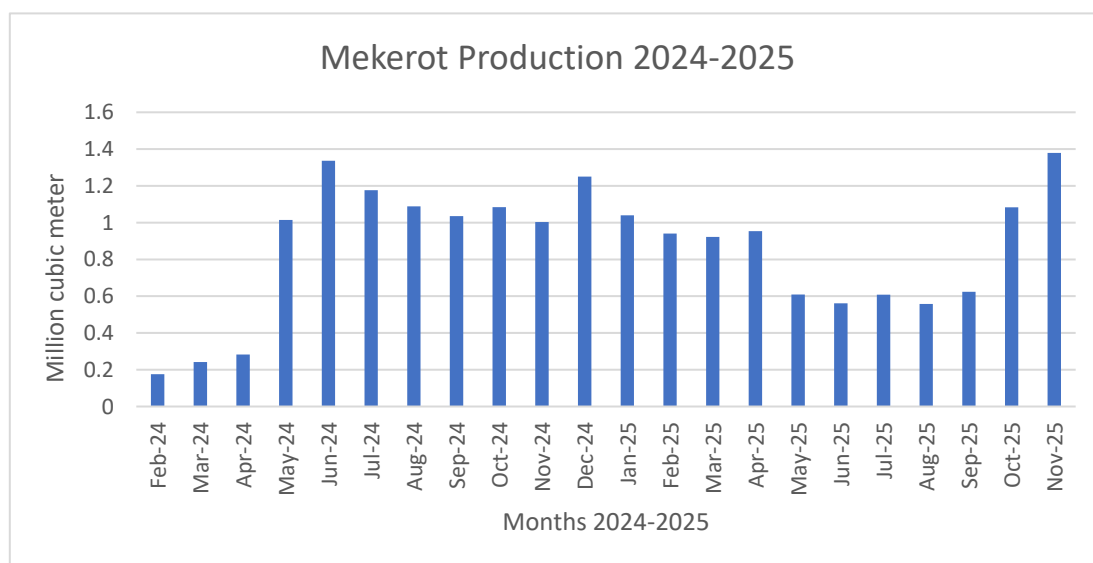
2.1.3 Mekorot Supply

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. Repair works were completed, and the pipeline has been in operation since October 2025. The average daily water production of this Mekorot connection reached approximately **8,170 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 **15,522 m³**.
- The third for Gaza governorate with 20,000 m³/day capacity, the records also show that the average daily production in November was **15,000 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) during this period.

