



# IN FOCUS: THE EFFECTS OF ISRAEL'S MILITARY OFFENSIVE ON ACCESS TO CLEAN AND SAFE DRINKING WATER IN THE GAZA STRIP

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AL MEZAN CENTER FOR HUMAN RIGHTS



In focus: The effects of Israel's military offensive on access to clean and safe drinking water in the Gaza Strip

Al Mezan Center for Human Rights is an independent, non-partisan and non-governmental human rights organization established in 1999. Al Mezan is dedicated to protecting and advancing the respect of human rights, with a focus on economic, social, and cultural rights, supporting victims of violations of international law through legal initiatives, and enhancing democracy, community and citizen participation, and respect for the rule of law in Gaza as part of occupied Palestine.

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Access to clean and drinkable water is an essential component for the realization of all human rights. Yet, Israel's May 2021 military offensive targeted, damaged, and destroyed water well systems, water networks and municipal facilities in the Gaza Strip, causing a devastating collapse of municipal services, notably municipal water supply. As a consequence, more than two million Palestinians in Gaza were left unable to enjoy their human right to water—a prerequisite for the realization of other rights, such as the rights to an adequate standard of living and health, and indispensable for leading a life in human dignity.

In principle, objects indispensable to the survival of the civilian population are civilian objects and may not be attacked as such, and yet, it has become a recurrent practice by the Israeli military to target and destroy key vital infrastructure in Gaza, including of the WASH sector. A component of these strikes entails the destruction of vital paved roads, which in addition to preventing the movement of vehicles, including ambulances, in the affected areas and causing extensive emotional and psychological stress from the high-intensity attacks, also critically undermines residents' ability to obtain desalinated water from water trucks, once tap water has been cut off.

This testimony by Ibrahim Al-Adham, a Palestinian farmer from North Gaza, reflects the humanitarian impact of Gaza's escalated water crisis during Israel's most recent offensive in May 2021:

I live in my family home in Beit Lahia, that houses 18 people, including nine children and four women. During the Israeli military offensive, the supply of municipal water was insufficient and regularly interrupted, barely exceeding one hour of uninterrupted supply some days. Due to the electricity shortage, we could not even pump water to the storage tanks on the roof of our house. It was really hard to endure this water shortage. We used buckets and kitchenware to store tap water when it was supplied, to use for drinking, personal hygiene, and household chores. A neighbor of ours has an agricultural water well and allowed us





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to use it those days [during the offensive]. The well water was saline and untreated, but it was our only option. We used buckets to manually transfer the water from the well to our rooftop tanks.

The water crisis has amplified the devastating impact of Israel's intense military attacks targeting agricultural lands, while also making agricultural work a risk to life and safety. Palestinian farmers themselves were among Israel's targets during the offensive. In one of the incidents documented by Al Mezan on 12 May 2021, an Israeli airstrike targeted a car parked on a farm near the Hammouda roundabout in eastern Beit Lahia, North Gaza, instantly killing four Palestinian farmers.<sup>1</sup>

In his testimony to Al Mezan, Al-Adham also noted that even in the event that crops were not damaged by Israeli airstrikes, they would still die due to water scarcity and abandonment:

We have 9,000 square meters of agricultural land in northern Beit Lahia, near the perimeter fence. We could not get to our land during the Israeli escalation, which made our eggplant and corn crops dry up and spoil. My family and I have lost about 2,800 USD worth of crops. These days are really challenging for all of us, but we are trying to stay patient despite the inhumane conditions we continue to face.

**According to Al Mezan documentation, the military offensive affected Gaza's water sector as follows:**

Thirteen water wells across the Gaza Strip were either damaged or completely destroyed due to Israeli airstrikes. Three water desalination plants and approximately 250,000 meters of water network were also damaged in airstrikes.

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<sup>1</sup> The fatalities were recorded as: Talaat Jamil Agha, 34, Atef Abdelrahman al-Barawi, 47, Nael al-Barawi, 22, and Wael Fares al-Ghoula, 55. Also, Imad Mohammed Junaid, the 36-year-old security guard at the farm, was wounded.



The municipalities of Gaza City and Beit Lahia (North Gaza District) endured the greatest number of losses.<sup>2</sup>

Three water wells in the Be'er al-Naaja area, North Gaza, were damaged.<sup>3</sup> These wells provided the municipality of Gaza City with water. An Israeli airstrike targeted the entrance of well no. 12, resulting in the destruction of the transmission line (16 inches in diameter) that channels water from the three wells to about 20 percent of the population in western and northern Gaza City, roughly affecting 120,000 people.

The municipality of Gaza City announced that damage during the offensive included: water supply networks, sewage networks, water wells, sewage pumps, municipal facilities and vehicles, roads and sidewalks, electricity networks, and administrative buildings. Early estimates suggest that the total cost of damage exceeds 20 million USD. The required maintenance includes around 8,500 meters of water network and 2,600 meters of rainwater collection network.<sup>4</sup>

The main pipeline carrying freshwater purchased from Israel's national water company Mekorot to Gaza was also damaged. It supplies the western area of Gaza City with approximately 20,000 cups of desalinated water per day.<sup>5</sup> The water desalination plant in Al-Sudaniya, northern Gaza City, also shut down during the military bombardment.<sup>6</sup>

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<sup>2</sup> Figures reported in a preliminary survey from the Ministry of Local Government in Gaza obtained by Al Mezan on 1 June 2021.

<sup>3</sup> Bearing municipal identification numbers 12, 15, and 16, according to Gaza City municipal records.

