



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

May, 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 its owned water trucks, the distributed water from desalination plants up to date is more than **3.66** million cubic meter. Moreover, the CMWU has rented **17** 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 **28.8** million cubic meters since the onset of the war till May 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 different areas of the Gaza Strip, including desalination plants, wells, sewage pumping stations, water and sewage networks, well generators, and electromechanical maintenance.

During the ceasefire period, the CMWU and its partners exerted significant efforts to restore and assess the damage of water and wastewater systems. As a result, there was a notable improvement in these essential services. Unfortunately, this progress was short-lived, as the ceasefire collapsed on 18 March 2025 when the IDF resumed hostilities. This led to a significant decline in service delivery and further exacerbated the already dire humanitarian situation in Gaza.

The collapse of ceasefire also impacted the critical water facilities in the Gaza Strip when the Israeli side decided to cut off the dedicated power supply line of the main desalination plant in the southern governorate on 9 March 2025 reducing its daily production to less than 1500m³ instead of 17,000m³. In addition, Israel continues to reject all coordination requests to repair Mekorot water connection in the Middle Area, which has been out of service since 22 January 2025. These two key sources Mekorot and SGDP supply the majority of drinking water to the Middle and Southern governorates and their continued disruption has a devastating impact on water availability in these areas. Furthermore, multiple evacuation orders have been issued for various southern and eastern

parts of Gaza since the collapse of the ceasefire. As a result, many water facilities in these areas have become inaccessible and are at risk of further damage.

Throughout May 2025 there were limitations to complete the repairs and assessment works as large part of Gaza Strip was inaccessible and had military operations. In this regards the CMWU has submitted coordination requests through PWA and ICRC to access WASH facilities. However, these requests have been repeatedly refused by the IDF, severely hindering repairs and operational efforts.

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 May 2025 around **6.99 million liters of fuel** in order to ensure the operation of standby generators, to run water production and pumping facilities, sewage pumping stations. In May 2025, fuel supplies dropped compared to the previous three months, as Israel continued to block the entry of fuel and all essential needs. This resulted in a significant decline in water production and distribution across the entire Gaza Strip. The fuel is received from the United Nations Relief Agency through UNICEF Fund, and the CMWU stores the fuel in 2 central fuel tanks, and then distribute it to around **190 water and sanitation facilities**, including desalination plants, wells, sewage stations and pumping stations in addition to desalinated water tanks. The fuel distribution process is subject to a monitoring system, where monitoring is carried out through UNICEF via 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 **215,830 liters** have been distributed since the beginning of the war, in order to avoid the spread of more diseases and epidemics.

After 20 months of war, Gaza local market is now depleted and the essential materials for repairs are not available, which hinders most of repair interventions leaving water and wastewater services in a catastrophic condition. Also losing the CMWU water sector central warehouse during this war hindered many of repairs. However, the CMWU was able, with the support of international partners, to gradually return to its O&M activities and overcome to some extent this 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 **682 million dollars** where this amount is subject to increase due to the current hostilities and military operations which definitely will cause further destruction to WASH facilities and infrastructure, The reconstruction of water and wastewater infrastructure and the operation of facilities are considered among the most important priorities immediately after the end of the war, 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 continuing 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 cutting off of all electricity supplies from the sector for more than 20 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 militarily. Furthermore, the frequent closure of crossings has severely worsened the water crisis, as most facilities have ceased operations due to fuel shortages and a lack of essential supplies. Numerous appeals have been made to humanitarian and international organizations to support and facilitate the entry of the necessary fuel and 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 over 20 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 IDF evacuation orders and military operations in Rafah and Beit Hanoun in North Gaza, all water and wastewater facilities in both areas were completely shut down. These facilities may have suffered extensive or complete destruction as a result of the ongoing hostilities. Additionally, all residents from these areas were forcibly displaced to Khan Younis and Gaza City, both of which already have highly vulnerable and severely damaged WASH infrastructure.

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 internally displaced persons (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 May 2025:

