

"We will Leave them Nothing"

The Israeli Systematic Destruction of the Agricultural Sector and Food Production Systems in Gaza

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Introduction:

This report "We Will Leave Them Nothing"* addresses the destruction of the agricultural sector and food production-related facilities during the ongoing Israeli military assault on the Gaza Strip since October 7, 2023. This includes bombing and razing of agricultural lands, uprooting and burning fruit trees and food crops, as well as demolishing greenhouses and agricultural infrastructure. Additionally, it highlights the targeting of livestock and fishing facilities, and aquaculture operations.

This report adopts a methodology for documenting the acts of aggression against various agricultural and food production sectors within the context of the genocide. It highlights the devastating consequences of this systematic and unprecedented attack, where the impact of Israeli destruction extends beyond direct damage to the agricultural sector. The assault has triggered a comprehensive collapse in food security, public health, and the local economy in Gaza, undermining the population's ability to secure food and livelihoods in a dignified manner and plunging them into catastrophic humanitarian conditions.

The devastating military assault on food production systems clearly demonstrates an intent to exterminate the Palestinian population, as the deliberate destruction intersects with the material elements of the crime of genocide as defined by the Convention on the Prevention and Punishment of the Crime of Genocide. This action affirms the ongoing policy of the occupation to erase the Palestinian existence and eliminate the ability of Palestinians to live and survive. It is carried out through various methods of collective punishment aimed at subjecting the population to conditions intended for their destruction and annihilation, including systematic starvation, blockade, and the comprehensive destruction of the essential means for survival.

The report also addresses the issue of the Israeli Occupation Forces seizing large areas of land and agricultural zones in Gaza since the beginning of the assault, which have been transformed into buffer zones and closed military zones. This has restricted farmers' access to their lands, effectively reducing the available space in the Gaza Strip, undermining agricultural productivity, and destroying Gaza's economic independence. It has also deprived the population of their most vital food resources.

The legal analysis in the report reveals that the deliberate destruction of the agricultural sector goes beyond being a serious violation of international humanitarian law, as outlined in the Geneva Conventions and their Protocols. It also breaches international human rights law, including the International Covenant on Economic, Social, and Cultural Rights, and constitutes an element of the crime of genocide that the Israeli occupying forces continue to commit in the Gaza Strip.

^{*}Soldier Shay Cohen of the Israeli military's "749" Engineering Battalion posted a video on his Instagram account,

in which he proudly boasts about participating in the destruction of residential areas and agricultural land in the "Netzarim" area south of Gaza City. He captioned the video: "We will leave them nothing." See: www.dropsitenews.com/p/israel-749-battalion-demolition-gaza

The report confirms that for the second consecutive year, Israel is committing the crime of genocide in Gaza, with the occupying forces imposing systematic collective punishment measures against the civilian population. These measures include a severe blockade on the entire Gaza Strip, the forced displacement of approximately 1.9 million Palestinians, the execution of massacres and mass killings of civilians, the destruction of vital infrastructure, and the ban on the entry of humanitarian aid.

According to data from the Palestinian Ministry of Health, the ongoing military assault on the Gaza Strip – now lasting over 18 months – has resulted in more than 52,000 deaths, 70% of whom are women and children, and over 118,000 injuries, while survivors are facing an unprecedented humanitarian crisis¹ due to the disruption of essential services and the collapse of food supply networks. What is happening in Gaza is not merely a military aggression, but a systematic strategy aimed at stripping the population of their basic means of survival and forcing them into submission through policies of blockade and starvation.

The right to adequate food and freedom from hunger is a fundamental human right, essential to preserving human dignity and necessary for ensuring other rights such as the right to life, health, adequate housing, and education. These rights are recognized by international legal frameworks, including international humanitarian law, international human rights law, and the International Covenant on Economic, Social, and Cultural Rights, which stipulates in Article 11 that everyone has the right to an adequate standard of living for themselves and their families, including sufficient food, clothing, and shelter.²



¹⁻United Nations Office for the Coordination of Humanitarian Affairs (OCHA), "Humanitarian Situation Update 284 | Gaza strip", April 30, 2025. Link: www.ochaopt.org/content/humanitarian-situation-update-284-gaza-strip

²⁻Article 11, "International Covenant on Economic, Social and Cultural Rights (1966)"

Link: www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights

I. Historical Context of Israel's Destruction of the Agricultural Sector in Palestine

Israel declared the occupation of the West Bank, including East Jerusalem, and the Gaza Strip on June 5, 1967. Since that time, the Palestinian people have suffered under a dual system consisting of Israeli military rule and a policy of segregation and apartheid. This system was not accidental but rather part of a colonial settler project aimed at reinforcing Israel's dominance over all of historic Palestine and excluding Palestinians while erasing their inherent rights to freedom, dignity, and self-determination.

As a result, Palestinians are denied their right to self-determination and sovereignty over land, natural resources, and the economy. Over the decades, Israel has strengthened its presence in the West Bank and Gaza Strip through colonial policies and practices against the Palestinians, including systematic killings and repression, blockades, illegal settlement expansion, continuous land and resource theft, and the forced displacement of Palestinians.

The agricultural sector is the backbone of Palestinian economic and social life, as well as one of the most important components of their cultural and historical identity as the indigenous people of historic Palestine. Therefore, the Israeli occupying state deliberately seeks to destroy this sector and tighten its control over Palestinian food production systems as part of its colonial strategies since the occupation of the West Bank and Gaza Strip in June 1967. Control over land and natural resources became a central element of Israel's settlement system.

The policies and measures imposed by the occupying authorities have led to a significant reduction in the available agricultural land. Israel has consistently stripped Palestinians of their land, seizing hundreds of thousands of dunams, allocating them for settlement expansion, building settler infrastructure and military installations, and creating networks of roads that benefit the settlements. The area designated for agriculture amounts to approximately 1.2 million dunams³, which constitutes 20% of the total area of the West Bank, totaling 6.023 million dunams.

In parallel, the occupation has deprived Palestinians of water resources by seizing water springs and groundwater reservoirs, stealing water from the Jordan River, and using water as a weapon in Israel's system of apartheid. This has endangered the security of Palestinian water resources. Additionally, the occupation has obstructed access to essential agricultural supplies for farmers, such as seeds, fertilizers, and farming and irrigation equipment. On many occasions, the occupying authorities have also prevented the export of Pales tinian agricultural products abroad .⁴ These practices have significantly undermined the agricultural sector, deprived Palestinians of access to natural resources, and limited their ability to support local agriculture and achieve food sovereignty.

³⁻Palestinian Central Bureau of Statistics. "Agricultural Census 2021." October 2023, p. 44. Online link: https://www.pcbs.gov.ps/Downloads/book2606.pdf

⁴⁻ Arab News, "Israel blocks Palestinian export in escalating trade crisis", February 09, 2020. Link: https://arab.news/93gj7

Since the signing of the Oslo Accords in 1993, Israel has carried out some of its most severe attacks on Palestinian land and agriculture. Instead of the agreements granting Palestinians broader self-rule powers or enhancing their independence, they have, in fact, unprecedentedly strengthened Israeli control over Palestinian land and natural resources. This has led to the continued fragmentation of agricultural lands, particularly in Area C of the West Bank, which constitutes 60% of the total area.

Area C is a vital food resource for the West Bank, containing the most fertile lands and fresh water resources. Israel continues to exercise full military and administrative control over this area, imposing strict restrictions that prevent Palestinians from accessing their land, exploiting natural resources, and engaging in economic activities freely. This policy has resulted in the isolation of Palestinian areas from one another, transforming them into fragmented pieces that weaken agricultural production and the economic capabilities of Palestinians.

This approach was not limited to the West Bank but was similarly applied in the Gaza Strip, where the occupation sought to establish full control over agricultural lands. The Second Oslo Agreement stipulated the creation of a 50-meter buffer zone inside the Gaza Strip, but Israel failed to adhere to this agreement and expanded the zone following the outbreak of the Second Intifada in 2000. This led to large-scale destruction of agricultural lands along the Gaza Strip's border, with Israel destroying approximately 20% of Gaza's agricultural land at that time.⁵

While Israel marketed its 2005 disengagement plan as a step towards ending its occupation of Gaza, the reality proved that it was merely a repositioning of the occupation, a more severe form of siege and control. After 2008, Israel continued to expand the restricted access buffer zone, with its depth in some areas ranging between 1-1.5 kilometers. As a result, approximately 35% of Gaza's arable land became inaccessible.⁶

Israel also imposed severe restrictions on access to the sea off Gaza's coast, significantly damaging the fishing and marine resources sector, which is a vital source for food security. The 1994 Oslo Agreement granted Palestinians the right to use up to 20 nautical miles for maritime and economic activities, but Israel never adhered to this, restricting fishing to a mere 3-6 nautical miles, and at best, 9 nautical miles.



5-Agrarian Conversation, "Agrarian Annihilation: Israel's war on Gaza is war upon both land and people", Link: https://www.peasantjournal.org/news/agrarian-annihilation/

6-UN-Office for the Coordination of Humanitarian Affairs (OCHA), "Access Restricted Areas (ARA) in the Gaza Strip", 2013. Link: www.ochaopt.org/sites/default/files/ocha_opt_gaza_ara_factsheet_july_2013_english.pdf This deprivation meant that Palestinians were denied access to 85% of their designated maritime area⁷, devastating the fishing industry and increasing its vulnerability. The strict restrictions on the entry of modern fishing equipment and materials for boat maintenance further exacerbated the sector's challenges.

