# Food insecurity, starvation and malnutrition in the Gaza Strip

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#### Introduction

Access to food has been significantly restricted in the Gaza Strip since the beginning of the October 2023 war, resulting in severe health risks for the population. The Integrated Food Security Phase Classification (IPC) identifies 5 food insecurity phases: minimal or none, stressed, crisis, emergency, and catastrophe/famine (1). Between September and October 2024, the entire Gaza population was classified in Phase 4 (emergency), meaning that the entire population was experiencing crisis, emergency or catastrophic famine. About a year into the war, approximately 1.84 million people in Gaza were experiencing acute food insecurity, classified in IPC Phase 3 (crisis) or above, including nearly 133 000 people facing catastrophic food insecurity (IPC Phase 5) and 664 000 in IPC Phase 4 (2). Households were experiencing extreme lack of food, starvation and exhaustion. Acute malnutrition was 10 times higher than before the October 2023 war (3).

Approximately 365 km² in size, Gaza Strip is home to around 2.2 million Palestinians, 80% of whom are refugees registered with the United Nations Relief and Works Agency for Palestine Refugees (UNRWA) (4). Since 2007, following Hamas' victory in the Palestinian elections (5), Israel has imposed land, air and sea closure and blockade over the Gaza Strip and has tightly controlled the entry and exit of people and materials, amounting to collective punishment based on Article 33 of the Fourth Geneva Convention (6,7). Lorenzo Veracini describes the Gaza Strip as a site of non-diplomatic transfer where a territorial section of the settler-controlled locale is seemingly excised from the settler body politic and indigenous peoples are transferred outside of the settler entity's population economy (8).

Since the blockade started in 2007, Palestinians in Gaza have largely been denied the right to travel within the occupied Palestinian territory and beyond, and since May 2024, they have been totally denied this right. The Gaza Strip has been described as an openair prison (9), and based on international law, Israeli military occupation in Gaza is illegal and needs to be terminated (10).

# Food deprivation as a tool of collective punishment

Mass starvation is a violent, intentional warfare tactic often facilitated by the blockage of food, supplies, and aid, leading to inevitable destruction of the targeted population. The Gaza Strip represents an extreme case of collective punishment. Israel maintains control over the territory but violates its responsibilities as the occupying power. As the occupier and administrator, Israel is obliged to provide food, health care and other services to the occupied Palestinian population (7,11).

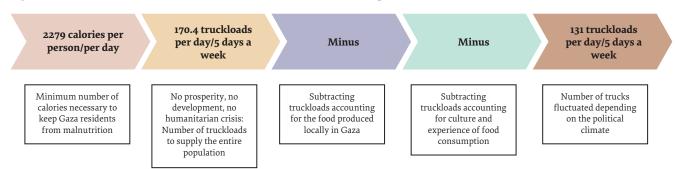
Israel controls Gaza's food basket on Israel's terms. When Gaza provided cheap agricultural and construction labour to Israel, Israel developed the food industry and monitors the increase in food intake. After the *Intifadas* (Palestinian uprisings), Israeli punitive measures included tightening the movement of people and goods, de-development and dismantling of Gaza's food production abilities aimed at collectively punishing the population and deepening food insecurity (12).

Since the Oslo Accords in 1995, Israel has retained its status as the occupying power in Gaza, but it subcontracts its legal duties for the provision of food and medical supplies to humanitarian entities funded by third-party states and international institutions, thereby forcing them to coordinate with Israel to access Gaza to provide aid (13). By 2018, over 80% of Gaza's population relied on humanitarian aid for food and continue to struggle to meet their nutritional needs (14).

Israeli occupation and siege affect food security in the occupied Palestinian territory, the control of import and export of food by Israel is detrimental to local food production (15). A 2008 court report released after a lengthy battle shows how Israel calculated the minimum number of calories necessary to keep Gaza residents from malnutrition and how they used it to calculate the number of aid trucks allowed to enter the Gaza Strip, thus capping the aid allowed to enter Gaza (Figure 1) (16).