2.1 Operation of Water Supply Facilities

2.1.1 Desalination plants

1- Al Bassa seawater desalination plant – Middle Area

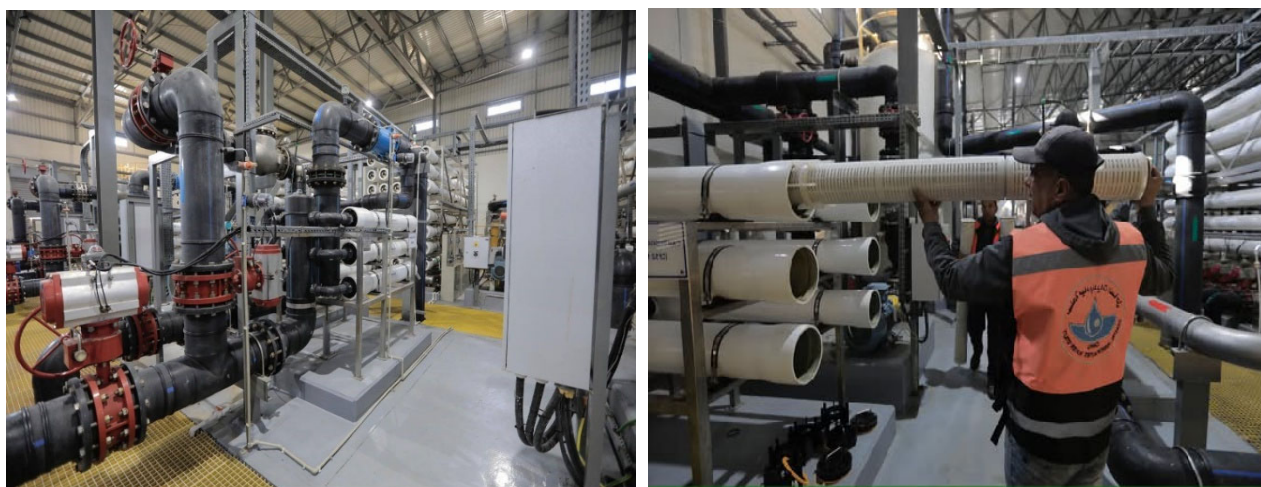
The CMWU is still operating the seawater desalination plant in the Middle area (Al-Bassa) depending completely on the existing generators. The average daily water production during **May 2025** was reported of around **1208 m3**. Water production in May slightly declined due to fuel shortages and restrictions on the entry of materials and consumables into Gaza.

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 plants 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 Mega watt 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, since 9th March 2025, F11 power line switched off by Israel side resulting in a severe drop in water production. The average daily production during May 2025 reached **1555 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 mid of May 2024 till the period of this report, this plant is not operational due to the Israeli invasion at Rafah area and the destruction of the water carrier lines. However, 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 Rafah governorate after completion the military operation as most of Rafah WASH facilities are completely destroyed during the war.

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

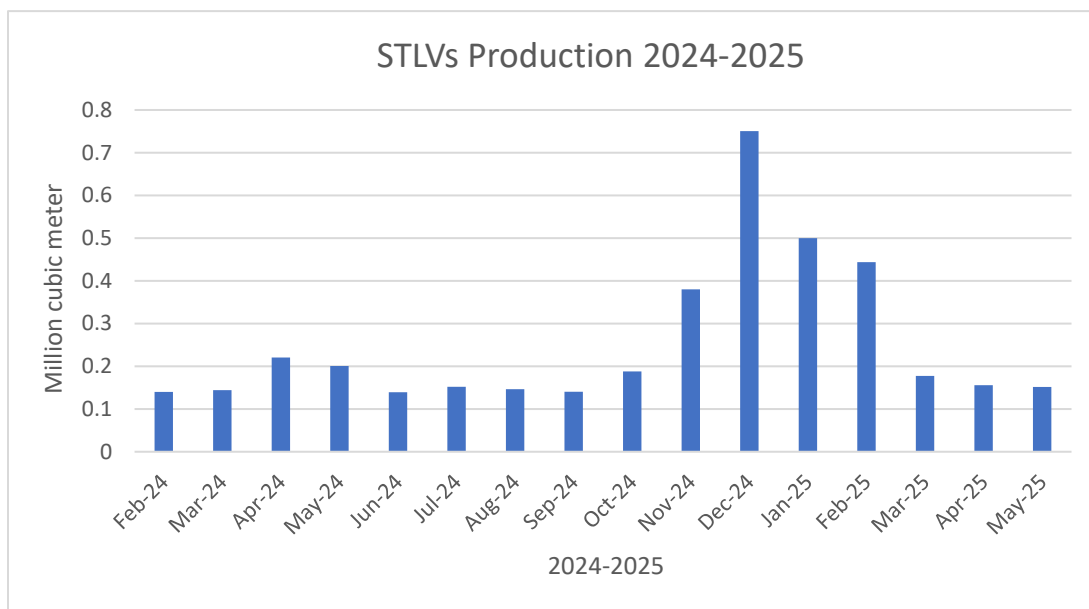
Since January 2025 the CMWU has started the operation of the newly constructed desalination plant in its warehouse west of Khan Younis (50m³/hr). This plant enhances the system of supplying safe and clean drinking water to citizens and IDPs in various areas of Al-Mawasi, west of Khan Younis.

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 has no drinking water source after the severe destruction of most water facilities.