The blockade Israel imposed on Gaza since 2007 marked the peak of its strategy to impoverish and economically suffocate the population. The blockade severely impacted agricultural, livestock, and fishing sectors, as well as restricting the movement of goods. This had a direct negative effect on Palestinian agricultural exports from Gaza and disrupted the supply of essential agricultural inputs such as fertilizers, seeds, and farming tools.

Even before the war, <u>agricultural lands</u> covered 170 square kilometers, equivalent to 47% of Gaza's total area, which is 365 square kilometers. According to data from the <u>Palestinian Central Bureau of Statistics</u> in 2022, the agricultural sector contributed around 11% of Gaza's GDP, approximately 575 million USD. Agricultural exports from Gaza accounted for 55% of total exports in 2022. Additionally, the agricultural sector provided employment opportunities and helped reduce the high unemployment levels in Gaza, with more than 55,000 workers in the sector.⁸

Over the past decade, Israel continued to destroy the agricultural sector in eastern Gaza by spraying thousands of dunams of crops with deadly chemical pesticides from the air⁹. This caused significant crop damage and contributed to severe soil degradation and the loss of vegetation. The spraying operations aimed to make the land barren and exposed, thus enabling the IOF to target Palestinians. These measures not only reduced the available agricultural land but also led to the abandonment of traditional farming practices that had sustained agricultural life in Gaza for generations.

In addition to the Gaza blockade, previous military actions have caused widespread damage to the agricultural sector, including the leveling of agricultural land, destruction of agricultural infrastructure, livestock farms, and fisheries. At the same time, large areas of agricultural land have become unusable due to contamination from remnants of bombs and unexploded ordnance¹⁰, leaving the agriculture and food production sectors facing severe challenges that limit recovery opportunities and economic stability.

⁷⁻The Palestinian Centre for Human Rights (PCHR), "Fact Sheet: Gaza Strip: Attacks and their Consequences", July 2012, Link: https://pchrgaza.org/gaza-strip-attacks-and-their-consequences-4/

⁸⁻Palestinian Environmental NGOs Network (PENGON), "Agriculture in Gaza Strip: Realities and Challenges", Page: 08. Link: www.pengon.org/writable/uploads/articles/1705230998_e3806ead42c78d5f33ab.pdf

⁹⁻Forensic Architecture, "Herbicidal Warfare in Gaza", July 19, 2019.

Link: www.forensic-architecture.org/investigation/herbicidal-warfare-in-gaza

¹⁰⁻ UN Mine Action Service (UNMAS), "Explosive Remnants of War risk civilian lives in Gaza amid funding crisis," September 24, 2020. Link: www.ochaopt.org/content/explosive-remnants-war-risk-civilian-lives-gaza-amid-funding-crisis_

The Israeli strategy of destroying Palestinian agriculture and food production has escalated to even more dangerous levels since the Israeli military launched its attack in October 2023. This operation reached its peak with the intensification of settler violence in the West Bank, the confiscation and levelling of vast areas of agricultural land, and their allocation for the construction of thousands of new settlement units, furthering the imposition of Israeli sovereignty over large parts of the occupied West Bank in what is known as the "annexation project."¹¹

As for the Gaza Strip, the ongoing military assault since October 7, 2023, represents the latest chapter in the ongoing attack on Palestinian agriculture, with the scale of destruction to the agricultural and food production sectors reaching unprecedented levels. Israeli occupying forces have destroyed approximately 70% of Gaza's agricultural land¹², including the demolition of agricultural infrastructure such as greenhouses, water facilities, irrigation systems, energy networks, storage warehouses, and livestock and fisheries facilities. This has caused deep and long-term damage to Gaza's capacity to recover and achieve self-sufficiency, exacerbating the suffering of the population with rising rates of malnutrition, food insecurity, and disease, especially as Israel continues to starve the population by depriving them of adequet food, water, and medicine since the war began.¹³

The campaign targeting Gaza's agricultural and food production sector is not an isolated incident, but part of a well-thought-out, long-term Israeli strategy to uproot Palestinian life and eliminate any possibility of building a sustainable and effective agricultural economy. According to a report by the <u>UN Special Rapporteur on</u> <u>the Right to Food, Michael Fakhri</u>, the systematic starvation imposed by the IOF in Gaza is one of the most horrific weapons of genocide. Through this brutal campaign, Israel seeks to undermine the Palestinian people's food sovereignty, weaken their ability to feed themselves, and reinforce their economic dependency on the occupation. This aggression underscores Israel's intent to forcibly displace and annihilate the Palestinian population. ¹⁴

The ongoing genocide in Gaza is not merely an act of targeting, but a comprehensive and destructive attack on the Palestinian environment, economy, and society. It does not only destroy the present lives of the population but also eradicates the future of life in Gaza, forcing the population to remain reliant on external humanitarian aid with little capacity to achieve food sovereignty. The consequences of this destruction will be felt for generations, as Gaza's residents face not only a food crisis but also irreversible environmental and economic degradation.

¹¹⁻UN Human Rights Office - OPT, "Israel's settlement expansion is alarming and flies in face of international law," Aug 19, 2024. Link: www.news.un.org/ar/story/2024/08/1133611

¹²⁻Food and Agriculture Organization of the United Nations, "Gaza: Geospatial data shows intensifying damage to cropland" October 03, 2024. Link: www.fao.org/newsroom/detail/gaza-geospatial-data-shows-intensifying-damage-to-cropland/en

¹³⁻Palestinian Centre for Human Rights, "Hunger and Lack of Medicine Threaten the Lives of Gaza City and Northern Residents," June 26, 2024. link: https://pchrgaza.org/ar/?p=25776

¹⁴⁻ Report of the Special Rapporteur on the right to food, Michael Fakhri, "Starvation and the right to food, with an emphasis on the Palestinian people's food sovereignty", July 17, 2024. Link: https://www.un.org/unispal/document/right-to-food-report-17jul24/

"Farming is a family profession, passed down from my father to me. I have been working with my father in this field since I was young, and I have been fully responsible for our agricultural land for about 25 years. Our land is located in the Beit Lahiya area, in the north of Gaza, covering 15 dunams, and it supports five families: my father's family, my own, and the families of my three brothers who work with me. Before the year 2000, we used to grow ten dunams of citrus trees, and we had five greenhouses for vegetables. With the beginning of the Second Intifada, the Israeli forces razed our land to create an open area without high trees. They also demolished our two-story house, which was 180 square meters. We returned and planted strawberries in 2002, but Israeli machinery came and razed the land again. Since then, we were expelled from the land until 2005. During this period, I worked as a taxi driver because there was no other source of income for the family, and my brothers took on different jobs. After the Israeli withdrawal from Gaza in 2005, we returned to plant the land again, renovating the wells and irrigation systems. We planted peas because they do not require much water, and we also grew various vegetables. The economic situation improved somewhat until the Israeli forces advanced into the area during the 2008 War, making it very dangerous for us to tend our fields. We were prevented from accessing the land, and the crops were destroyed before we could harvest them, resulting in huge losses. In the 2012 aggression, the land was again razed, and in 2014, during the war, the entire land and its crops were destroyed. We returned to rehabilitate the land with funding from international organizations, including the Food and Agriculture Organization (FAO)."

Akram Yunis Abu Khousa, 51 years old, Farmer, Atatra - Beit Lahiya¹⁵



15- PCHR's field researcher collected the testimony on October 10, 2024.

II. Israeli Destruction of the Agricultural Sector and Food Production Systems during the Genocide

During the military assault on Gaza that began on October 7, 2023, and lasted for more than 18 months, Israel intensified its operations, directly targeting civilians, vital infrastructure, and escalating what was already a long-standing siege into a humanitarian catastrophe. The agricultural sector and food production systems have become a primary target for destruction. This deliberate attack on the land and agriculture—vital sources of the Palestinian economy and food security—reflects Israel's large-scale strategy aimed at exterminating the population, severing their connection to the land, and undermining their survival. This strategy has crippled Gaza's food production capacity and disrupted the local economy.

1. Agricultural Sector

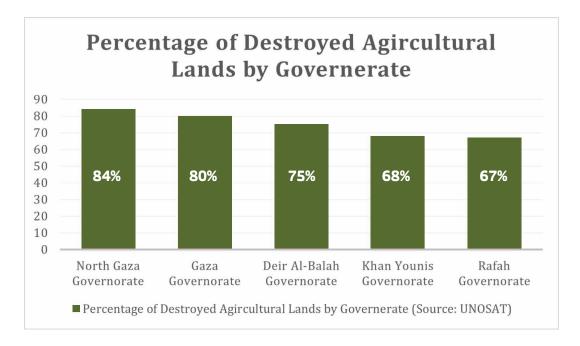
Over the course of 18 months of relentless military attacks, the IOF have aggressively targeted agricultural lands and infrastructure in the Gaza Strip. Air and ground military strikes have caused widespread damage to the agricultural sector, including the destruction and levelling of vast tracts of agricultural land, especially in border areas. Israeli tanks and bulldozers have destroyed crops and orchards, intentionally uprooting and burning olive trees, citrus groves, and vegetable farms. The timing of these attacks was particularly devastating, coinciding with the harvest season for many crops.¹⁶

Reports from the United Nations Satellite Centre (UNOSAT) show an unprecedented decline in crop health and vegetation density due to the damage to large areas of agricultural land and infrastructure in Gaza. According to <u>the latest satellite imagery analysis</u> conducted in December 2024, approximately 113 square kilometres of agricultural land—including fields, orchards with perennial trees, permanent crops, vegetables, and fruits—have been destroyed. This accounts for 75% of Gaza's total agricultural land, which spans 150 square kilometres. The analysis also indicates a steadily increasing rate of destruction, closely linked to repeated incursions into various areas.