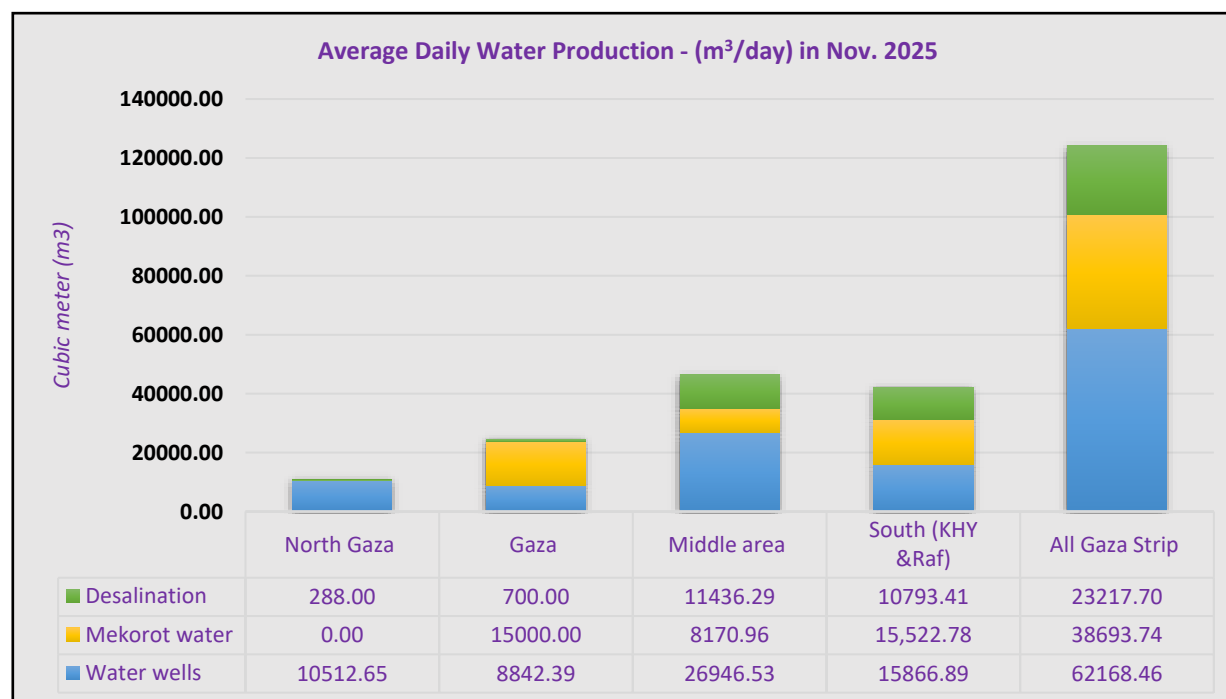


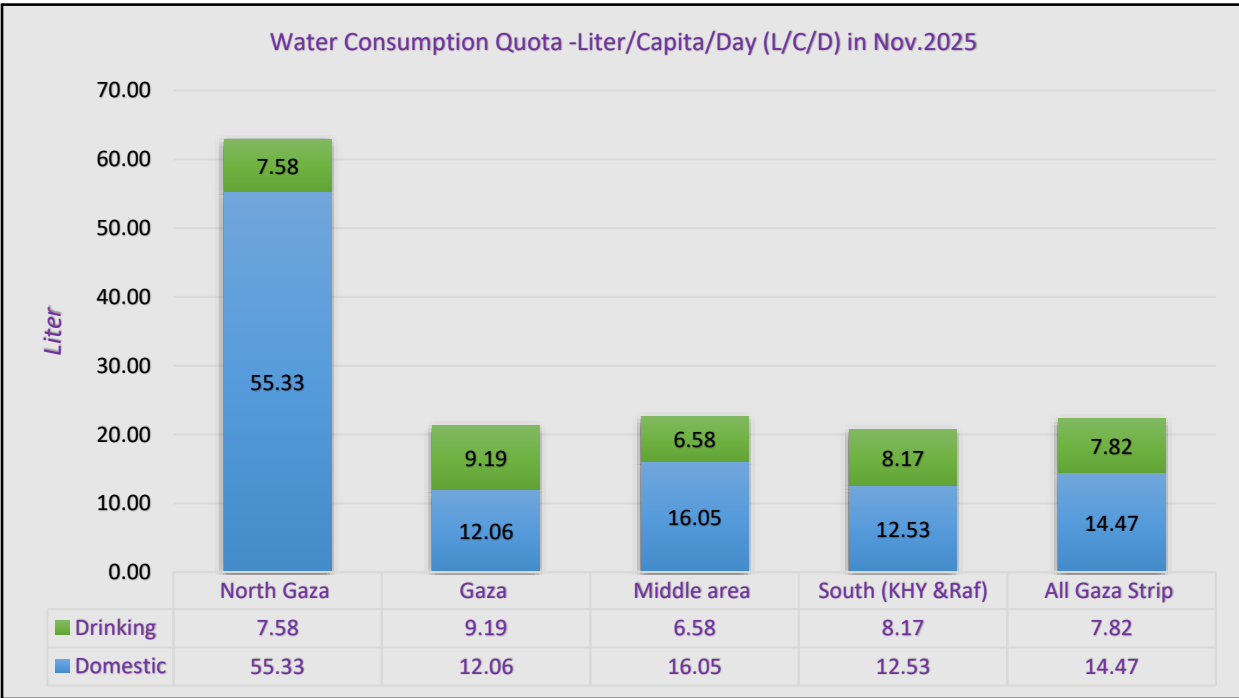
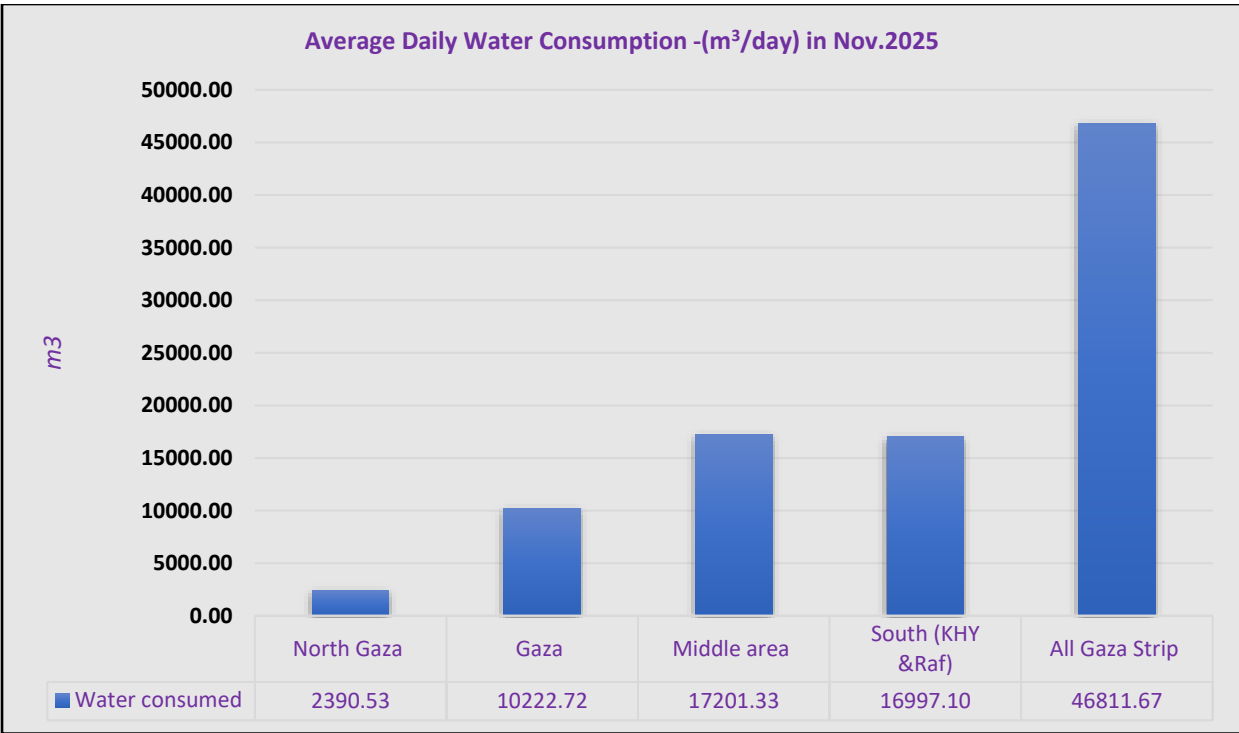
Mekerot monthly production from February till November 2025