In May, the average daily water production from all wellhead public RO desalination plants in the Gaza Strip was **2,163 m³**

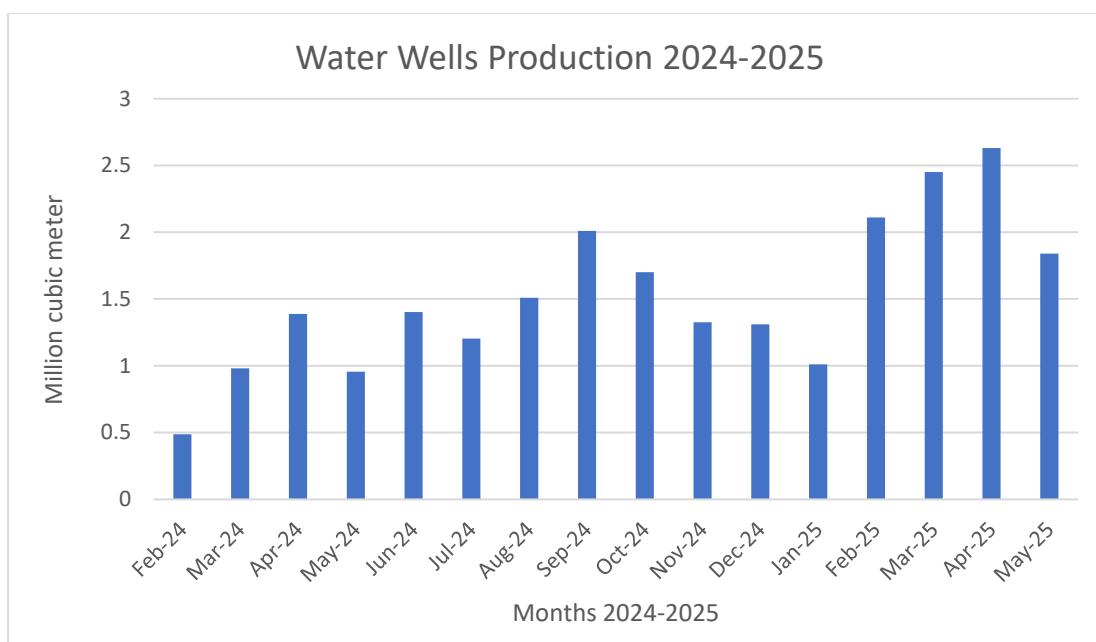
The figure below shows the desalination plants' production from February 2024 till May 2025. The records indicate a significant drop in water production in March, April and May 2025 due to the complete shutdown of F11 power line by the Israeli side since 9th March 2025 and the severe fuel shortage. This situation persists as the Israeli side continues to prevent the entry of fuel and essential materials needed for the WASH sector and other critical services.



Water Desalination Production from February 2024 to May 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 May 2025, whereas the fluctuation in water production depends on fuel availability, security issues and status of facility (operational or damaged) during each month. Water production in May 2025 declined significantly due to the fuel crisis, as the Israeli side continues to prevent the entry of fuel and essential materials into Gaza since the collapse of the ceasefire in March 2025. Additionally, evacuation orders and ongoing military operations have further impacted production, reducing the average daily water production in May to **62,975 m³**.



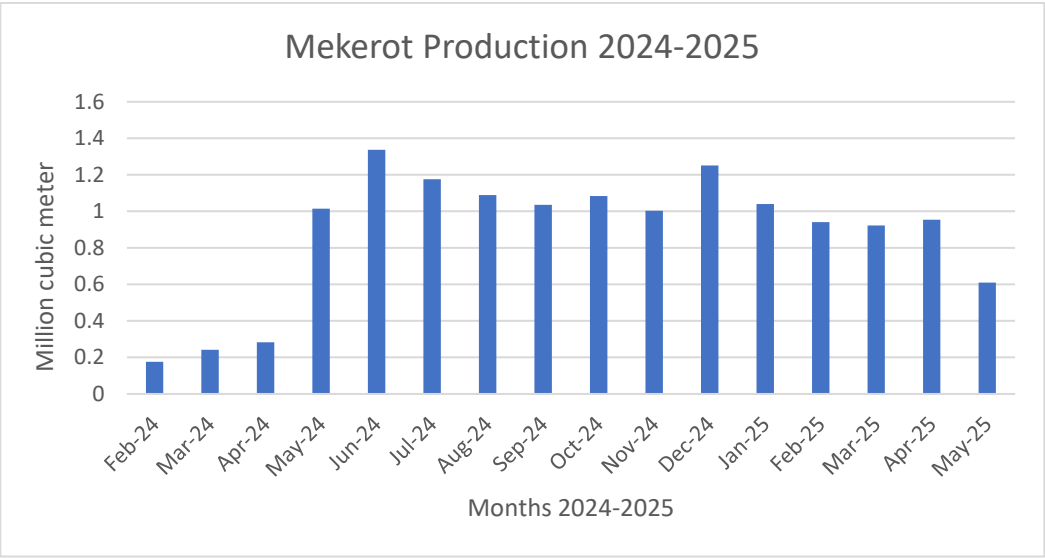
Wells Production from February 2024-May 2025

2.1.3 Mekorot Supply

There are Three Mekorot water supply Connections from Israel as follow:

- The first in the middle governorate called Ben Saed with capacity 14,000 m³ /day, this source of water was not operational during March as the feeder pipeline was damaged since 21 January 2025, that affected negatively on the water supply in the middle area including Maghazi, Zawaida, Nusirate and Deir Al Balah, the municipalities still operate the water wells for more hours to compensate the deficit from this main source of water. In parallel the CMWU with its partners increased their water trucking to all middle area to cover the drinking water needs as the people were using Mekorot water for drinking. PWA and ICRC sent a request of coordination for the Israeli side to allow to reach the damage for the repair, without any positive reply.
- 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 **14,106 m³**
- The third for Gaza governorate with 20,000 m³/day capacity, the records also show that the average daily production in May was **8,500 m³**, this declination in water supply referred to the frequent breakdowns and damages resulting from the Israeli Military operations east of Gaza City.