According to the analysis, North Gaza Governorate recorded the highest level of destruction, with 26.4 square kilometres—equivalent to 84% of its total 31 square kilometres of agricultural land—damaged. In December 2024, UNOSAT reported the destruction of 80% of agricultural land in Gaza Governorate (25.2 km² out of 31.5 km²), 75% in Deir al-Balah Governorate (19.5 km² out of 25.9 km²), 68% in Khan Younis Governorate (29.1 km² out of 42.8 km²), and 67% in Rafah Governorate (12.7 km² out of 19 km²). ¹⁷



16- Oxfam International, "Golden Time: seasonal farming production destroyed and lost in northern Gaza amid mounting fears of worsening hunger and starvation", February 26, 2024. Link: <u>www.oxfam.org/en/press-releases/golden-time-seasonal-farming-production-destroyed-and-lost-northern-gaza-amid</u> 17-UNOSAT, FAO, "Gaza Strip Cropland Damage Analysis", January 30, 2025. Link: <u>https://unosat.org/products/4072</u>



In addition to the destruction of land and crops, military strikes targeted essential agricultural infrastructure. Greenhouses, agricultural wells, irrigation systems, solar energy systems, and other logistical equipment were direct targets of destruction and levelling, all of which are crucial components for agricultural production in Gaza.

According to the latest data from the Food and Agriculture Organization (FAO), the IOF have destroyed 7,371 dunams of greenhouses¹⁸, representing 56.5% of Gaza's total greenhouse area of approximately 13,050 dunams. In the Gaza Governorate alone, 99.9% of greenhouses were destroyed. In addition, 2,672 agricultural infrastructure facilities were destroyed, including <u>292 central storage facilities</u> for agricultural products, 160 internal storage facilities for crops, seeds, animal feed, and agricultural tools, and 28 companies supplying and distributing agricultural equipment were destroyed. ¹⁹

Agricultural wells and irrigation networks were also severely impacted. At least <u>1,531 wells</u>²⁰ were destroyed since the beginning of the military assault, especially in Gaza and North Gaza governorates, causing devastating damage to Gaza's food production capacity. The IOF also flooded large areas of underground soil layers with salty seawater under the pretext of destroying tunnels²¹, which has caused a severe environmental disaster. This has led to increased soil and groundwater contamination, particularly with the collapse of sewage networks, making the remaining agricultural land unfit for cultivation.

21- Nature, "Israel is flooding Gaza's tunnel network: scientists assess the risks", February 02, 2024. Link: https://www.nature.com/articles/d41586-024-00320-4



¹⁸⁻ Food and Agriculture Organization of the United Nations, "Damage to greenhouses due to the conflict in the Gaza Strip as of 31 of December 2024", January 28, 2025. Link: https://openknowledge.fao.org/handle/20.500.14283/cd4032en

¹⁹⁻FAO, "damage to agricultural infrastructure due to the conflict in the Gaza Strip as of 31 December 2024", January 23, 2025. Link: https://openknowledge.fao.org/handle/20.500.14283/cd4034en_

²⁰⁻ FAO, "Damage to agricultural wells due to the conflict in the Gaza Strip as of 31 December 2024", January 23, 2025. Link: https://openknowledge.fao.org/handle/20.500.14283/cd4033en

The destruction also extended to solar energy systems, which are indispensable in the Gaza Strip for providing alternative power to farms, ensuring food production continues amid the widespread electricity blackout across Gaza. By the end of March 2024, Israel had destroyed more than <u>1,695 solar panels</u> out of a total of 2,614 panels distributed over an area of 42,500 square meters across the governorates of Gaza, depriving farmers of the ability to irrigate their land and produce food.²² This deliberate destruction of essential infrastructure indicates a systematic Israeli policy aimed at long-term destruction of the agricultural sector, affecting the population negatively for years, if not decades. Recent data from the Palestinian Central Bureau of Statistics reveal a significant decline in agricultural activities, with a 93% decrease in agricultural output in Gaza.²³

"I work in agriculture, which is my livelihood and that of my children and the workers who help with farming. I leased four plots of land totalling over 450 dunams, all located on the eastern border in Beit Hanoun and Beit Lahiya, growing food crops such as carrots, watermelon, cantaloupe, potatoes, and onions, as well as orchards with citrus and olive trees. The land also included modern agricultural tools and irrigation systems, and the farms were powered by solar energy, with more than 270 solar panels. The rental cost for one dunam was 130-200 Jordanian dinars annually, and around 60 workers were employed to care for the land. On Saturday, October 7, 2023, at 6:30 AM, while I was working with the labourers on one of the farms, we heard the sound of successive explosions. I instructed the workers to withdraw and return to their homes for their safety, as the land is close to the border. The land had been targeted and destroyed in previous Israeli attacks, but this time, I knew I was going to suffer huge losses. On October 13, 2023, I left my land and headed south with my family, beginning a journey of suffering and displacement. Later, I learned that my land was razed and bombed by the IOF, and two storage facilities containing agricultural chemicals, fertilizers, and materials were destroyed, with losses from the storages alone amounting to 200,000 shekels. My total losses due to the destruction of the land and equipment amount to 3,000,000 shekels."

Nasser Ibrahim Abu Jarad, 61 years old, Farmer, Beit Lahiya²⁴

The war has left behind a deadly legacy of unexploded bombs and ordnance, where remnants of highly explosive shells and bombs pose an ongoing threat to the land and farmers, rendering large areas unsafe for agriculture for years to come, thereby limiting food production. Recent statistics show that the IOF have indiscriminately dropped over 100,000 tons²⁵ of rockets and bombs since the beginning of the war, leaving behind dangerous remnants that severely impact soil quality and damage the vegetation cover.

24- PCHR's field researcher collected the testimony on October 14, 2024

25- Anadolu Agency, "Infographics: Casualties in Gaza since Oct. 7, 2023", March 25, 2025.

²²⁻ FAO, "Damage assessment of solar panels in the Gaza Stirp as of 29 March 2024", Link: https://www.un.org/unispal/wp-content/uploads/2024/06/cd1130en.pdf

²³⁻The Palestinian Central Bureau of Statistics (PCBS), "Highlights the Socio-economic and Environmental Conditions after One Year of the Ongoing Israeli Occupation Aggression against Gaza Strip and the West Bank", October 07, 2024. Link: <u>https://www.pcbs.gov.ps/post.aspx?lang=en<emID=5848</u>

Link: https://www.aa.com.tr/en/info/infographic/45232_

According to United Nations estimates, Israeli military attacks have generated more than 50 million metric tons²⁶ of rubble and debris in the Gaza Strip, a staggering figure considering Gaza's limited land area. Even more alarming is the contamination of this debris with significant amounts of asbestos, chemical pollutants, and heavy metals such as phosphorus, lead, and carbon, which pollute the land with hazardous materials that could persist for a long time. This not only depletes soil fertility and agricultural productivity but also threatens public health and the ecosystem, as these substances leach into groundwater, poisoning it with non-biodegradable toxins, which are vital for human consumption and irrigation.

The harvest season for agricultural crops has also fallen victim to the war, serving as a stark reminder of the devastating damage inflicted on the land in Gaza. Israeli attacks coincided with the harvest time for dates, olives, citrus, and wheat. With the widespread destruction of agricultural fields and lands due to Israel's scorched earth policy, farmers found themselves unable to harvest their crops. According to the latest assessments from the Palestinian Ministry of Agriculture, approximately 140,000 date palm trees, planted over 7,000 dunams²⁷, were uprooted and razed.

"I have been growing food crops for 30 years and used to cultivate 100 dunams of agricultural land, leased from various areas in the east and south of Deir al-Balah. The war came just a week before the harvest season. The land was planted with cauliflower, eggplant, cabbage, and tomatoes, but we couldn't access it or harvest it because of the military operations. During the ground invasion of the southern Deir al-Balah area, the IOF completely razed 80 dunams of land, destroying 30,000 seedlings of cauliflower and eggplant. I also had 12 dunams of land with greenhouses, of which 4 dunams were razed. Additionally, my brothers and I owned 18 dunams of land, located 700 meters from the border fence, which were also razed, and have now become part of the new buffer zone. I will no longer be able to access it. We will not be able to resume farming under such massive destruction and the exorbitant costs for farmers in Gaza, especially with the depletion of essential materials such as seeds, pesticides, fuel, and irrigation systems. Before the war, I used to export two truckloads of vegetables to the West Bank daily, but that stopped when the Israeli military assault began on October 7, 2023."

Hassan Ibrahim Abu Asad, 50 years old, Farmer, Deir al-Balah²⁸

For the second consecutive year, the olive harvest—which holds special significance for the Palestinian people—has been severely impacted by continued bombings and land levelling. Before the war, the olive sector contributed approximately 14% of Gaza's total agricultural output, with 50,000 dunams planted with more than 2 million olive trees. In 2022, olive production reached 50,000 tons. However, due to the war, production plummeted to less than 10,000 tons, as 40,500 dunams of olive groves were razed and more than 1.620,000 million productive olive trees were uprooted.

²⁸⁻ PCHR's field researcher collected the testimony on November 2, 2024



²⁶⁻UN-Habitat and the UNEP, "Gaza Strip - Preliminary Debris Quantification - December 2024", January 21, 2024.