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 November 2025. The total average daily water production reached approximately 124,079 m³/day (62,168.46 m³ from municipal wells, 38,693.74 m³ from Mekorot, and 23,217.7 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 62.91 liters per capita per day (L/C/D) in North Gaza to 20.70 L/C/D in the southern governorates (Khan Younis and Rafah), with Gaza governorate recording 21.25 L/C/D and the Middle Area reaching 22.63 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 November 2025								Actual Consumption House hold 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	10512.65	0.00	288.00	55.33	7.58	62.91	38000	2390.53
Gaza	8842.39	15000.00	700.00	12.06	9.19	21.25	481000	10222.72
Middle area	26946.53	8170.96	11436.29	16.05	6.58	22.63	760000	17201.33
South (KHY &Raf)	15866.89	15,522.78	10793.41	12.53	8.17	20.70	821000	16997.10
All Gaza Strip	62168.46	38693.74	23217.70	14.47	7.82	22.29	2100000	46811.67





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 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, 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 November the CMWU teams carried out emergency interventions to address the impacts of the storms in various areas of Gaza City, Middle area and Khan Younis. Additionally, mobile stormwater pumping units which were supplied through ICRC have been utilized to remove accumulated rainwater from the streets, contributing positively to mitigating the damage caused by the heavy rainfall



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. Moreover, a consultancy service has been initiated to start assessing the destruction and developing tender documents for repairs the damaged sewage networks and pumping facilities, 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 (KHHWWTP, BWWTP and NWWTP) stopped due to the severe destruction in their main structures. Also, the operation staffs could not reach safely to these plants as they are very close to the eastern border. 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.

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, the CMWU and PWA have formed a technical committee to inspect and assess the damage of East Khan Younis WWTP (26,600m³/day). The visual inspection shows that the damage can be handled, and based on that, the CMWU has prepared a proposal for recommissioning of KHWWT and shared it with the interested donors to be included in their plans for the coming years. In this regard UNDP has responded and assigned a consultant to assess the needs and develop all needed designs and tender documents to re-operate the plant

On the other hand, the CMWU has developed a TOR and raised it to ICRC for financing the consultancy service of assessment and developing the needed tender documents for recommissioning of Sheikh Ejleen WWTP through two phases, the first phase includes maintenance works to ensure sewage stabilization and anaerobic treatment where the second phase shall include reconstruction and upgrading works to treat the received sewage from Gaza city and middle area within the acceptable standards before discharging to the sea.

At the same time, efforts are ongoing to obtain coordination approval to inspect and assess the damages at Al-Bureij and NGEST WWTPs.

2.4 Providing Fuel to Operate WASH Facilities

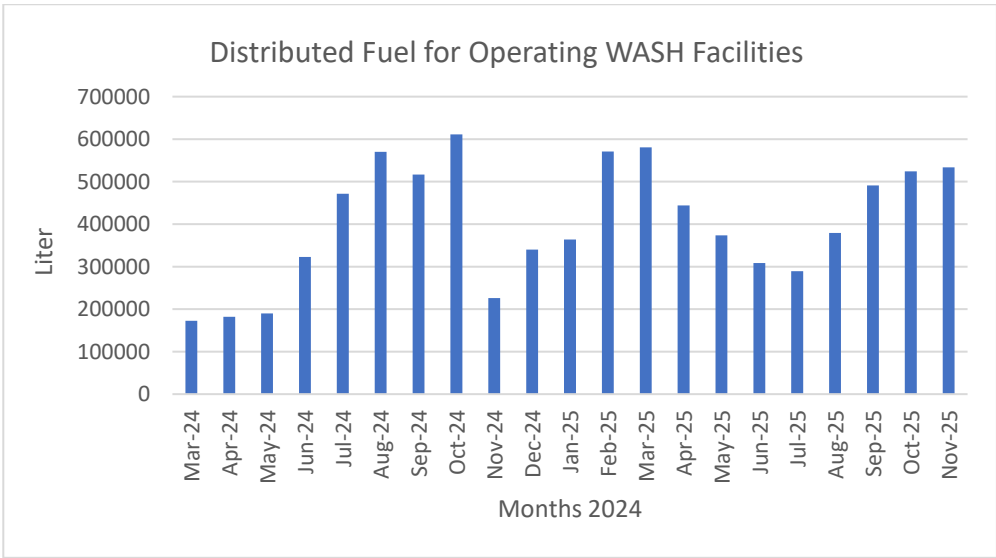
Through UNICEF fund, the CMWU in cooperation with UNRWA still provides WASH facilities in the Middle and Khan Younis Governorate with diesel, in order to ensure the operation of these facilities and provide the population with water and sanitation services, especially in light of the continuation of 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 below figure shows the distributed fuel for WASH facilities from March 2024 to November 2025 in middle and southern governorates. Fuel distribution over the past three months has remained relatively stable due to the efforts of humanitarian organizations to enhance fuel supplies for the WASH and health sectors. The regularity of fuel supply during the ongoing crisis is highly important to meet the minimum level of water and wastewater services and to operate the recently maintained WASH facilities.