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.



Mekorot monthly production from February till May 2025

2.2 Water Supply Quota:

The table below presents the average daily water production from various sources municipal wells, Mekorot supply, and public desalination plants as well as the water consumption quotas for domestic and drinking purposes across Gaza Strip governorates during May 2025. The total average daily water production amounted to approximately 91,120 m³, covering all governorates of the Gaza Strip. Gaza and the North received an average of 12.78 (L/C/D), while the South and Middle Areas received a higher quota of 18.94 L/C/D, resulting in an overall average of 16.16 L/C/D across the entire Gaza Strip. These figures are subject to frequent fluctuations due to multiple challenges, primarily the security situation, ongoing fuel shortages affecting the operation of water facilities, frequent damages and evacuation orders that render key infrastructure sites inaccessible or unsafe to operate.

Area	Average Daily Water Production in May 2025			Water Consumption Quota in May 2025		
	Water wells	Mekorot	Desalination	Domestic	Drinking	Total
	m ³ /day	m ³ /day	m ³ /day	Liter/C/D	Liter/C/D	Liter/C/D
Gaza & North	26565	8500	600	10.27	2.51	12.78
South & Middle	36410	14106	4939	12.07	6.87	18.94
All Gaza Strip	62975	22606	5539	11.26	4.90	16.16

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 are working to clean sewage lines and networks from blockages that have caused severe obstructions to wastewater drainage. 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 machinery are essential to controlling and eliminating floods especially in shelters where IDPs are vulnerable to disease and other public health risks.



- As part of ongoing efforts to improve sanitation services in the Gaza Strip, the CMWU in cooperation with ICRC carried out maintenance work for the sewage suction truck belonging to Beit Lahia Municipality, which serves approximately 80,000 residents.

This initiative comes amid the difficult circumstances in Gaza, including a severe shortage of equipment and machinery needed to operate and maintain vital infrastructure facilities.



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 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 damages 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 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, currently UNDP is trying to obtain the Israeli approval for a joint visit to WWTP and still waiting the response.

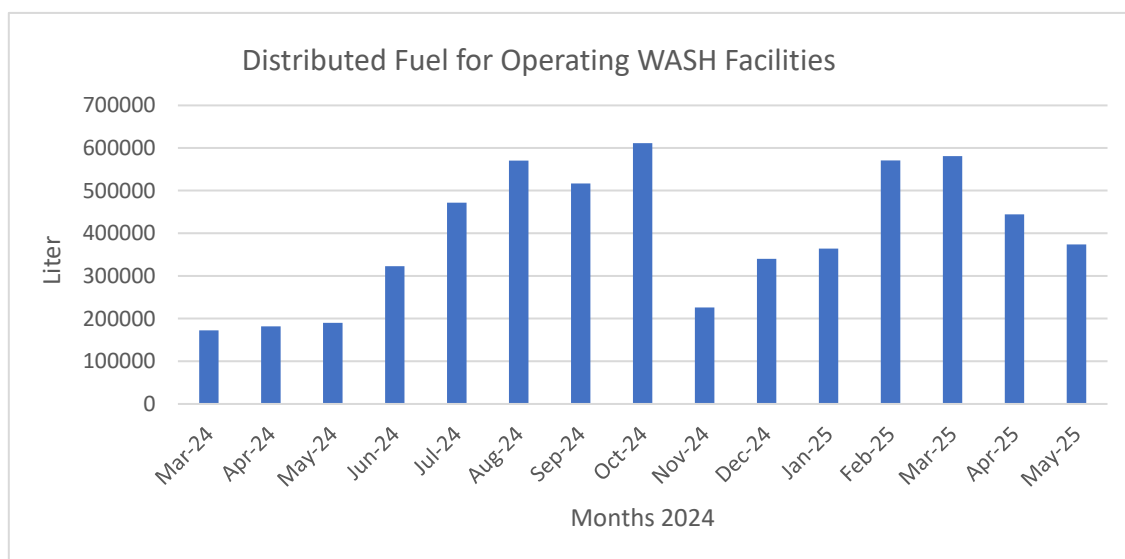
2.4 Providing Fuel to Operate WASH Facilities

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.