 $[\]label{eq:link:https://reliefweb.int/report/occupied-palestinian-territory/gaza-strip-preliminary-debris-quantification-december-2024$

²⁷⁻Palestinian Ministry of Agriculture. "Infographic: The Reality of the Date Palm Sector Amid the Genocide War 2023-2024," September 2024. Link: https://tinyurl.com/49h2jy7e_

According to Fayyad Fayyad, Director of the Palestinian Olive & Olive Oil Council, he reported to PCHR:

"The olive season contributes about 14% of the total agricultural GDP, as there are about 2 million olive trees planted over 50,000 dunams in the Gaza Strip, with an average yield of 1,200 kilograms per dunam. In 2022, production reached about 40,000 tons of olives. However, production declined dramatically in the 2023 season due to its overlap with the Israeli military attacks, reaching only about 10,000 tons. Based on current data, production is expected to shrink further in 2024 to around 7,500 tons due to the extensive bombing, destruction, and land levelling."

Fayyad continues, "The olive sector in Gaza has been obliterated; thousands of dunams of olive land, especially in northern Gaza, have been completely destroyed. Citizens will face significant difficulties collecting olives from the few remaining trees scattered between buildings and small agricultural areas, particularly due to the risks posed by the proximity to eastern Gaza's areas. Additionally, there are challenges related to olive oil production, especially after the destruction of olive oil mills in Gaza. Out of 40 mills, only 6 are still operational, with only one remaining in northern Gaza. These mills face major challenges, the most significant of which is the difficulty in obtaining the necessary fuel for operation. When available, the fuel is sold at exorbitantly high prices on the black market, meaning the cost of production and the scarcity of olives will make both olive oil and olives unaffordable for most residents of Gaza."29

2. The Destruction of the Livestock Sector

In addition to the agricultural sector, Israel has also targeted the livestock sector, exacerbating the humanitarian catastrophe in Gaza. The goal in striking this sector was to destroy one of the main pillars of the food security system in Gaza, widening the scope of the blockade with new methods and driving the population into deeper despair. This has caused catastrophic and unprecedented levels of hunger and food insecurity, as well as the collapse of the livestock production sector, one of the key elements of the local economy that provides labor and income for many families in Gaza.

Before October 2023, the livestock sector was already one of the most crucial food production sectors, playing a vital role in supporting the local economy, despite the conditions created by years of the suffocating Israeli siege and the limited natural resources. The livestock industry accounted for about 46% of the total agricultural output in Gaza. According to the agricultural census published in January 2023, Gaza had 14,578 head of cattle, 57,897 sheep, 8,638 goats, 549 camels, and 13,943,437 broiler chickens, along with 565,358 laying hens. Together, these animals³⁰ formed the core of Gaza's livestock sector, contributing substantially to animal production.



²⁹⁻PCHR's field researcher obtained this information in a phone interview on September 20, 2024.

³⁰⁻ Palestinian Central Bureau of Statistics. "Agricultural Census 2021," October 2023, pp. 57-58. Online

link: https://www.pcbs.gov.ps/Downloads/book2606.pdf

The aerial bombardments and ground artillery shelling have targeted livestock farms and barns housing thousands of animals, particularly in the northern and eastern regions of the Gaza Strip. Additionally, facilities for animal food production have been destroyed, leading to the mass killing of entire herds of cattle, goats, sheep, horses, and poultry, often as a result of direct bombings.

As of December 2024, UN reports confirmed that the IOF had destroyed 11 major livestock farms, 502 sheep farms, 645 household animal pens, 278 animal shelters, and 81 dairy farms. Additionally, 625 poultry and turkey farms, 85 bird farms, and 33 rabbit farms were also destroyed. ³¹

The destruction went beyond farms to include food production factories, dairy processing plants, slaughterhouses, and feed silos. The demolition of water supply facilities and power networks compounded the losses in livestock production, making it impossible to provide essential resources such as food and water for these animals. Especially difficult for livestock farmers are the challenges in securing necessary supplies of feed, veterinary medications, and fuel to keep the animals alive, due to the continued closure of border crossings and the prohibition of essential supplies into Gaza, which has lasted for over two years.

"Since the beginning of the war, we stopped working due to the power outage and the lack of feed to sustain the livestock. I live in the Wadi al-Salqa area, and my family and I have been involved in livestock breeding, agriculture, and food production for 40 years. I own a cattle farm on 2 dunams of land, three egg-laying chicken farms, a dairy factory, four dunams of land with 100 olive trees, and two dunams with poultry farms to grow vegetables and food crops. In early December 2023, IOF began a ground invasion of Khan Younis, forcing my family and me to flee from Wadi al-Salga to central Deir al-Balah. We left everything behind. My town was completely wiped out. Nothing was spared from destruction. My entire farm was destroyed. The warplanes bombed and completely destroyed my house. The bulldozers razed my cattle and calf shelters, my egg-laying chicken farms, and my agricultural land. Even my plastic poultry farms, which I used to grow vegetables, were bulldozed. The vehicle I used for distributing eggs and dairy products was also destroyed. My farm is gone-nothing like this has ever happened before."

Abd al-Hamid Muhammad Abu Uriban, 53 years old, Farmer, Wadi al-Salqa, east of Deir al-Balah³2



31-FAO, "Damage to agricultural infrastructure due to the conflict in the Gaza Strip as of 31 December 2024.", Link: https://openknowledge.fao.org/handle/20.500.14283/cd4034en

32-PCHR's researcher obtained this statement via phone on November 2, 2024.

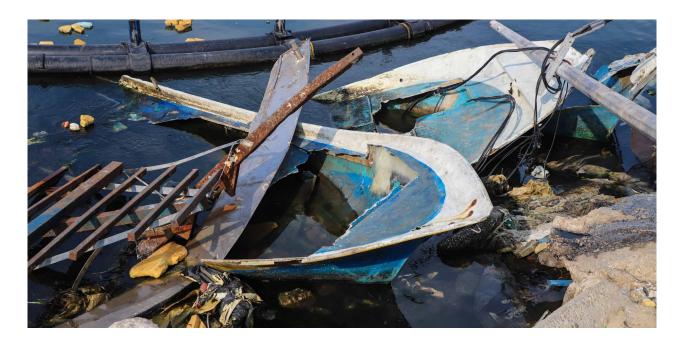


3. Fishing Sector and Fisheries Wealth

The Gaza Strip, located along the Mediterranean Sea, relies heavily on fishing as a primary source of food and daily income for thousands of families. With around 2,000 fishing boats and vessels operating in the sector, it provides employment for more than <u>4,000 fishermen</u>. The annual fish catch exceeds <u>4,600 tons</u>, despite the difficulties caused by the Israeli blockade that has lasted for 18 years, including continuous restrictions on fishing zones accessible to fishermen. As a result, 85% of the fishing areas outlined in the Oslo Accords, which extend up to 20 nautical miles, are now off-limits.

The fishing sector has not been spared from destruction. Since October 7, 2023, IOF has completely closed off Gaza's coastline to fishermen, prohibiting fishing activities, a move that represents collective punishment for the population. This ban has been accompanied by the pursuit of fishermen attempting to fish from small boats, targeting them either through direct killings or arrests.

Since October 2023, Israeli forces have killed 150 fishermen³³ and targeted marine infrastructure directly. The entire Gaza seaport has been destroyed, causing severe damage to the piers along the northern Gaza coastline, in Al-Zawaida, Deir al-Balah, and Khan Younis. Additionally, 259 fishermen's rooms were bombed and destroyed, along with over 900 nonmotorized boats, 96 motorized vessels, and the two largest fish farming facilities in Gaza. The fish market and the refrigeration and storage facilities for fish, as well as the Fishermen's Syndicate headquarters, were also destroyed. ³⁴



³³⁻NGO Network, "Fact Sheet: The Fishing Sector in the Gaza Strip Under the Weight of War," September 17, 2024. Link: <u>https://pngoportal.org/uploads/documents/2024/09/q43ZG.pdf</u>

³⁴⁻Interview with the Palestinian Center for Human Rights with Zakaria Bakr, a fisherman and activist documenting the suffering of fishermen in the Gaza Strip, October 25, 2024.



"From the very first moment of October 7, 2023, Israel completely closed Gaza's sea and prevented us from accessing the water. We no longer had the chance to fish. The warships carried out continuous patrols off the coast, firing shells and bullets at the beach and fishermen's rooms every night. Accessing the shore became dangerous for us. In December 2023, the artillery shells from the naval vessels directly targeted the Deir al-Balah dock, resulting in the destruction of our fishing rooms and equipment left there. Simultaneously, drone aircraft set fire to my boat and 20 other fishing boats, completely burning them. When I arrived at the location with the fishermen in the morning, we found what remained had turned into a pile of ashes. For more than four months, we had no opportunity to go to sea. In February 2024, we risked going back to the water near the shore, using primitive equipment after most of our gear had been destroyed or sunk in the first weeks of the war. In March 2024, while we were casting nets in the sea, the warships fired at us heavily. My son and I jumped straight into the water and stayed there under fire for several minutes. We miraculously survived."

Despite the daily risks, fishing has become increasingly difficult as the fishing areas are heavily polluted by sewage pumped into the sea. Yet, we have no other way to survive, so we risk going into the water. Every day, we face targeting, whether through shells fired at us, being directly executed by Israeli naval snipers, or being arrested. In October, the IOF arrested six fishermen while they were fishing off the coast of Khan Younis and transferred them to Ashdod, and their fate is still unknown. Our suffering doesn't end there. We can't replace our destroyed equipment. I've been working in fishing since 1995, supporting my family of eight, but I feel there is no future for fishing in Gaza, especially with the ongoing war and the closure of the crossings that prevent us from getting the materials we need. We can't use generators to power the boats due to the lack of fuel, and we can't afford to maintain our equipment due to the rising prices and the closure of the crossings. We've been completely destroyed, and we've lost the source of income we relied on."