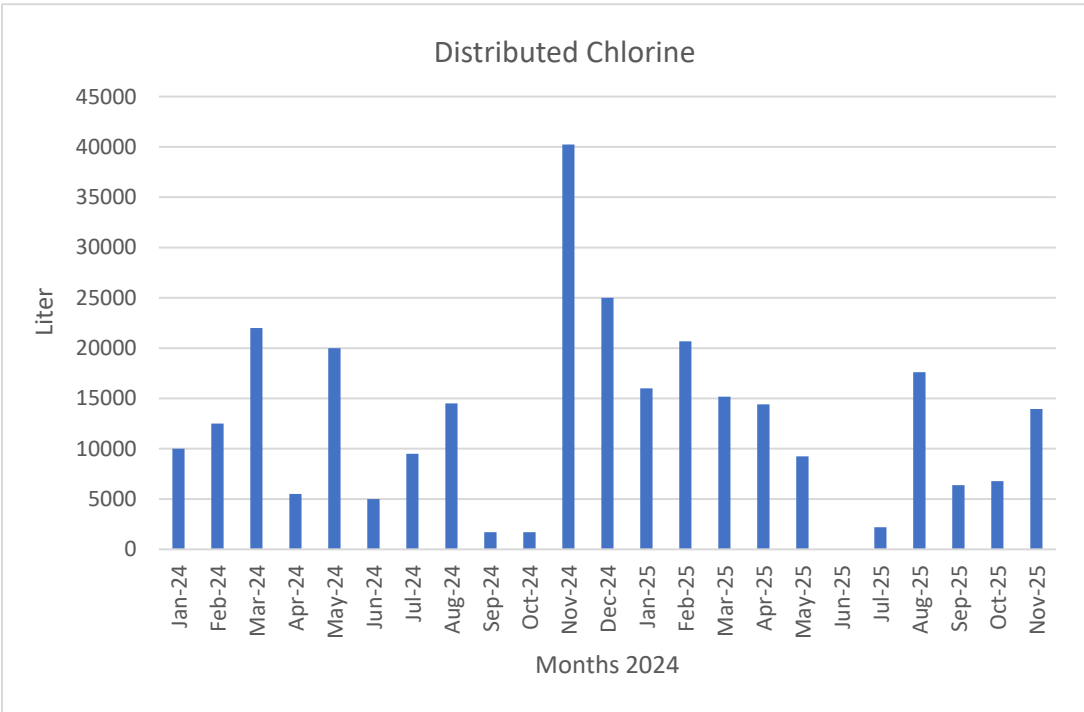


Distributed fuel for operation WASH facilities

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 since November 2024, as shown in the figure below.

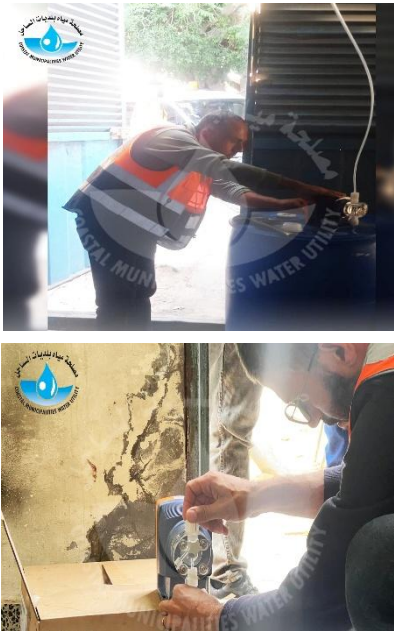
Records indicate a slight increase in chlorine supply during November 2025, which enabled the distribution of sufficient quantities to water facilities for disinfection purposes.



Chlorine Supply during 2024-2025

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 November 2025 the CMWU in cooperation with international and local partners has distributed approximately **95, 000cubic meters** of water through its owned and hired water trucks.



2.6.2 Installation of Water Bladders at Shelters

The CMWU is still working on distributing and installing water bladders to IDPs shelters across Gaza Strip. In November **12** water bladders have been installed in different shelters in Khan Younis and middle area to serve the returnees as listed in the table below.

Camp Name	Area	Lat.	Long.
Al Hayat camp	Khan younis	31.3616120	34.2867554
Zeraa camp	Deir al-Balah	31.1027710	34.3592490
Yebna camp	Khan younis	31.3624320	34.2888260
Karaj Rafah	Khan younis	31.3415920	34.3018830
Jalal street	Khan younis	31.3461280	34.3038730
Rabayaa street	Khan younis	31.3424070	34.2985770
Kateba area	Khan younis	31.3439910	34.2989440
Al Hayat school	Khan younis	31.3437460	34.2969500
Behind AL Bahr mosque	alzahra	31.4792290	34.3925940
Western Egyptian camp	Deir al-Balah	31.4232090	34.3385140
Zahrat Al Hanoon camp	Deir al-Balah	31.2337200	34.1935900
Eastern Egyptian camp	Khan younis	31.4056120	34.3660010