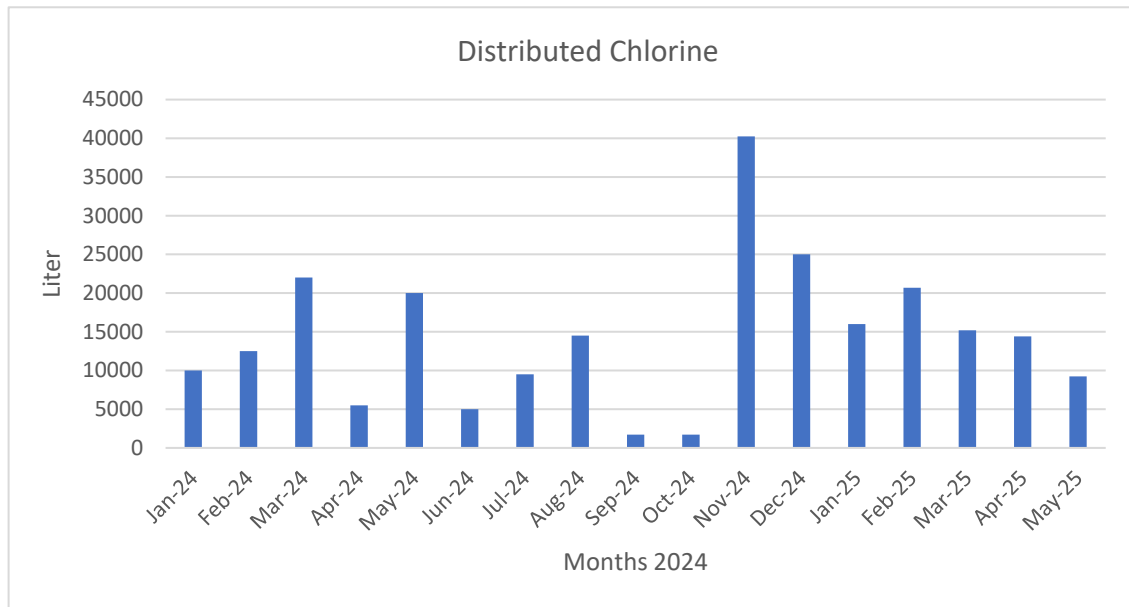
The below figure shows the distributed fuel for WASH facilities from March 2024 to May 2025. during May there is a remarkable drop in fuel distribution and that refers to fuel shortage due to crossings closure and large number of facilities were out of service during this month due to military operations and evacuation orders. The regularity of fuel supply during this crisis is highly important to meet the minimum level of water and wastewater services and to operate the recently maintained WASH facilities otherwise these services will be severely disrupted.



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 succeeded in supplying adequate quantities of chlorine for water supply facilities since November 2024 as shown in below figure.



Chlorine Supply during 2024-2025



Under CMWU water quality monitoring program, the CMWU laboratory team is continuing 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. This initiative reflects CMWU's ongoing commitment to protecting public health and delivering safe and sustainable water services.



2.6 Water Supply and Water Trucking

2.6.1 Providing UNRWA Schools with Drinking Water:

The CMWU is still supplying UNRWA schools' shelters with drinking water since the beginning of the war through a contract signed with UNRWA for more than 120 schools and shelters. The average water supplied to IDPs even in UNRWA or the shelters is 150 cubic meters per day.



2.5.2 Water Distribution to Various Shelters

The CMWU continues to supply shelters and residents with potable water, especially in light of the increasing need for drinking water in the continuation of the Israeli war on the Gaza Strip, in cooperation with international and local institutions. The CMWU distributes about **1.2 million liters of desalinated water daily to various shelters.**



2.5.3 Providing Additional Water Tankers

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 the Mekorot supply is limited and frequently disrupted due to repeated damages. These services are especially critical in the Middle Area, where Mekorot has been completely out of service since January 2025, leaving residents and IDPs dependent on trucked water to meet their basic drinking water needs



2.5.5 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.



2.5.6 CMWU Signs Agreement with “Al Fares Alshahim” UAE fund for Drilling and Equipping Water Wells in Gaza

The CMWU has signed a cooperation agreement with Al Fares Alshahim to construct water wells in the Gaza Strip, as part of ongoing efforts to alleviate the worsening water crisis.

The project includes drilling of wells, starting with two in the cities of Deir al-Balah and Khan Younis, aiming to provide water for approximately 10,000 people. This comes as a continuation of two previous phases of the project that focused on improving water infrastructure.

This initiative is part of the humanitarian efforts implemented by the United Arab Emirates to support the residents of the Gaza Strip and enhance their access to safe and sustainable water sources.



2.6 Repairing and Fixing The damages of infrastructure and WASH Facilities

2.6.1 ICRC Financed Emergency Interventions:

An agreement was signed between 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

Under this contract repairing works have been implemented in May 2025 in the following facilities:

- Manaber AL noor well – Khanyounis: Maintenance of malfunctioned pumping unit,
- Sawarha Well – Zawaida: Install new supplied 25 HP submersible pump
- Tarazi Well - Zdeir AL Balah: Inspect, calibrate and operate malfunctioned pumping unit
- Maani Well - Deir AL Balah: Dismantle, inspect & replace the malfunctioned electrical submersible motor 25 HP
- ST-028 reservoir - AL Fukhari: maintenance of deteriorated one vertical booster pumping unit.
- Taj AL Waqar Well – Nusairat: Rewinding of malfunctioned 40 HP electrical vertical motor
- Saada Desalination plant - Khan Younis: Maintenance of high pressure pumps of AL Saada DP in khan Younis
- Basheer Wel - Deir AL Balah: Heavy Machinery - hiring of wheel loader to demolish debris materials in the well yard.