Adel Yusuf al-Housh, 42, Fisherman, from Deir al-Balah camp, shares his experience³⁵

The direct result of this has been the destruction of over 85% of the fishing sector's assets.³⁶ Consequently, rehabilitating the sector appears nearly impossible, especially given the ongoing war and the current block-ade conditions. Many fishermen have not only lost their livelihoods but also their homes.



³⁵⁻PCHR's field researcher collected the testimony on October 30, 2024

³⁶⁻Interview with the Palestinian Center for Human Rights with Zakaria Bakr, a fisherman and activist documenting the suffering of fishermen in the Gaza Strip, October 25, 2024.

"On the fourth day of the war, Israeli forces bombed the Gaza Port basin, where my family's fishing boats were docked. We had a 350,000 USD fishing launch and a 150,000 USD "Shanshula" boat. Due to the military strikes, the boats and equipment caught fire and burned for two days, with no access to extinguish the flames. They were completely destroyed. We were severely impacted, and my fishing business came to a halt. In August 2023, I attempted to return to fishing on the beach in Deir al-Balah. I managed to secure enough funds to purchase a small fishing boat, and now I'm trying to make a living after losing everything. However, the efforts of fishermen to venture out to sea are fraught with danger. Every day, fishermen are targeted and shot at by Israeli warships. We face death on a daily basis, and every time we head out to sea, we don't know if we'll survive and make it back to shore.

Atef Said Abu Rayala, 39, fisherman, Beach Camp³⁷

4. The economic losses resulting from the destruction of the agricultural sector and food production systems

The systematic destruction of Gaza's agricultural sector and food production systems has led to devastating humanitarian and economic consequences. While Gaza used to produce 44% of its food locally, relying on imports³⁸ for the remaining 56%, the ability of Gaza to produce its own food has now collapsed, making agricultural self-sufficiency impossible. The population is facing severe shortages of food supplies, and the crisis is worsening with the continued closure of crossings and the blockade preventing the entry of food and essential materials.

The consequences of the destruction of the agricultural sector are severe and have a disastrous impact on the local economy. Thousands of workers in agriculture, livestock care, and fishing have lost their livelihoods, and unemployment rates have soared to unprecedented levels. Entire communities that once relied on the agricultural sector are now suffering from economic collapse, with social and psychological impacts. They have lost their primary income and struggle to meet basic needs, facing extreme difficulty in finding alternative work in the midst of ongoing warfare.

The daily losses in the agricultural sector are estimated at \$2,000,000 since the start of the war³⁹, with no hope of recovery in sight. The disruption of the food supply chain—from production to distribution—has led to a massive rise in food prices, with basic goods increasing by more than 250%, a level that is unaffordable for the already impoverished population.

³⁷⁻PCHR's field researcher collected the testimony on October 30, 2024

³⁸⁻The Palestinian Central Bureau of Statistics (PCBS), "The Impact of The Israeli Occupation Aggression on the Agricultural Sector in Gaza Strip, 2023", November 28, 2023. Link: www.pcbs.gov.ps/post.aspx?lang=en&itemID=4643

³⁹⁻The same reference

A <u>report issued by the World Bank</u> a few months ago indicates that Gaza's economy is on the verge of complete collapse, with a 86% contraction in the first quarter of 2024 due to the sharp decline in GDP and economic activity, including agriculture. The destruction of the agricultural sector has led to a 93% reduction in agricultural activities, severely damaging the local economy. With the war continuing, economic recovery will be extremely difficult, and it could take decades to rebuild the agricultural sector alone, requiring billions of dollars in funding.

This destruction is the culmination of a long-term Israeli policy targeting the Palestinian economy. Israel's objective is to destroy the population's resilience and the ability to survive and maintain sovereignty over their food systems. This not only destabilizes Gaza's economy but also deepens its reliance on external humanitarian aid, eroding any prospects for self-sufficiency while undermining the rights to land, sustainable resources, and economic independence.



III. Consequences of Agricultural Sector Destruction on Food Security in Gaza

Since the onset of the military assault on October 7, 2023, the Gaza Strip has been plunged into an even deeper humanitarian disaster than what was experienced during long years of blockade. The deliberate targeting of Gaza's agricultural sector and food production infrastructure by Israel has been a major factor in this crisis. Gaza is now facing a systematic destruction of its agricultural sector, where food sovereignty has been eroded, and the population's ability to produce food has been crippled. Food sovereignty is a fundamental pillar in ensuring long-term food security in any region, guaranteeing communities' ability to control their food systems.

The systematic destruction of this vital sector has not only devastated decades of resilience and development efforts, but has also exacerbated a severe food crisis, resulting in increased rates of food insecurity, widespread hunger, and malnutrition. The large-scale destruction is not merely a side effect of the conflict; it aligns with a broader strategy that Israel has used over the years to weaken the Palestinians and restrict sustainable development through both military and non-military means. This has transformed the Gaza Strip into one of the worst man-made humanitarian disasters, subjecting its inhabitants to prolonged and ongoing suffering.

Israel has engaged in a practice of "systematic starvation", a concept referring to the intentional use of hunger as a weapon and means of warfare, depriving the population of essential resources needed for survival. This has manifested in two key ways: the direct destruction of food production capacities and the blockade, which has limited the supply of food and other basic necessities. As a result, the population has become completely dependent on international aid and imported food shipments, which are intermittent and insufficient to meet basic needs. Meanwhile, Israel has forced the population to live with significantly fewer calories⁴⁰ than recommended, while imposing strict restrictions and controls⁴¹ on the sustainable and effective delivery of aid.



⁴⁰⁻ Oxfam International, "People in northern Gaza forced to survive on 245 calories a day, less than a can of beans", April 03, 2024. Link: www.oxfam.org/en/press-releases/people-northern-gaza-forced-survive-245-calories-day-less-can-beans-oxfam

⁴¹⁻ Lisa Doughten – Office for the Coordination of Humanitarian Affairs (OCHA), "Briefing to the Security Council on the Situation in Gaza", October 09, 2024. Link: www.un.org/unispal/document/lisa-doughten-ocha-briefing-sc-9744th-meeting-09oct24/

"From the first hours of October 7, 2023, we began our journey of displacement. Based on our previous experiences with past wars, we knew it was unsafe to stay. We fled to UNRWA schools in the Jabaliya camp, where the suffering was severe due to overcrowding, scarce drinking water, and food. The indiscriminate, intense bombardment of residential areas was terrifying.

As the days passed, food supplies dwindled due to the lack of aid entering the northern part of the strip. We struggled to obtain flour, which was extremely scarce and overpriced, so we resorted to animal feed as a substitute for flour, and even wild plant leaves, which were far from healthy. The most painful part was that we couldn't silence the crying of the children due to the extreme hunger we were experiencing.

At the end of February 2024, my middle son, Mohammad, 25, was shot in the foot while trying to get a bag of flour. We decided to flee to southern Gaza, specifically Rafah, due to the hunger and famine we were facing, which we could no longer bear."

Samia Mohammad al-Mahboub, 50, Jabaliya Refugee Camp, North Gaza 42

As a result of these actions, Israel has isolated the Gaza Strip from external sources of food. The <u>World Food</u> <u>Programme (WFP)</u> reports that food aid distributions and humanitarian assistance have come to a halt, with the entry of aid reaching its lowest point in nearly a year and food stocks in relief agencies' warehouses running out. During August and September 2024, Israel also prevented 83% of the food aid scheduled to enter Gaza⁴³, severely hampering emergency relief efforts, according to data from humanitarian agencies.

On October 17, 2024, <u>the Integrated Food Security Phase Classification (IPC) initiative</u> published a report highlighting the hunger and malnutrition situation in Gaza. According to the data, approximately 1.84 million people are now experiencing acute food insecurity at crisis levels or worse (Phase 3 of the IPC classification), including 664,000 people facing food insecurity at the emergency level, which is Phase 4, and 133,000 people facing the most severe food insecurity in Phase 5, the catastrophic hunger stage.

"On October 5, 2024, my family and I were at home as usual when, around noon, chaos erupted in the camp. We didn't anticipate that the military was preparing to invade the camp. We went out into the street to find out what was going on and heard neighbours saying that the army had entered the camp. I started packing our belongings for any emergency.

Panic spread throughout the camp as Israeli military vehicles closed all the camp's main entrances, taking full control. They cut off the Jabaliya camp from the rest of northern Gaza. We were trapped and unable to leave the house. Food and drinking water began to run out inside the house, and we couldn't leave to get more due to the dangers outside. Bombshells and missiles rained down on us relentlessly, with no knowledge of where they were coming from. Drones were hovering above every street and alley, shooting at anything that moved."

Sabah Naeem al-Daqs, 44, Jabaliya Refugee Camp, North Gaza⁴⁴

systematic aid obstruction", September 16, 2024. Link: www.nrc.no/news/2024/september/israels-siege-now-blocks-83-of-food-aid-reaching-gaza-new-data-reveals/ 44- PCHR's field researcher collected the testimony on October 23, 2024



⁴²⁻ PCHR's field researcher collected the testimony on March 3, 2024

⁴³⁻Norwegian Refugee Council, "Joint press: 15 aid organizations demand international pressure for an immediate ceasefire, arms embargo, and end to Israel's

The IPC report stated that the risk of famine will remain prevalent between November 2024 and April 2025 across the Gaza Strip, with the potential for the humanitarian situation to deteriorate into the worst-case scenario, with 1.95 million people, representing 91% of the population, expected to face catastrophic levels of hunger and malnutrition due to the deteriorating food security situation. This is especially concerning with the continuation of the war, the tightening of the Israeli blockade, and the large-scale prevention of humanitarian aid and food supplies. This could lead to an even worse humanitarian scenario between November 2024 and April 2025.