Small-scale farming and fishing activities, which have long served as a safety net for the local population, are hindered by the siege, and a third of the agricultural

Figure 1. Calculation of total number of trucks allowed into the Gaza Strip (14)



land was declared a "no-go zone" (17). Israel has repeatedly sprayed herbicides, destructive to crops and humans, near the fence in Gaza to clean the terrain (18,19). Fishing became riskier as boats were targeted and confiscated by the Israeli military (13). Jasbir Puar describes the tight caloric restriction as a 21st Century version of settler colonial biopower where neither living nor dying is the aim, but rather a form of mass debilitation or collective maiming – in this case, in the form of malnutrition (20).

## Siege, warfare and starvation

The combined effect of an 18-year blockade, the denial of access to, or sovereignty over, natural resources, and impoverishment of Palestinians has significantly contributed to food insecurity in Gaza. Of the Palestinian population, 68% suffers from significant food insecurity, and children in Gaza, who are over half the population, are particularly vulnerable (21). A 20% prevalence of stunted growth before the age of 2 years has been reported among children in Gaza (22), and in 2022, UNRWA was supplying food to over 1 139 000 refugees in Gaza, 14 times more than it supplied in 2000 (12).

Gaza had witnessed 4 major Israeli military on-slaughts during the years of siege preceding the October 2023 war and each had deepened food insecurity and injustice among Palestinians. In 2009, the United Nations Fact Finding Mission on the Gaza Conflict found that during Operation Cast Lead, Israel operated a "deliberate and systemic policy" of targeting food production facilities (23). The military aggression damaged almost all of Gaza's 10 000 smallholder farms, destroyed around half a million trees and over 35 750 cattle, sheep and goats, and over one million birds and chicken. Each war was followed by a cycle of donor-funded reconstruction and aid, limited by the siege (6).

Intentionally using starvation of civilians as a method of warfare amounts to war crime when committed in the context of an international armed conflict, including military occupation (24). In October 2024, the United Nations Special Rapporteur on the situation of human rights in the Palestinian territories determined that systematic attacks on Gaza food sovereignty indicate an intent to destroy its population through starvation, specifying that starvation and obstruction of humanitarian aid by Israel constitute genocidal acts (25). Over one year into what the International Court of Justice

(ICJ) deemed a "plausible" case for genocide (26), the IPC has declared an emergency food situation across the Gaza Strip, and international aid organizations predict that the catastrophic starvation will result in more deaths than Israeli military attacks (27). In addition to the control of humanitarian aid, the war has halted food production on the Gaza Strip, which cannot be restored by a ceasefire alone. Israel's blockade of sea access has long devastated the Palestinian fishing industry (13). The livestock sector has also collapsed due to massive famine and denial of sovereignty over water resources (28).

In January 2024, the ICJ ordered Israel to "take immediate and effective measures to enable the provision of urgently needed basic services and humanitarian assistance to address the adverse conditions of life faced by Palestinians in the Gaza Strip" (26). However, Israel continues to block the entry of food and to attack humanitarian convoys, failing to comply with the court order (29). Amnesty International opines that Israel is committing genocide against Palestinians in Gaza, emphasizing that essential parts of the food production system have been severely damaged or destroyed (30).

#### Conclusion

The Gaza Strip is currently witnessing the combined effects of settler colonial warfare, forced displacement, illegal siege and occupation, destruction of the healthcare system, starvation, and crowded and unsanitary living conditions. These conditions are not an unfortunate, unexpected bye-product of war, but an intentional tactic to collectively punish and eliminate the Palestinian people. Ending Israel's illegal siege and blockade of Gaza and ensuring unimpeded humanitarian access are obligations of the international law and immediate priorities (31). However, achieving food justice and food security in Gaza requires the adoption of effective, coherent measures to address the deep, decades-old structural causes of the forced displacement, land dispossession, exploitation, and de-development to which Palestinians have been subjected (32), and full realization of the rights of Palestinian people to return to their land, to sovereignty and self-determination.