2- Electrical Repairs for Damaged Panel Boards of Water and Wastewater Facilities -2025

Under this contract repairing works have been implemented in May 2025 in the following facilities

- Sawarha - Abo Taha -Zawaida: Connection cable with submersible pump
- Al Amal Araishia PS – KhanYounis: Supply and install 100 meter XLPE cable 4x16mm2
- Hammad PS & Abu Al Reesh PS:: Began assembling the control panel to operate two pumps (22 kW each). Serves sewage lifting for approximately 15,000 citizens.
- Al Qatatwa & Al Maqaber PS: Began assembling the control panel to operate two pumps (13.5 kW each). Serves sewage lifting for approximately 30,000 citizens.

- Farouk Water Well – Nussirat:: Tested the motor and control panel. Produces 50 m³/h and supplies water to approximately 8,000 citizens.
- Farouk water well – Nussirat: Supply and install 20 m Cable 4x16mm². Facility water production: 65m³/h



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 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, a shortage of materials and the impact of ongoing evacuation orders have complicated these repair efforts. As a result, only a limited number 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.



7- Emergency Repair and Maintenance for Generators of Water and Wastewater Facilities in Gaza

This contract was signed on 9th April to repair WASH facilities generators throughout Gaza Strip, during April the generators of the following facilities have been repaired

- Abu Ahmed Tank – Abasan: Complete maintenance performed, including replacement of oil, fuel, and air filters, oil change, and turbo servicing.
- Desalination Plant – Deir Al-Balah: fuel and air filters replaced, and the water pump serviced.
- Desalination of Warehouses – Khan Yunis: Complete maintenance including oil, fuel, and air filters, as well as oil change.
- Al-Bassa Sewage Pump Station – Deir al-Balah: Full maintenance performed including filter replacements, oil change, and repairs to lower water and radiator hoses.
- Garage 7 Desalination Well – Gaza: Full maintenance completed: oil, fuel, and air filters changed, and oil replenished.
- Sheikh Radwan Well 7 – Gaza: Comprehensive maintenance including filters, oil change, and radiator hose replacement.
- Sheikh Radwan Well 9 – Gaza: Oil replenishment only.
- Saraya Well – Gaza: Full maintenance involving battery replacement, AVR installation, and electrical connection from the feeder to the control board.
- Bir al-Raqouni Well: Replaced oil filters and fuel filters
- Hira Well: Replaced oil filters and fuel filters
- Bir al-Fateh Well: replaced oil, fuel, and air filters
- Bir al-Nazla Well: Replaced oil and air filters

- Abu Hamad Well – Abasan Al Kabira (Water Well): Complete maintenance including oil, fuel, and air filter replacement, and fuel injection pump service.
- Al-Amal Basin – Khan Yunis (Waste Water Pump Station): Generator rental provided.
- Desalination Plant 6000 – Deir al-Balah (Waste Water Pump Station): Full maintenance including replacement of oil, fuel, and air filters, and oil change.
- New Abasan Well – Abasan Al Jadida (Water Well): Complete maintenance including oil and air filter replacement, oil change, and motor starter service.
- CMWU HQ – Gaza (Water Well): Fuel filter replacement and generator (Catot) operation.
- Al Sa'ada Tank – Khan Younis 250 (Water Tank): Full maintenance completed, including oil, fuel, and air filters, and oil replacement.
- Al Mawasy Water Well – Khan Younis 88: Full maintenance completed, including oil, fuel, and air filters, and oil replacement.
- Al Mawasy Pump Station – Khan Younis 88 (Sewage): Full maintenance completed, including oil, fuel, and air filters, and oil replacement.
- Al Satar Tank – Khan Younis 300 (Water Well): Full maintenance completed, including oil, fuel, and air filters, and oil replacement.



2.6.2 Maintenance of Sewage Network Near Indonesian Hospital in North Gaza

The CMWU through UNICEF support, has carried out urgent repair works for the damaged sewage lines and manholes near Indonesian Hospital in northern Gaza Strip. This intervention came to protect and serve approximately 10,000 residents through elimination sewage floods and their hazards on environment and public health.