2.6.3 Providing Additional Water Trucks

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 all are 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 Activation of CMWU Mobile Lab:

The CMWU still monitors through its portable lab and equipments 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 November took place at the following water facilities:

Location			Work Description
Facility name	Long.	Lat.	
Tal El Zohor well - Zawaida	34.3631266	31.42398509	Rewinding of malfunctioned electrical vertical motor of 30 HP capacity Supply and install bearing for 30 HP electrical motor.
Montazah well - Al-Musader	34.370618	31.418235	Maintenance work for submersible pump, the work includes: - Supply and install pump cable 4m length. - Supply and install new shaft because old shaft was broken. - Supply and install box between the pump and the motor. - Supply and install rope 18mm thick and 25m length.
Al Aqsa Tank - Deir Al-Balah	34.358271	31.421066	Dismantle the booster pump and after inspection, limescale was found on the pump shaft and it was cleaned.
Kwaiti well - Khanyounis	34.28023017	31.3334691	Rewinding of malfunctioned electrical vertical motor of 75 HP capacity.
Aslan well - Beit Lahia	34.495068	31.548503	Dismantle and reinstall submersible pump 30 HP and performing the necessary repairs.
Beach well - Dair Al-Balah	34.315913	31.405426	Dismantle, inspect & replace the malfunctioned electrical submersible motor which supplied by CMWU, the work includes reassemble the pumping unit after maintenance.



2- Maintenance of Electrical panels of WASH facilities:

During November 2025 and under this contract many electrical repairs have been carried out in the following facilities:

- Connecting and operating Saeed Siyam well – Gaza
- Operating and assembling control panels for two 13.5 kW pumps at Pumping Station 7B
- Operating a mobile generator for Beit Lahia Municipality for multiple wells
- Repair of the soft starter for Kalboush well – Nuseirat
- Repair of the soft starter for Al-Bassa pump – Deir Al-Balah
- Supply of cables for Aya well – Khan Younis



3- Hiring Heavy Machineries for water and wastewater Repairs

Under this contract several water and wastewater repairs have been implemented in the following areas

Area	Description of Works
Gaza City	Repair water and wastewater networks, rubbles removal to access facilities, cleaning sewage manholes at more than 12 sites in Gaza city
Al Nuseirat	Maintenance works for AL Nussirat water network.
AL Zawaida	Clean and maintenance works for sewage manholes
Khan Younis	Clean and maintenance works for sewage manholes
Dair Al-Balah City	Clean and maintenance works for sewage manholes
Al Maghazi	maintenance works for wastewater networks



4- Maintenance of Sewage pumping station in Khan Younis

- Under this contract three sewage pumping stations in Khan Younis (Al Maqaber PS, Al Majadla PS, Al Qatatwa PS) have been rehabilitated and provided with a second pump, the installation includes the pump riser and all needed fitting to connect it with the existing manifold, this newly pump serves as a standby ,also it works with the existing one in emergency and heavy rainy days to avoid and control floods,



5- 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 additional IDPs following the collapse of the ceasefire and the recent evacuation orders in the southern governorates.

In parallel, CMWU continues to work on repairing damaged water wells to restore them to operation. However, shortage of materials and the impact of ongoing evacuation orders have complicated these repair efforts. As a result, only limited numbers of wells in Khan Younis are currently operational.

In order to meet the growing water demand of residents and IDPs, CMWU continues to rely on the hired wells as a critical interim solution.



2.7.2 Maintenance of Al Sheikh Radwan Pressure Pipeline

The CMWU through UNICEF support repaired the pressurized transmission line of Sheikh Radwan basin in Gaza City, which experienced many damages along the pipeline during the war.

These efforts come amid the catastrophic conditions at Sheikh Radwan lagoon, where large quantities of wastewater have accumulated, posing a real threat of overflow into nearby residential areas. The repair works aim to operate the pipeline to empty the lagoon and prepare it for the winter season. This will help reduce flooding risks and protect residents and displaced people living in tented areas from the flow of rainwater or wastewater, contributing to improved environmental conditions and service provision in Gaza City.



2.7.3 Repairing Water Wells in Jabalia:

As part of ongoing efforts to improve water services in Jabalia City, the CMWU through ICRC support has utilized the hired heavy machineries to remove the rubbles and open access for seven main wells. These activities were undertaken in preparation for comprehensive maintenance works aimed at enhancing the operational efficiency of the city's water sources.

The works included Hiraa Well, Old Nazla Well, New Nazla Well, Zarqa Well, Abu Shrekh East Well, Arjouni Well, and Qubaa Well, all of which were prepared and made accessible as part of an emergency plan designed to ensure their continued operation and to supply water to the population.



2.7.4 Supply Electrical Generators to operate Critical WASH Facilities

The CMWU with support from UNICEF and in coordination with PWA, has supplied ten 15 KVA electrical generators. The generators were distributed to Gaza Municipality, Jabalia Municipality, and Beit Lahia Municipality for use in operating secondary water wells located within residential neighborhoods, as well as for wastewater pumping operations.

This support comes as part of ongoing efforts to strengthen the capacity of water and wastewater facilities to respond to urgent needs amid the difficult humanitarian conditions in the northern areas of the Gaza Strip, and to ensure the continued provision of essential services to residents and displaced communities.