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### References

- Integrated Food Security Phase Classification. IPC Acute Food Insecurity Classification. Geneva: Integrated Food Security Phase Classification, n.d. https://www.ipcinfo.org/ipcinfo-website/ipc-overview-and-classification-system/ipc-acute-food-insecurity-classification/en/.
- 2. United Nations. Gaza Strip: Acute Food Insecurity and Acute Malnutrition. IPC Special Snapshot, September 2024-April 2025. https://www.un.org/unispal/document/gaza-strip-ipc-report-sep24-apr25/#:~:text=About%201.84%20million%20people%20 across,IPC%20Phase%204%20(Emergency).
- Integrated Food Security Phase Classification. Gaza Strip: Acute Food Insecurity Situation for September-October 2024 and Projection for November 2024-April 2025. Geneva: Integrated Food Security Phase Classification, 2025. https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1157985/.
- 4. Riccardo Bocco. UNRWA and the Palestinian refugees: A History within history. Refugee Survey Quarterly 2009;28(2-3):229-252, https://doi.org/10.1093/rsq/hdq001.
- 5. Institute for Middle East Understanding . Legal Status of Israel's Siege & Blockade of Gaza. Fact Sheet, 18 August 2023. https://imeu.org/article/fact-sheet-legal-status-of-israels-siege-blockade-of-gaza.
- 6. Farhat T, Ibrahim S, Abdul-Sater Z, Abu-Sittah G. Responding to the humanitarian crisis in Gaza: Damned if you do... damned if you don't! Ann Glob Health 2023;89(1). doi:10.5334/AOGH.3975.
- United Nations Office of the High Commissioner for Human Rights. Geneva Convention relative to the Protection of Civilian Persons in Time of War. Geneva: OHCHR, n.d. https://www.ohchr.org/en/instruments-mechanisms/instruments/geneva-convention-relative-protection-civilian-persons-time-war.
- 8. Veracini L. Settler Colonialism: A Theoretical Overview. United Kingdom, Palgrave Macmillan, 2010. doi:10.1057/9780230299191.
- 9. Mills D, Wispelwey B, Muhareb R, Gilbert M. Structural violence in the era of a new pandemic: the case of the Gaza Strip. Lancet 2020:S0140-6736(20)30730-3. doi:10.1016/S0140-6736(20)30730-3.
- 10. International Court of Justice. Legal consequences arising from the policies and practices of Israel in the Occupied Palestinian Territory, including East Jerusalem. Advisory Opinion, 19 July 2024. https://www.icj-cij.org/case/186/advisory-opinions.
- 11. Smith RJ. Isolation through humanitarianism: Subaltern geopolitics of the siege on Gaza. Antipode 2016;48(3):750-769. doi:10.1111/ANTI.12224.
- 12. Gordon N, Haddad M. The road to famine in Gaza. The New York Review, 30 March 2024. https://www.nybooks.com/on-line/2024/03/30/the-road-to-famine-in-gaza/.
- 13. Zurayk R, Gough A. Control Food, Control People: The Struggle for Food Security in Gaza. Institutute for Palestine Studies, 2013. https://www.palestine-studies.org/en/node/1648402.
- 14. United Nations. 2018: More casualties and food insecurity, less funding for humanitarian aid. Press Release, 27 December 2018. https://www.un.org/unispal/document/2018-more-casualties-and-food-insecurity-less-funding-for-humanitarian-aid-ocha-press-release/#.
- 15. Conal Urquhart. Gaza on brink of implosion as aid cut-off starts to bite. The Guardian, 16 April 2006. https://www.theguardian.com/world/2006/apr/16/israel.
- 16. State of Israel Ministry of Defense. Food consumption in the Gaza Strip Red Lines. Ministry of Defense, 1 January 2008. https://www.gisha.org/UserFiles/File/publications/redlines/red-lines-presentation-eng.pdf.
- 17. Abu Saif F. Destruction of the agricultural sector in Gaza: The effects of the Israeli war, paths of progress and nutritional sovereignty. Institute for Palestine Studies, 2024. https://www.palestine-studies.org/en/node/1655221.
- 18. Legal Center for Arab Minority Rights in Israel. Human rights defenders to Israel: Stop spraying dangerous herbicides over Gaza Strip. The Legal Center for Arab Minority Rights in Israel, 2019. https://www.adalah.org/en/content/view/9667#.
- 19. Zurayk R, Gough A, Sourani A, Al Jaajaa M. Food security challenges and innovation: The case of Gaza. Rome: FAO, IFAD, WFP, 2012. https://www.fao.org/fileadmin/templates/cfs\_high\_level\_forum/documents/FS\_Challenges\_Innovation\_-Gaza\_Arab\_Group.pdf.
- 20. Puar JK. The Right to Maim. Durham: Duke University Press, 2017. doi:10.1515/9780822372530/HTML.
- 21. Medical Aid for Palestinians. New film from MAP's team in Gaza: Combatting child malnutrition. Latest News & Developments, 4 February 2020. https://www.map.org.uk/news/archive/post/1086-new-film-from-mapas-team-in-gaza-combatting-child-malnutrition.
- 22. Assaf E, Al Sabbah H, Al-Jawadleh A. Analysis of the nutritional status in the Palestinian territory: a review study. Front Nutr. 2023;10. doi:10.3389/FNUT.2023.1206090.
- 23. United Nations Office of the High Commissioner for Human Rights. Report of the United Nations Fact-Finding Mission on the Gaza Conflict. Geneva: United Nations Office of the High Commissioner for Human Rights, 2009. https://www.refworld.org/reference/mission/unhrc/2009/en/92049.
- 24. United Nations Office of the High Commissioner for Human Rights. Rome Statute of the International Criminal Court. Geneva: United Nations Office of the High Commissioner for Human Rights, n.d. https://www.ohchr.org/en/instruments-mechanisms/instruments/rome-statute-international-criminal-court.