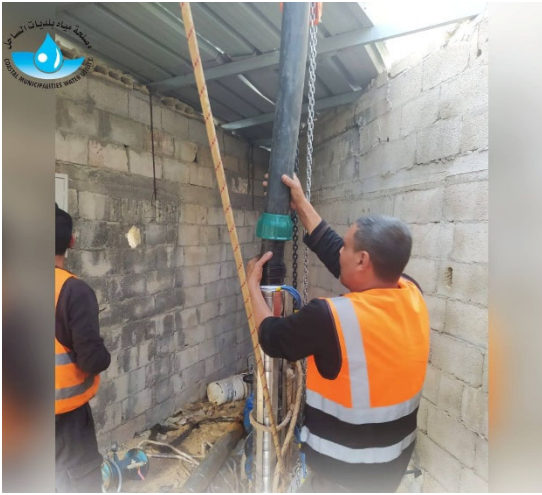
2.6.3 Maintenance and Repairing AL Zawaida Water Well-Middle Area

The CMWU in cooperation with ICRC, has carried out comprehensive maintenance works for Al-Zawaida water well, as part of ongoing efforts to improve water access for residents under emergency conditions.

The maintenance works included the supply and installation of a new 25-Hp submersible pump to replace the damaged one, in addition to complete electrical maintenance to operate the pump and ensure the well's efficient performance.

This well serves around 12,000 people and has a production capacity of 50 cubic meters per hour. It is considered one of the main sources of water supply for the area.

This vital intervention comes amid highly complex humanitarian conditions resulting from the war, which has severely impacted infrastructure, particularly in the water sector. These efforts contribute to strengthening the resilience of the population and ensuring the continuity of essential services. These wells supply water to residents connected to the municipal network as well as nearby displacement camps.



2.6.4 Maintenance and Repairing Manaber Al Norr Water Well in Khan Younis

The CMWU in cooperation with ICRC carried out mechanical maintenance for Manaber Al-Noor water well in Khan Younis, which had been out of service due to failures in the pumping system. The well has now been restored to operation with a production capacity of 60 cubic meters per hour.

The well serves the western areas of the city, including the Emirati, Dutch, and Japanese neighborhoods, and benefits approximately 15,000 residents.



2.6.5 Maintenance and Repairing of Al Saftawi Sewage Pipeline

The CMWU through UNICEF, has repaired the sewage transmission line serving Al Saftawi wastewater pumping station, located in Jabalia, northern Gaza Strip.

The project included installation of a new transmission line with a diameter of 500 mm and a length of 1 kilometer, using HDPE pipes, aiming to serve around 30,000 residents in the area.

This intervention represents an important step in addressing sewage overflow and accumulation problems, ensuring the continuous and efficient operation of the pumping station. The project also contributes to environmental protection, safeguarding public health, and improving the quality of sanitation services provided to citizens.



2.6.6 Maintenance of Al Amal Stormwater Pumping Station-Khan Younis

In light of the exceptional circumstances in the Gaza Strip and the ongoing war that has cast a heavy shadow over all aspects of life, the CMWU continues its emergency efforts to ensure the continuity of essential services. In cooperation with ICRC, necessary maintenance works were carried out for Al Amal stormwater basin in Khan Younis.

The maintenance works aimed to lower the water level accumulated in the pond basin, which posed a direct threat to residents in the area. The water was pumped toward the infiltration basins located northwest of the pond, in accordance with a well-designed technical plan to manage rainwater efficiently amid limited resources.



2.6.7 Maintenance of Al Bassa Sewage Pumping Station- Dair Al Balah

The CMWU technical teams carried out emergency maintenance works at Al-Bassa wastewater pumping station to ensure its continues operation without interruption, especially under the current circumstances.

Al-Bassa pumping station is the central station in Deir al-Balah city and serves approximately 90,000 residents, in addition to the displaced people, making its role vital in maintaining environmental and public health in the area.



2.6.8 Installation of Water Bladders at IDPs Shelters

As part of ongoing efforts to provide safe drinking water, the CMWU, in cooperation with UNICEF, has installed rubber water tanks with a capacity of 5 cubic meters in several shelter centers and unserved residential communities across all Gaza Strip. The installation included several shelters in Deir al-Balah, Nuseirat, Al-Zawaida, and various locations in Khan Younis Governorate, in addition to shelters and residential neighborhoods in Gaza City and the North Gaza Governorate.

This project aims to alleviate the suffering of displaced persons and residents by ensuring the delivery of safe drinking water to the targeted areas. The bladders are regularly filled by CMWU water tankers.



2.6.9 Maintenance of Sewage Network in Abu Shamala Area, Khan Younis

The CMWU through Oxfam support has carried out emergency maintenance repairs for the damaged sewage networks in Khan Younis. The works took place in the western camp of Abu Shamala area. The infrastructure of this area experienced severe damages during the ongoing war which resulted in frequent sewage floods. Therefore, this intervention aimed to alleviate the suffering of people during this challenging time and to secure a safe environment in the light of the public deterioration





2.6.10 Repairing and Operation of Al Samer Sewage Pumping Station in Gaza City

In a highly significant step to protect residents and displaced persons from the serious environmental and health consequences of wastewater overflows, the CMWU in cooperation with ICRC, has re-operated Al-Samer wastewater pumping station system in Gaza City.