2.7.5 Maintenance of wastewater pipelines in Dair Al Balah

The CMWU through ICRC support carried out urgent maintenance works on a major 12-inch wastewater pipeline in Deir Al-Balah City. This pipeline is considered one of the vital lines in the city.

The pipeline serves residents and IDPs in the areas of Umm Duhair, Al-Lahham, and part of the southern Al-Hakr area.



2.7.6 Repair and Maintenance of Water Network at Tal Al Hawa Area- Gaza City

The CMWU with support from UNICEF carried out emergency maintenance works on several main water lines in Tel Al-Hawa and Al-Sabra neighborhoods in Gaza City. The maintenance works covered Tel Al-Hawa Towers, and the Industry area, where these lines serve more than 150,000 people. This intervention is part of ongoing efforts to gradually restore water services following the extensive destruction inflicted on the infrastructure.

This intervention forms part of the continuous efforts made by the CMWU to repair damage to water networks and restore water flow to affected residential neighborhoods, with the aim of ensuring service continuity and alleviating the suffering of the population amid the difficult humanitarian conditions.



2.7.7 Rehabilitation and Maintenance of Al Shifa RO Desalination plant

The CMWU has launched the project to repair and rehabilitate the desalination plant at Al-Shifa Hospital in Gaza City, with a production capacity of 500 cubic meters per day. The project is being implemented in cooperation with the Ministry of Health and with support from PARC.

This project comes after Al-Shifa Hospital and its facilities sustained extensive damage during the war. Hence the rehabilitation of the desalination plant is a vital step toward ensuring the continuity of life-saving healthcare services as Al Shifa is the largest and most important hospitals in the Gaza Strip, serving thousands of patients daily.



2.7.8 Maintenance of Al Maghazi Water well

The CMWU in partnership with ICRC carried out maintenance works of the water well S-103 (Al-Montazah), located west of Al-Maghazi Camp in the middle area.

This well is considered a main water source, serving more than 6,000 residents. In addition, the water desalination plant operated by Al-Maghazi Municipality relies on the same well as its primary water source, contributing to the supply of potable water to residents and displaced people.



2.7.9 Maintenance of Hesbit Al Samak Sewage Pressure Pipeline-Khan Younis

The CMWU through ICRC support has maintained Hisbet Al-Samak sewage pressure line in Khan Younis City.

Repairing and fixing the damages of the pipeline is essential for operating Hesbit Al Samak pumping station which is considered one of the vital facilities in Khan Younis, as it collects and pumps wastewater and conveys it to the wastewater lagoons west of the city for partial treatment , serving more than 100,000 residents in the area.



2.7.10 Rubbles Removal to Access Water and Wastewater Infrastructure for Repairs

CMWU with support from UNICEF and in cooperation with Gaza Municipality, carried out rubble removal works in the Al-Sawi Street area, adjacent to Al-Sayyad Building in Al-Shati area west of Gaza City. This intervention was undertaken in preparation for maintenance works on wastewater networks, manholes, and stormwater inlets, which were severely damaged as a result of recent military operation in city



2.7.11 Maintenance of Beit Lahia water wells

Under assessment and rapid repairs efforts, the technical teams from CMWU and Oxfam visited number of water wells in Beit Lahia to assess the needs and prepare for their maintenance and rehabilitation,

The visit included Al-Omany Water Well and Al-Taqwa Well in the Al-Mashrou' area, in addition to Al-Khansa Well and Ma'rib Water Well located west of the city.



2.7.12 Maintenance of Nama water well in Al Maghazi

CMWU in partnership with ICRC has completed the rehabilitation works of ‘Nama’ water well located in Block (4) of Al-Maghazi Camp. This was carried out as part of joint efforts to develop and improve the camp’s water networks and within the ongoing efforts to enhance water services and strengthen the sustainability of water resources.

The rehabilitation works included the installation of a new electrical control panel, in addition to a 30-horsepower pump with a production capacity of 60 cubic meters per hour, contributing to improved pumping efficiency and better water supply for residents.

This well serves more than 10,000 residents in the area, making it a vital source for meeting daily water needs and enhancing the stability of water supply amid the difficult conditions facing the Gaza Strip



2.7.13 Rehabilitation of Al Sheikh Redwan Water Wells

The CMWU through Oxfam support has completed the rehabilitation of Al Sheikh Radwan wells (No. 10 and 11) in Gaza City. This project aims to improve water services in Gaza City, especially after the two wells sustained severe damage during the recent military operations in the area, which led to their prolonged shutdown.

The project included the full rehabilitation of the two wells, encompassing mechanical and electrical maintenance, as well as the installation of new pumps and control systems to ensure efficient and sustainable operation.

It is worth noting that each of the two wells produces approximately 180 cubic meters per hour and together serve around 150,000 residents in Al Sheikh Radwan area and western Gaza.



2.7.14 Maintenance of water networks in various areas in Gaza City

The CMWU with support ICRC repaired an 8-inch water pipeline in Al-Tuffah neighborhood near Al-Qa'qaa Mosque. In addition, a 4-inch water pipeline was repaired on Salah Al-Din Street adjacent to Al-Hashemia School, as well as another water line located behind Al-Nasr Hospital, after these pipelines sustained severe damage as a result of shelling. This intervention comes as part of efforts to deliver water services at a minimum level to residents and displaced people



2.7.15 Flood mitigation interventions

The CMWU through ICRC has cleaned the main concrete stormwater channel along Salah Al-Din Street, which is considered the primary drainage artery for stormwater in the Middle Area.