The catastrophic consequences that UN agencies and humanitarian organizations have warned about, are now a grim reality. With the complete destruction of Gaza's agricultural sector and food production systems, and the blockade on food imports, Gaza is facing an unprecedented humanitarian crisis, where catastrophic hunger and food insecurity are deepening. This crisis has severe long-term consequences for the health and survival of entire generations, particularly children, pregnant women, the elderly, and those with chronic illnesses. Gaza's Ministry of Health has reported a significant increase in complications related to food insecurity, including anemia, dehydration, and weakened immunity.

"I was five months pregnant when the Israeli military assault began on October 7. With repeated displacement in search of a safe place from the Israeli bombardment and severe food shortages due to the blockade, we had no vegetables, fruits, or even flour. We were forced to eat ground animal feed. I felt extreme fatigue and weakness, unable to carry out daily tasks. I had joint pain and was constantly worried about losing my first pregnancy. I lost around 15 kilograms and developed anemia. Because of these conditions, I had to give birth prematurely. I gave birth to my daughter but could not breastfeed her due to malnutrition and had to resort to formula feeding from day one. Unfortunately, she developed a severe lung infection and died a month after birth."

Layali al-Shanbari, 20, Jabaliya Refugee Camp, North Gaza ⁴⁵

Children, in particular, are the most affected by this crime of starvation. Over one million children have been forcibly displaced from their homes since the war began, and they are now suffering from food insecurity. They rely primarily on unhealthy food, deprived of access to essential vegetables, fruits, dairy products, and protein-rich foods necessary for their growth.

According to <u>UNICEF</u>, nearly 50,000 children are suffering from stunted growth and severe malnutrition, which is a direct result of acute food insecurity, and they are in urgent need of treatment. In September 2024, the Palestinian Ministry of Health confirmed the death of 38 Palestinians⁴⁶, most of them children, due to complications from malnutrition and dehydration, while thousands of children are facing the risk of death from hunger.

⁴⁶⁻Gaza Ministry of Health, "Emergency Health Sector Report: Day 347 of the Aggression, Monday, September 16, 2024," published on the Gaza Ministry of Health's Telegram account, September 17, 2024. link: https://t.me/MOHMediaGaza/5828



⁴⁵⁻ PCHR's field researcher collected the testimony on August 6, 2024

"The Israeli occupation prevented any food supplies from entering northern Gaza. Many bakeries were targeted. After weeks, we exhausted all the food supplies in our house and the stores. I will never forget the sadness and helplessness I felt in front of my children. This feeling will stay with me for years due to its intensity. I can't imagine that my children are yearning for a piece of bread. I cry for long nights because of my hunger and the suffering of my children, even though I always used to put them before myself and never ate before they did."

Amna Mohammad Ahl, 33, Gaza City⁴⁷

The long-term effects of the food crisis in Gaza should not be overlooked, as it exacerbates rates of malnutrition and hunger in the short term, especially among the most vulnerable groups. Additionally, the long-term consequences of malnutrition severely affect children's physical and cognitive development, leading to permanent health damage, impairing their ability to learn, and increasing their susceptibility to diseases. This is occurring in a context where Gaza's healthcare system is collapsing under the weight of destroyed hospitals and medical facilities, and a severe shortage of medicines and medical equipment.

"In June 2024, amid the daily struggle to meet family needs, I began feeling tired, in pain, and short of breath. I went to Nasser Medical Complex for treatment, and after tests, I was found to have fluid in my lungs due to infections. The doctors decided to perform surgery to drain the fluid and remove a mass formed due to the infection. I underwent the procedure and stayed in the hospital for two months, during which I was forced to stop breastfeeding my daughter, Amira.

When I was discharged from the hospital, my husband informed me that Amira had been transferred to Médecins Sans Frontières because she was suffering from malnutrition and needed nutritional supplements. During my hospital stay, I had stopped breastfeeding, and due to the difficult financial situation and lack of infant formula, my in-laws used the milk we had from UNRWA, which caused problems because it wasn't suitable for children under one year old. I then gave her supplements we received from Médecins Sans Frontières, but I noticed her condition deteriorating. She developed signs of malnutrition such as weakness, weight loss, and fever. I took her to Nasser Hospital for follow-up care at the malnutrition department, and she is now receiving care and monitoring, and I feel her condition is improving. However, I have not fully recovered from my surgery and I worry about my other children suffering from malnutrition in my absence."

Faten Mohammad Abu Arar, 39, Al-Zeitoun neighborhood, Gaza City

47- PCHR's field researcher collected the testimony on July 3, 2024



On March 2, 2025, coinciding with the end of the first phase of the ceasefire agreement, the Israeli government resumed its comprehensive siege on the Gaza Strip, reversing the agreement announced in January 2025⁴⁸. It disregarded the catastrophic consequences of this blatant decision on the lives of 2.3 million Palestinians, announcing the closure of all border crossings and preventing the entry of all humanitarian aid, which serves as a lifeline for the civilian population in the Gaza Strip, including food, water, fuel, medicine, and shelter supplies. This move clearly signals Israel's intention to continue its genocidal actions and persist in using siege and starvation as weapons of war to pressure and subjugate the Palestinian people.

According to the PCHR's field documentation, the humanitarian situation has worsened significantly due to the ongoing tight siege and the closure of crossings for the second consecutive month—up until the time this report was prepared. Indicators of a famine are steadily rising, particularly amid a severe shortage of essential supplies such as food, water, fuel, and medicine. The World Food Program had previously announced that its stocks of wheat flour, food parcels, and cooking gas were depleted,⁴⁹ and all bakeries partnered with the program had ceased operations, halting its relief efforts. UNICEF also warned of rising malnutrition and diseases due to the shortage of food supplies for children and immunocompromised individuals.⁵⁰



⁴⁸⁻ The Guardian, "Israel cuts off humanitarian supplies to Gaza as it seeks to change ceasefire deal", March 02, 2025. Link: https://www.theguardian.com/world/2025/mar/02/israel-cuts-off-humanitarian-supplies-to-gaza-as-it-seeks-to-change-ceasefire-deal

50- UNICEF, "More than a million children in the Gaza Strip deprived of lifesaving aid for over one month", April 05, 2025. Link: https://www.unicef.org/mena/press-releases/more-million-children-gaza-strip-deprived-lifesaving-aid-over-one-month-unicef.

⁴⁹⁻ MEMO, "All bakeries supported by WFP in Gaza closed due to lack of flour, fuel", April 02, 2025. Link: <u>https://www.middleeastmonitor.com/20250402-all-bakeries-supported-by-wfp-in-gaza-closed-due-to-lack-of-flour-fuel/</u>

IV. Land and Agricultural Area Seizure and Isolation

Amid the ongoing genocide, the Israeli occupation has seized vast areas of land in Gaza, particularly agricultural lands essential for the food and livelihood of the Palestinian population. The Israeli occupation has also expanded the buffer zone along the border fence, deepening it by <u>1 to 1.8 kilometres</u> and transforming other areas into military zones under Israeli security control, prohibiting residents from accessing them.

On October 28, 2023, the IOF launched a large-scale ground invasion of northern Gaza and the outskirts of Gaza City, beginning operations to destroy and level agricultural land and homes in Beit Hanoun, Beit Lahiya, and Juhur ad-Dik. Israeli bulldozers began to carve new paths in these areas, preparing the way for tanks, armoured vehicles, and Israeli military units to advance into Gaza.

By November 5, 2023, Israel had announced occupying the "Netzarim" area, completing its control from the eastern border fence to the western coast.⁵¹ Immediately thereafter, the process of separating northern and southern Gaza took place by constructing a new road, later known as "Road 749". On May 30, 2024, Israel reoccupied the Salah al-Din Corridor, the separation line between Gaza and Egypt (known as the "Philadel-phia Corridor"), creating a 14-kilometer-long and 1-kilometer-wide buffer zone along the Palestinian-Egyptian border. This action further fragmented Gaza, cementing the military siege on the entire territory. ⁵²

A recent analysis by the British research group (Forensic Architecture), released just before the ceasefire announcement in January 2024, revealed that the IOF seized over 131 square kilometres, accounting for 36% of Gaza's total area during its military offensive. This includes the expansion of the buffer zone along the Gaza-Israel border. Additionally, the Netzarim corridor was expanded, and military bases were constructed by the IOF along its 8-kilometer length and 7-kilometer width. This expansion involved the destruction of most Palestinian buildings and homes, the levelling of agricultural land, and the creation of a "military buffer zone" at the heart of Gaza, with a total area exceeding 56 square kilometers⁵³. The fact remains that the IOF are not engaged in actual combat in these occupied areas; rather, they are racing against time⁵⁴ to achieve as much destruction as possible.