- 25. United Nations. Genocide as colonial erasure Report of Francesca Albanese, the UN Special Rapporteur on the situation of human rights in the Palestinian territories occupied since 1967. The Question of Palestine, 1 October 2024. https://www.un.org/unispal/document/genocide-as-colonial-erasure-report-francesca-albanese-010ct24/.
- 26. International Court of Justice. Summary of the Order of 26 January 2024. The Hague: International Court of Justice, 2024. https://www.icj-cij.org/node/203454.
- 27. de Waal A. We are about to witness in Gaza the most intense famine since the second world war. The Guardian, 21 March 2024. https://www.theguardian.com/commentisfree/2024/mar/21/we-are-about-to-witness-the-most-intense-famine-since-world-war-ii-in-gaza.
- 28. Al Haq. Water discriminatory access and "water-apartheid" in the OPT. Al Haq, 2013. https://www.alhaq.org/publications/8073.
- 29. Gaza hunger figures "worst on record" says Oxfam. Press Release, 18 March 2024. https://www.oxfam.org/en/press-releases/gaza-hunger-figures-worst-record-says-oxfam#.
- Amnesty International. Amnesty concludes Israel is committing genocide in Gaza. Ltest News, 5 December 2024. https:// www.amnesty.org/en/latest/news/2024/12/amnesty-international-concludes-israel-is-committing-genocide-against-palestinians-in-gaza/.
- 31. United Nations. Responsibility of States for Internationally Wrongful Acts (2001). New York: United Nations. https://legal.un.org/ilc/texts/instruments/english/draft\_articles/9\_6\_2001.pdf.
- 32. Smith J, Kwong EJL, Hanbali L, Hafez S, Neilson A, Khoury R. Violence in Palestine demands immediate resolution of its settler colonial root causes. BMJ Glob Health 2023;8(10):e014269. doi:10.1136/BMJGH-2023-014269.