The channel near Wadi Gaza was destroyed during the war, leading to its complete blockage and preventing stormwater from reaching the wadi, which posed a risk of water flow obstruction and accumulation near residential areas.

This intervention aims to restore the channel's capacity to convey stormwater naturally toward Wadi Gaza, thereby reducing the risk of flooding and protecting residential areas.



2.7.16 Connecting IDPs Camps in Al Mawasi with the UAE water pipeline

The CMWU in partnership with Oxfam, has commenced the construction of water distribution lines from the Emirati water pipeline, with the aim of improving water access in Al-Mawasi areas of Rafah and Khan Younis.

This intervention comes as a continuation of ongoing efforts to expand the utilization of the Emirati pipeline and to enable water access to a larger number of camps and residential communities located approximately 500 meters from Al-Rashid Street, which have been experiencing water scarcity and supply difficulties in the recent months.

This phase is expected to benefit at least 28,000 people in the targeted areas, contributing to improved continuity of safe drinking water supply for residents and displaced persons, as part of

the efforts of the CMWU and its partners to alleviate humanitarian burdens and strengthen community resilience.



2.7.17 Rehabilitation of southern SWDP' beach well

The CMWU, through its technical teams, carried out maintenance and repair works on one of the coastal wells that supplies Southern Gaza Seawater Desalination Plant with water. This was done to ensure the continuity of the plant's operation, as it is considered the largest source of desalinated water in the Gaza Strip, with a production capacity of 16,000 cubic meters per day, covering the water needs of more than 700,000 citizens and displaced people in the southern and middle areas



2.7.18 Connecting Two Water Wells in Al Bureij with Water Network

The CMWU through ICRC support, has connected Al-Khansa well and Toyor Al-Jannah well to the water distribution network of Al-Bureij Camp as part of efforts to enhance water supply and improve access for residents.

Toyor Al-Jannah well serves approximately 8,000 residents in Blocks 6, 7, and 12. Al-Khansa well, with a production capacity of around 70 cubic meters per hour, has also been connected to the network, serving several areas within the camp and helping to reduce pressure on the system and improve the regularity of water delivery.



2.7.19 Maintenance and Repair of CMWU Water and Sewage Trucks

The CMWU through Echo-Peace support, has successfully completed a set of maintenance works for wastewater vehicles and water distribution tankers designated to serve displaced people across various areas of the Gaza Strip, totaling 25 water and wastewater tankers.

The maintenance works included comprehensive mechanical and electrical repairs, as well as the installation of new tires and batteries, despite the challenges facing the sector and the difficulty of procuring these supplies in the local market due to current conditions and price fluctuations.

These efforts contributed to alleviating citizens' suffering and improving the level of services provided to them.



2.7.20 Maintenance of Main water and Sewage Pipeline in Al Nuseirat

The CMWU, in partnership with ICRC carried out maintenance work on a main sewage line on Omar Bin Al-Khattab Street in Al-Nuseirat, in middle area near Wadi Gaza, serving approximately 50,000 residents of the New Camp, Al-Hasaynah, and western Al-Nuseirat areas.

The work also included the maintenance of two water lines serving around 18,000 residents in the 20th Street area and Camp 2.



2.7.21 Maintenance of Water Networks in Gaza City

The CMWU with the support of UNICEF and in cooperation with Gaza Municipality, implemented a series of maintenance interventions. These efforts come as part of ongoing initiatives aimed at improving household water supply for residents and displaced people. The interventions covered the following areas:

- Al-Nafaq Street – next to Al-Usra Pharmacy
- Yaffa Street – next to Al-Mahatta Mosque
- Surroundings of Al-Sharafa Roundabout
- Surroundings of Abu Al-‘Ulba Roundabout – Al-Nasr Neighborhood
- Area of Abdullah Azzam Mosque – Al-Sabra
- Al-Shati Camp – next to Shahebar School
- Al-Nasr Neighborhood – north of the Italian Compound
- Al-Sahaba Market area
- East of Al-Saroukh Roundabout
- North of Sheikh Radwan Pond
- Abu Hasers and Al Abbas areas

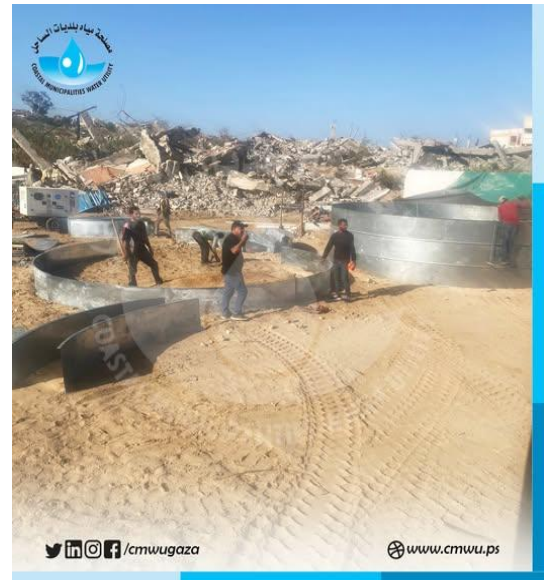


2.7.22 Construction of RO desalination plant in Beit lahia

The CMWU through MSF – Holland, has commenced the construction of a new desalination plant with a production capacity of 20 cubic meters per hour in the city of Beit Lahia.