51- France24, "Gaza City 'encircled' by Israeli troops", November 06, 2023. Link: https://f24.my/9uij

52- BBC, "Israel extends control of Gaza's entire land border", May 30, 2024. Link: https://bbc.com/news/articles/c1994g22ve9o

53-Anadolu Ajansi, "Israeli military cut across Gaza Strip, leaving territory fragmented", November 24, 2024. Link: https://www.aa.com.tr/en/middle-east/israeli-military-cut-across-gaza-strip-leaving-territory-fragmented/3402300

54- Drop Site News, "An Investigation into Israel's 749 Combat Engineering Battalion: Our Job Is to Flatten Gaza. No One Will Stop Us", October 22, 2024. Link: www.dropsitenews.com/p/israel-749-battalion-demolition-gaza



On March 19, 2025, Israel resumed its military assault on the Gaza Strip. On April 1, 2025, the <u>Israeli forces</u> issued evacuation orders for the entire Rafah Governorate, along with parts of the Khan Younis Governorate, and began a large-scale ground operation in Rafah after fully surrounding it.⁵⁵ The IOF started the establishment of the "Moraj" corridor, separating the cities of Khan Younis and Rafah, isolating the 74-square-kilometer city of Rafah from the rest of the Gaza Strip.⁵⁶ The military operations in Rafah have deprived Palestinians of access to their agricultural lands, which are a primary source of local agriculture and constitute the "food basket" upon which the region depends, particularly for vegetable production. <u>Recent reports</u> suggest Israel's intention to transform Rafah, which represents one-fifth of the Gaza Strip's area, into a buffer zone after completing systematic destruction within it.⁵⁷ This step reflects a determination to reduce the size of Gaza and deepen the food crisis for its inhabitants.

This seizure not only leads to the destruction of Palestinian agriculture but also creates a demographic reality, turning Gaza into isolated "cantons," mirroring the West Bank model, where methods of isolation and fragmentation have disrupted Palestinian communities, undermined agricultural activities, and restricted the free movement of people. Israel has framed these actions within a security context, with official Israeli statements indicating that the seizure of these lands represents a calculated shift towards reducing Gaza's territory⁵⁸ and reinforcing Israel's long-term occupation presence there. This became evident after the ceasefire announcement and even following the resumption of military attacks, as Israel declared it would create buffer zones ranging from 700 to 1300 meters along the Gaza border and maintain control over them, preventing Palestinian access.

In light of this, it is important to emphasize that preventing Palestinians from accessing agricultural lands in Gaza strips them of agricultural self-sufficiency, raising concerns about the long-term consequences for food security. The ability to plant or harvest crops within these areas is no longer possible due to inaccessibility, which also raises critical questions regarding the targeting of Palestinian livelihoods in a manner that meets international definitions of genocide, through the systematic deprivation of basic resources aimed at reducing the population and destroying their survival by denying them essential means of sustenance. The implications of this strategy for human rights and Palestinian sovereignty are profound, calling for urgent international action to address the potential violations and restore Palestinian access to their lands.



⁵⁵⁻Wafa, "Israeli army issues new forcible eviction orders for more areas in Rafah", April 01, 2025. Link: https://english.wafa.ps/Pages/Details/156051

⁵⁸⁻ The Telegraph, "Israel says it will 'decrease' Gaza territory", October 18, 2023. Link: http://www.telegraph.co.uk/world-news/2023/10/18/israel-decrease-gaza-strip-territory-eliminate-hamas/



⁵⁶⁻ France24, "Israel's Netanyahu announces new 'Morag' security corridor across Gaza", April 02, 2025. Link: https://f24.my/B3u0_

⁵⁷⁻ Haaretz, "Israel Preparing to Turn Rafah – One-fifth of Gaza – Into Part of Buffer Zone", April 09, 2025. Link: <u>https://www.haaretz.com/israel-news/2025-04-09/ty-article-magazine/.premium/israel-preparing-to-turn-rafah-one-fifth-of-gaza-into-part-of-border-buffer-zone/00000196-19e6-d78d-a1de-1dff20590000</u>

"I have been working in agriculture with my family for 30 years, and my family owns 34 dunams of agricultural land in the Zeitoun neighborhood, 26 of which are planted with olive trees. The remaining dunams include greenhouses, a poultry farm, two wells, a complete modern irrigation system, water reservoirs, and an advanced alternative energy system. The land was the primary source of food and income for my family and six other families, as we produced approximately 40-50 tons of olives annually. Since the outbreak of the war, the situation has deteriorated significantly. We were forced to evacuate the area and move to southern Gaza. The IOF targeted my farm with rockets and shells, destroying it. During the ground invasion of Gaza City at the end of October, my farm was bulldozed and completely wiped out. This wasn't the first time my farm had been destroyed; it had sustained damage in previous military attacks, but nothing like this war. The farm was obliterated, turned into a barren land, and nothing remains of it. The olive trees that I had nurtured for 27 years are gone. What I now know is that my farm and the surrounding area have been fully incorporated into the Netzarim corridor, and it has become a closed military zone. I will no longer be able to access it."

Mohammed Naseem Al-Dahdouh, 46 years old, Zeitoun neighborhood – Gaza City 59



59- PCHR's field researcher collected the testimony on December 24, 2024



V. Destruction of the Agricultural Sector from the Perspective of International Law

The right to food is intrinsically linked to the right to access natural resources such as land and water, which are essential for achieving food security and sustainable development. As an occupying power, Israel bears the responsibility to protect and uphold these rights, ensuring the protection of civilians' livelihoods in accordance with international humanitarian law, particularly the 1949 Fourth Geneva Convention, which mandates humane treatment of civilians during times of war or occupation.

Israel's destruction of agricultural land and infrastructure, the use of starvation as a weapon in its war against the Palestinians, its seizure of Palestinian lands within Gaza, restrictions on access, and the forcible displacement of a majority of the population constitute multiple violations of international humanitarian law and human rights law. These actions are tantamount to war crimes and crimes against humanity.

The severity of these actions lies in their transformation of food sources into tools of oppression, reflecting a form of <u>"environmental genocide,"</u> ⁶⁰ severely undermining the Palestinian right to life, food, land, and dignity, as stipulated in the International Covenant on Economic, Social, and Cultural Rights.⁶¹

International humanitarian law mandates the protection of civilian property and essential resources for survival, especially during times of war. <u>Article 54</u> of Additional Protocol I to the Geneva Conventions explicitly prohibits the attack or destruction of "objects indispensable to the survival of the civilian population," including agricultural lands, food warehouses, livestock facilities, water supplies, and irrigation systems. Israel's destruction of these resources constitutes a breach of international law and a war crime under Article 8 of the Rome Statute.

International humanitarian law's principles of distinction, proportionality, and military necessity require military actions to differentiate between military targets and civilian objects. Attacks on civilian infrastructure are strictly prohibited unless there is a direct military necessity, and such attacks must be proportionate. However, Israeli strikes targeting agricultural lands, livestock, fisheries, and food production systems in Gaza show a deliberate disregard for these principles, as such civilian objects have become primary targets of destruction within its military doctrine.



⁶⁰⁻ Laurent Lambert, "Ecocide as Genocide: A Human Security Approach to 'Utter Annihilation' in Gaza", October 06, 2024 Arab Center for Research and Policy Studies, Link: www.chs-doha.org/en/Publications/Pages/Ecocide-as-Genocide-A-Human-Security-Approach-to-Utter-Annihilation-in-Gaza.aspx

⁶¹⁻Article 1, Paragraph 2 of the International Covenant on Economic, Social and Cultural Rights states: "All peoples have the right to freely pursue their economic, social, and cultural development, and to freely dispose of their natural wealth and resources without prejudice to any obligations arising from the requirements of international economic cooperation based on the principle of mutual benefit and international law. In no case may a people be deprived of its means of subsistence."

Both the Geneva Conventions and the Rome Statute prohibit the use of systematic starvation as a weapon against civilians. Israel's actions constitute a blatant violation of international humanitarian law, particularly <u>Article 14</u> of Additional Protocol II to the Geneva Conventions (1977), which forbids attacks on or the destruction of "foodstuffs, agricultural areas for the production of food, crops, livestock, drinking water facilities, and irrigation works." Systematic starvation and deprivation of basic resources are classified by the International Criminal Court as war crimes, subject to investigation and prosecution under <u>Article 8</u> of the Rome Statute.

Moreover, Israel's unlawful seizure and military isolation of vast agricultural areas deprives Palestinians of essential spaces for food production. These actions flagrantly violate the principle of distinction and do not meet the criterion of military necessity, representing a clear violation of the Fourth Geneva Convention, which prohibits an occupying power from seizing and destroying civilian property in occupied territories. ⁶²

The IOF justifies land seizures and destruction as security measures; however, the scope of these actions suggests a deliberate strategy aimed at the destruction of Palestinian communities through forced displacement, ethnic cleansing, and the denial of their means of survival, all under the guise of furthering Israel's long-term security agenda.

Israel's strategy of denying Palestinians access to food sources by destroying the agricultural sector, using systematic starvation, and converting these resources into instruments of subjugation, aligns with the definition of "genocide", as outlined in <u>Article 2</u> of the 1948 Genocide Convention. Particularly, when the objective of such a strategy is to create conditions for the complete or partial physical destruction of the Palestinian people.

A recent report by Francesca Albanese, the UN Special Rapporteur on the human rights situation in the occupied Palestinian territories since 1967, titled <u>"Genocide as Colonial Erasure,"</u> adds a crucial dimension to the ongoing debate regarding Israel's intent to commit genocide in Gaza. The report emphasizes that Israel operates with the ultimate goal of erasing Palestinians and annihilating their existence⁶³, using every tool at its disposal to achieve this aim, not just in Gaza but across all of the Palestinian territory. The Israeli government's explicit incitement and the horrific actions it has carried out support this claim.



⁶²⁻Article 1, Paragraph 2 of the International Covenant on Economic, Social and Cultural Rights states: "All peoples have the right to freely pursue their economic, social, and cultural development, and to freely dispose of their natural wealth and resources without prejudice to any obligations arising from the requirements of international economic cooperation based on the principle of mutual benefit and international law. In no case may a people be deprived of its means of subsistence."