<sup>4</sup> Figures from the Gaza City Municipality reported in a workshop on the challenges facing the Gaza Strip's municipalities held by Palestinian NGOs Network (PHROC) on 7 June 2021.

<sup>5</sup> Anwar Al-Jundi, Coordinator of the General Administration of Water and Sanitation in Gaza Municipality, interviewed by Al Mezan's researcher Bassem Abu Jay on 26 May 2021.

<sup>6</sup> The municipality of Gaza City estimates the daily quantity of water supplied to the residents of Gaza City at 95,000 cups, of which 70,000 cups come from the aquifer (which is managed by the municipality), 20,000 cups from Mekorot, and around 5,000 cups from the desalination plant in Al-Sudaniya.



Five of North Gaza's municipal wells were damaged—namely Zayed Square, Al-Nozha, Al-Atatra, Al-Siyafa, and Al-Salatin—as a result of Israel's airstrikes targeting infrastructure or nearby premises, significantly hampering any immediate maintenance efforts. Together, these wells supply approximately 10,000 cups per day.<sup>7</sup> Available information indicates that Al-Atatra and Al-Salatin wells remain inoperable to date. Notably, these wells were used to channel water to approximately 100,000 people, who are now enduring extreme water scarcity. Prior to the Israeli offensive, each well operated for roughly 10-20 hours daily and supplied 70 to 100 cups of water per hour. Further, around 12,000 meters of water network belonging to the North Gaza municipality were destroyed.<sup>8</sup>

During the escalation, maintenance teams from Gaza's municipalities were unable to keep up with water well operation schedules due to the intensity and frequency of Israel's airstrikes, especially in the late hours of the night, amid near-total blackouts in most districts. Consequently, water wells shut down at around 10pm every day during the aggression, and municipalities used 50 water trucks to transfer water to different neighborhoods in an attempt to compensate for the water supply deficit. The municipalities reportedly began repairing the damaged well systems when Israel's offensive ended.

The Gaza Electricity Distribution Company (GEDCO) remained unable to access and repair the high-voltage lines that supply electricity to the Gaza Strip throughout the offensive.<sup>9</sup> As a result, an escalated and persistent power crisis emerged, seriously hampering the provision of municipal water services and urgent maintenance work.

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<sup>7</sup> Atef Al-Sultan, Director of Health, Water and Sanitation Department in the North Gaza Municipality, interviewed by Al Mezan's researcher Hussein Hammad on 2 June 2021.

<sup>8</sup> Mahmoud Abu Samra, Engineer at Beit Lahia Municipality, interviewed by Al Mezan's researcher Hussein Hammad on 26 May 2021.

<sup>9</sup> GEDCO's daily report of Wednesday, 2 June 2021.



The water crisis in Gaza is multifaceted: contamination and high salinity levels in Gaza's aquifer exacerbate its extremely limited natural water supply. This crisis worsened due to the prolonged power cuts, Israeli military attacks on the well system, insufficient fuel supply, and the desalination plant capacity being reduced by half. The Gaza municipalities are currently dependent on financial aid to purchase the fuel needed to generate electricity to run the water wells.<sup>10</sup>

Although the military bombardment has ended, Israel's heightened closure measures—particularly its control of crossings and ban on fuel entry—play a major role in preventing practical solutions for the current water crisis being implemented. This comes against the backdrop of the COVID-19 global health crisis and related concerns for the financial situation and food security in the Gaza Strip, especially in the farming community.

The laws of war require that Israel apply added scrutiny to attacks involving destruction and damage to certain objects and infrastructure that are indispensable or of special significance for the civilian population, which includes water-related infrastructure. Israel's vast destruction of vital infrastructure in Gaza and the lasting humanitarian suffering that those attacks caused for the civilian population shows a lack of due regard for this legal requirement and for the reverberating effects of its military strikes. The failure to take appropriate precautions or intentionally exposing the civilian population in Gaza to the attacks and to the dangers stemming from them are prohibited and therefore Israel's conduct may amount to war crimes and crimes against humanity.

Further, the damage caused by Israel's latest aggression on Gaza is worsening an already critical and prolonged water crisis created by Israel's 54-year occupation, 14-year closure, and repeated bombardments against the Gaza Strip. In November 2020, Al Mezan and partners sent a joint urgent appeal to the Special

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<sup>10</sup> Yahya Al-Sarraj, president of the Gaza City Municipality, interviewed by Al Mezan's researcher Bassem Abu Jray on 27 May 2021.



Rapporteur on the human rights to safe drinking water and sanitation on the escalating water and sanitation crisis in the Gaza Strip.<sup>11</sup> Despite the fact that six United Nations Special Rapporteurs subsequently urged Israel to fulfill its legal obligations vis-à-vis the occupied Palestinian population in Gaza,<sup>12</sup> the Occupying Power has continued to perpetuate its unlawful policies in blatant violation of international humanitarian law and human rights standards.

It must be stressed that the international community's failure to recognize Israel's settler-colonial and apartheid system—of which the Occupying Power's control and limiting of natural resources, including water, is a part—as the main driver of the conflict has led to a deeply embedded state of impunity that allows these practices to continue. Israel's sense of exceptionalism to its obligations under international law is a direct reflection of the international community's failure to address the root causes of these violations, including the state's very basic and apparent violations of international law relating to water.

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<sup>11</sup> See Al Mezan's joint urgent appeal to UN Special Procedures (9 November 2020) here:

<http://mezan.org/en/uploads/files/1605008575924.pdf>

<sup>12</sup> See UN Special Procedures' communiqué to Israel (8 February 2021) here:

<https://spcommreports.ohchr.org/TMResultsBase/DownloadPublicCommunicationFile?gld=25840>