This achievement came after continuous efforts, including repairing damages to the station's main transmission line, maintaining the electric generator, and cleaning the wet well, which paved the way for efficiently restarting this vital system.

Al-Samer station is one of the essential facilities in Gaza City, serving more than 150,000 people. This intervention is of even greater importance under the current harsh conditions in the Strip, as it helps reduce environmental pollution and protects the population especially the displaced from the risk of epidemics and disease outbreaks.



2.6.11 Installation and Operation of a new water desalination plant in Gaza City

In a humanitarian effort aimed at alleviating the suffering of residents amid the ongoing war on the Gaza Strip, the CMWU in partnership with MSF, has installed a water desalination plant in Gaza City with a production capacity of 11 cubic meters per hour to be operated by the operation staff of the MoG under the supervision of the CMWU

This initiative contributes to securing clean drinking water for approximately 24,000 beneficiaries.

CMWU is supplying the plant with the necessary chemicals for operation and maintenance to ensure the continuity of service and the quality of the produced water, as part of its national and technical responsibility in managing and operating water facilities in the Strip.



2.6.12 Maintenance of Al Fukhari Booster Pump

The CMWU in cooperation with ICRC carried out maintenance for the booster pump of Al-Fukhari reservoir.

The maintenance included repairing the malfunctioning pumping system to ensure the continuous supply of water to the residents of Al-Fukhari, who are suffering from a shortage in water supply due to the shutdown of wells that are located in areas affected by Israeli incursions. This intervention will also enable the supply of water to other areas within Al-Fukhari Municipality.

These efforts come as part of the ongoing work to rehabilitate water facilities that have been severely damaged during the Israeli war on the Gaza Strip, which has greatly exacerbated the water supply crisis



2.6.13 Emergency Maintenance of Al-Rawdah Desalination Plant in Al-Zawaida

The CMWU carried out emergency maintenance for Al-Rawdah desalination plant in the Al-Zawaida after it had been out of service for several days. The plant has a production capacity of 480 cubic meters per day and is considered a vital water source for the area.

The maintenance work included electrical and mechanical repairs, as well as calibration adjustments, aiming to restore the plant's operational efficiency and ensure the continuous supply of water to residents.

This intervention comes amid a critical need for safe drinking water, especially with the ongoing war and the increasing number of displaced persons, which has intensified pressure on water facilities across different areas.



2.6.14 Installation of Filling Points for CMWU Warehouse Desalination Plants

Amid the dire humanitarian conditions and the ongoing war, the teams of the CMWU continue their efforts to secure safe drinking water for displaced persons. Recently the CMWU has installed water filling points for the CMWU warehouse desalination plant west of Khan Younis city to serve the residents and IDPs in Al Mawasi area.

The plant has a production capacity of approximately 1,200 cubic meters per day, which has significantly contributed to meeting the needs of nearby shelter centers and camps, especially with the increasing waves of mass displacement from areas in the western part of the city.



2.6.15 Operating a Private Well in Dair Al Balah

The CMWU in cooperation with ICRC has operated a private well with a pumping capacity of 50 cubic meters per hour. A power generator was rented to operate the well and the well was connected to the municipality's water distribution network.

The number of beneficiaries from the operation of this well is estimated at around 15,000 people, as part of an effort to mitigate the water crisis and ensure a minimum level of water supply amid the emergency conditions facing the Gaza Strip.

This initiative comes in light of the ongoing Israeli war on Gaza, during which Al-Sahel 6 water well was rendered completely out of service after its electric generator was directly targeted by Israeli forces, causing it to cease operation. Additionally, the supply of Mekorot water to the Middle Governorate from the Israeli side has been suspended since January 2025, leading to a severe

shortage of water reaching the Al-Baraka reservoir in Dair al-Balah a key facility in the water system that supplies large parts of the city.



2.6.16 Drilling and Construction of Water Well in Dair Al Balah

The CMWU through UAE fund, has launched a project to drill a water well in the Heker Al-Jame' area in Deir al-Balah, . The project aims to serve both the residents of the city and the displaced persons residing there, with more than 20,000 people expected to benefit.

This well is being drilled at a time when Deir al-Balah is suffering from a severe shortage of water sources, particularly after several wells in the eastern parts of the city went out of service due to Israeli military operations. The crisis has been further exacerbated by the ongoing disruption of the main Mekorot water line that supplies the middle area, which has been cut off for over four months, increasing residents' hardship and worsening the humanitarian crisis.

This project is part of a broader initiative aimed at drilling and equipping water wells across the Gaza Strip, as part of efforts to alleviate the worsening water crisis. The first phase of the project includes drilling two wells in Deir al-Balah and Khan Younis to provide sustainable water sources and improve access to clean water.



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 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.

3.3. 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.

3.4. Cutting off Mekorot water: frequent cut 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.

3.5. 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.

3.6. 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.

3.7. 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.

3.8. 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.

3.9. 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.

3.10. 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 the operation of water and sanitation facilities, which rely on fuel to power their generators.

3.11. 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.