⁶³⁻ Francesca Albanese, "Genocide as colonial erasure – Report of the Special Rapporteur on the situation of human rights in the Palestinian territories occupied since 1967", October 01, 2024. Page 43. Link: www.documents.un.org/doc/undoc/gen/n24/279/66/pdf/n2427966.pdf

The crime of genocide, along with the continuing acts of forced displacement and ethnic cleansing⁶⁴ against Palestinians, reflects a profound international failure on both legal and ethical levels. The international community's response to the apartheid regime in South Africa and its reaction to environmental destruction in Ukraine highlights a clear double standard in dealing with Israel, as mechanisms for accountability and justice are continually obstructed, undermining the credibility of international institutions and their commitment to protecting human rights.



⁶⁴⁻ The Guardian, "World must act to prevent 'ethnic cleansing' of Gaza, António Guterres warns", October 30, 2024. Link: www.theguardian.com/world/2024/oct/30/antonio-guterres-warns-israel-could-carry-out-ethnic-cleansing-of-gaza?CMP=share_btn_url

VI. Recommended Interventions and Measures to Support Recovery and Reconstruction Efforts in the Agricultural Sector

The agricultural sector in the Gaza Strip has suffered massive devastation due to the Israeli aggression since October 7. Israel has systematically targeted the food production infrastructure, leading to the near-total collapse of this vital sector. This was not a random or 'collateral damage' but part of a deliberate strategy to destroy all means of life, deprive the population of their ability to secure food, and eliminate their primary sources of livelihood.

Gaza has lost vast amounts of strategic crops, including grapevines, guava, and olive trees, as large swathes of farmland were destroyed—wiping out a crucial component of local agricultural production. The livestock sector faced an equally devastating blow, with over 80% of livestock farms destroyed. Thousands of poultry and livestock perished due to Israeli bombardment, severe fodder shortages, and power outages, leading to the extinction of essential breeds that once formed the backbone of animal production.

The fishing industry has also been catastrophically impacted, with all fishing harbours along the coast destroyed, along with boats and equipment. This has brought the sector to a near standstill, cutting off the livelihoods of thousands of fishermen. Given the scale of destruction, returning to the sea—even after a ceasefire—has become nearly impossible.

Restoring food security and food sovereignty requires urgent and intensive efforts to support the recovery and rebuilding of the agricultural sector through a comprehensive strategy and immediate interventions that ensure farmers, livestock breeders, and fishermen can resume their productive activities and enhance their resilience. A set of recommended policies and interventions has been formulated as measures that must be implemented to support recovery and reconstruction efforts in the sector. These recommendations are based on both primary and secondary data collected by field researchers from the Palestinian Centre for Human Rights (PCHR) during the preparation of this report, in collaboration with the Palestinian Agricultural Relief Committees (PARC). The data reflects the urgent needs of affected groups in the agricultural sector, as well as insights from experts who were interviewed*, which would enable the sector to recover, reclaim its role in supporting the local economy, and ensure food security for the population. These recommendations include:

^{*}An extensive focus group session was held by PCHR in collaboration with PARC bringing together agricultural sector specialists and affected groups, including farmers, livestock breeders, and fishermen.



1. Immediate and Permanent Ceasefire:

A ceasefire is the fundamental point for any genuine recovery efforts. Resuming agricultural activity requires a stable and safe environment that allows farmers and livestock breeders to return to their lands without the constant threat of invasion and destruction. Restrictions on farmers' access to their lands, particularly in areas classified by Israeli occupation as buffer zones, must be removed. These areas have deprived Gaza of 25-30% of its agricultural land, and farmers must be re-enabled to access their lands freely. In the absence of real guarantees for stability, farmers will remain hesitant to reinvest in their lands for fear of further losses, necessitating international intervention to protect their rights and secure a safe environment for agricultural al work.

In this regard, the Palestinian Center for Human Rights calls upon the High Contracting Parties to the Fourth Geneva Convention of 1949 and the United Nations Security Council to assume their responsibilities in protecting international peace and security. They must compel Israel to immediately cease its aggression in the Gaza Strip, withdraw from all occupied territories within Gaza, and protect essential civilian infrastructure required for the survival of civilians, as outlined in Article 54 of the Additional Protocol I to the Fourth Geneva Convention.⁶⁵

2. Developing a Comprehensive Strategy for Agricultural Sector Rehabilitation

The recovery process requires a comprehensive strategy that rebuilds the agricultural sector following the <u>Build Back Better</u> approach—not only restoring what was destroyed but also improving resource management and ensuring long-term sustainability. This strategy must encompass all subsectors, including crop production, livestock, and fisheries, and should be developed through effective coordination with government entities, civil society organizations, and international agencies. Strengthening collaboration with the Food and Agriculture Organization (FAO) and other relevant regional and international bodies is essential to mobilize the necessary funding and support for agricultural rehabilitation.

Additionally, the role of agricultural cooperatives and farmers in the planning process must be reinforced to ensure that policies and interventions are practical and aligned with the sector's actual needs. The strategy should include programs to restore agricultural infrastructure, rebuild value chains disrupted by the war. It should focus on rebuilding storage and marketing capacities while integrating new technologies to enhance productivity and reduce costs—such as sustainable and climate-smart agriculture—will be key to strength-ening the sector's resilience and long-term viability.

⁶⁵⁻ Article (54) explicitly prohibits the attack or destruction of "objects indispensable to the survival of the civilian population," including farmland, agricultural areas, food storage facilities, crops, and livestock infrastructure.



3. Restoring Agricultural Land and Infrastructure

Rehabilitating damaged farmland is an urgent priority, as the soil requires comprehensive restoration to address the destruction and contamination caused by explosives and toxic materials used during the war. Removing rubble and war debris, along with safely managing organic waste in an environmentally responsible manner, are critical steps to restoring soil fertility and making the land suitable for cultivation again.

In addition, efforts must focus on repairing irrigation networks, restarting water wells, and ensuring the availability of energy to pump water to farms and production facilities. Rebuilding essential infrastruc-ture—including the restoration of agricultural roads connecting rural areas to markets—is crucial to enabling farmers to transport their products efficiently and regain access to markets.

4. Ensuring the Immediate and Sustainable Flow of Essential Agricultural Resources

In addition to rehabilitating infrastructure, immediate action must be taken to ensure the uninterrupted flow of agricultural inputs through the crossings. Farmers are suffering from severe shortages of seeds, fertilizers, pesticides, veterinary medicines, animal feed, and agricultural equipment. It is essential for the international community to pressure Israel to end the blockade on the Gaza Strip and open the crossings to allow the entry of all forms of humanitarian aid, including supplies specific to the agricultural sector. These inputs must be secured regularly and sustainably, with the establishment of a strategic stockpile to protect the agricultural sector from sudden disruptions in supply. Additionally, local nurseries should be supported to produce seedlings and seeds, reducing dependence on imports to enhance long-term agricultural self-sufficiency.

5. Rehabilitating the Livestock Sector and Enhancing Its Productivity

The livestock sector is a key pillar of food security, and its recovery requires immediate interventions to restore and rehabilitate farms that have not been completely destroyed. Urgent measures must be taken to restart existing poultry farms by providing essential inputs such as energy, feed, fertilized eggs, and vaccines to reinstate production cycles.

Additionally, rebuilding local livestock breeds, including cattle, sheep, calves, and camels, is crucial after the widespread destruction and extermination of these animals. Programs should be implemented to improve productivity by importing resilient breeds that can withstand Gaza's environmental conditions. Establishing sustainable livestock and poultry projects and securing renewable energy sources to support farm operations are also essential for long-term recovery.

6. Rebuilding the Fisheries Sector and Ensuring Its Sustainability

The fishing and marine resources sector requires extensive efforts to compensate fishermen for their losses, starting with securing their right to resume fishing activities, which remains restricted despite the ceasefire. Reconstructing destroyed fishing harbours, providing new boats and essential equipment—such as nets, engines, fuel, and marine tools—are necessary steps to enable them to return to work. Moreover, reviving seafood exports, a crucial economic lifeline for this sector before the war, will not be possible without rebuild-ing critical infrastructure, including power networks, transport networks, ice production plants, and refriger-ated storage facilities, to ensure the safe preservation and efficient marketing of fish products.

7. Strengthening International Advocacy and Documenting the Destruction of the Agricultural Sector

Recovery and reconstruction efforts must go hand in hand with extensive legal and advocacy work to document war crimes committed against the agricultural sector and present these cases to international bodies to hold Israel accountable for the systematic destruction of Gaza's food system.

compensation for the massive economic losses inflicted on the agricultural sector must also be a priority. It is imperative to bring cases related to agricultural destruction before UN special rapporteurs on the right to food and the environment, as well as international human rights organizations and legal bodies, to develop a global legal framework that protects Palestinians' rights to adequate food and access to natural resources—obligations that Israel, as an occupying power, is legally bound to uphold. Establishing a UN commission of inquiry to investigate these crimes is crucial, as they constitute violations of the Rome Statute, the Fourth Geneva Convention, and other relevant international treaties.

This will ensure justice for victims and prevent the perpetrators from escaping accountability. In this context, PCHR urges climate justice movements and environmental organizations to escalate their efforts to halt Israel's environmental destruction of Palestinian land. The widespread devastation not only deprives Palestinians of their right to land and natural resources but also obstructs global progress toward the UN Sustainable Development Goals (SDGs)—particularly the goals of Zero Hunger and Climate Action.