This initiative comes as part of ongoing efforts to provide sources of safe drinking water and improve access for residents. Previously, Al-Khansaa Water Well was equipped and maintained to supply the plant with water.

The current works include the construction of two tanks with a thickness of 2 mm, internally lined with an antibacterial PVC layer. One tank will be dedicated to storing water before treatment, while the other will be used for storing desalinated water. The works are expected to be completed during December 2025



2.7.23 Technical Inspection and Repair of Al Ma'amadani Hospital RO desalination plant in Gaza

The CMWU carried out maintenance works for the desalination plant that serves Al-Ahli “Al-Ma’amadani” Hospital in Gaza City, as part of its efforts to ensure the provision of safe and hygienic water for hospitals.

The work included inspecting technical components, performing the necessary repairs, and enhancing the operational efficiency of the plant, with the goal of improving the quality of the produced water and strengthening the plant’s performance, especially under the current circumstances that require a high level of readiness for water services within hospitals.



2.7.24 Maintenance of Sewage Network in Various Areas of Jabalia

The CMWU through ICRC, continues to carry out maintenance works on the sewage networks in several areas across Jabalia, as part of ongoing efforts to improve sanitation services and enhance network efficiency.

The maintenance works have covered Abed Al-Rahman area, Al-Saftawi, Al-Nazla, Abu Sharkh, and Al-Faluja, whereas field teams are inspecting the networks and conducting the necessary repairs.

The works also include clearing and removing blockages from the main wastewater lines to improve the flow of wastewater, reduce environmental issues, and enhance the level of service provided to residents.

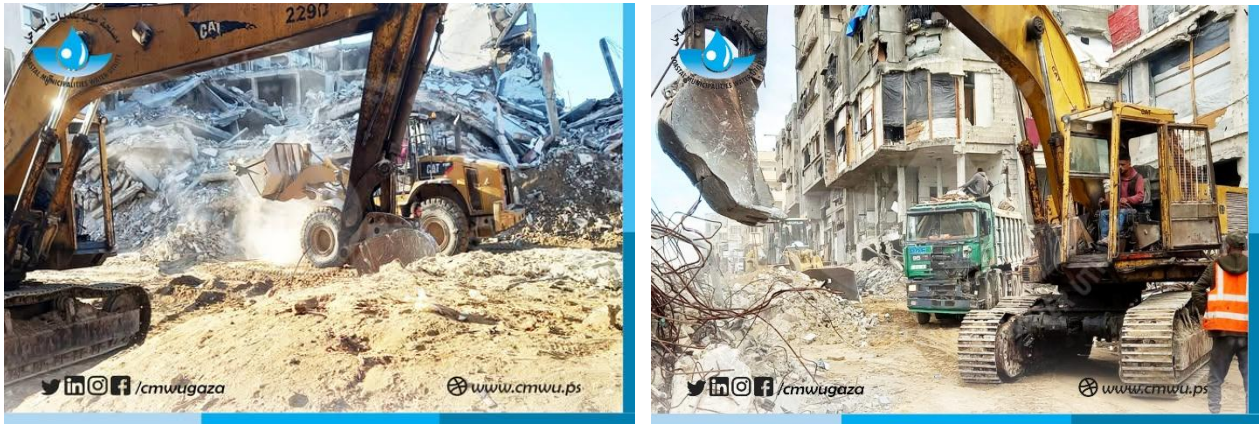


2.7.25 Maintenance of Sewage Network in Gaza city

The CMWU with the support of UNICEF and in cooperation with Gaza Municipality, has begun maintenance works on wastewater networks in Al-Ma'askar Market area of Al-Shati Camp, specifically on Hasbat Al-Samak Street, in addition to Al-Masjid Al-Abyad area. The works also included maintenance of the wastewater network and stormwater inlets in the North Beach area – Al-Hamami Street, as well as in Al-Nasr area west of Bank of Palestine – Al-Jam'iya Al-Islamiyya Street.

The initial works included debris removal and opening access routes to the networks in preparation for starting maintenance activities and enabling technical crews and machinery to reach these areas, with the aim of preventing sewage overflows and improving stormwater drainage.

The wastewater networks in these areas sustained severe damage as a result of Israeli bombardment, which necessitated urgent intervention to rehabilitate them and ensure the continuity of services for residents.



2.7.26 Maintenance of Abu Sharekh well in Jabalia

The CMWU with the support of UNICEF, carried out maintenance works at Abu Sharkh Al-Sharqi water well in Jabalia, north of the Gaza Strip, after it sustained severe damage as a result of Israeli bombardment.

The well has a production capacity of approximately 145 cubic meters per hour and serves around 25,000 people. Its operation will contribute to improving water services for residents. In addition, a new electric generator was supplied to operate the well, with support from UNICEF, to ensure the continuity of water provision.



3 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 of 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 of 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:

Evacuation orders and ongoing military operations 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.