Fact Sheet: Impact of the Genocidal War on the Agricultural Sector in the Gaza Strip

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Palestinian Agricultural Relief Committees (PARC)

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1. **Executive Summary**

- During the war, Gaza's agricultural sector has suffered extensive devastation that has dismantled agricultural production systems in their entirety and undermined the fundamental prerequisites for operations, including agricultural land, wells and irrigation networks, greenhouses, storage facilities, and energy sources. This paper draws directly on recent data collected by the Agricultural Relief Association through its field interventions during the war, as its teams conducted on-site damage identification and assessment, documenting the scale of losses based on verified, real-world evidence from targeted locations, and relying on testimonies from farmers and fishers as well as operational readings of affected assets and infrastructure.
- These data—triangulated with the key findings of United Nations and international assessments—indicate that the current level of damage now threatens local food-production capacity and erodes the livelihoods of thousands of households dependent on agriculture and fishing. In this context, the Agricultural Relief Association plays a pivotal role not only as a producer of robust, accurate damage evidence, but also as a response actor that translates assessment results into practical support that strengthens farmers' resilience by directing technical and logistical assistance toward urgent, short-term reactivation priorities. Accordingly, investing in agricultural reactivation during emergencies—as underscored by the Association's field evidence—constitutes a life-saving pathway by increasing local food availability, easing upward pressure on prices, and reducing dependence on external aid.

2. Key Messages

- Saving agriculture in Gaza is a life-saving intervention because it restores local food production, reduces dependence on assistance, and helps stabilize prices and post-harvest losses.
- The greatest damage has been to orchards/trees (long-term productive assets), which means the recovery window requires early investment; otherwise income losses will deepen for years.
- Restarting production depends on small, mobile inputs (seeds and seedlings, irrigation supplies, feed and veterinary services, simple storage solutions) in parallel with heavy reconstruction.
- Khan Younis shows signs of being an epicenter of escalating damage to land and agricultural infrastructure, requiring geographically focused, area-based intervention packages.
- Clearing agricultural land of war debris and unexploded ordnance is a prerequisite for recovery and safe access.

3. Key Indicators

- Nearly 50% of agricultural land area lies beyond the "yellow line", including about 30,000 dunums along the eastern border areas, 35,000 dunums in Beit Lahia and Beit Hanoun and east of Jabalia in the North Governorate, and at least 25,000 dunums in Rafah Governorate in the south of the Strip.
- Current agricultural output is estimated at only 25,000 tons (about 7%) compared to more than 400,000 tons produced by Gaza's farms before the Israeli war.

- The agricultural sector contributes around 11% of GDP in the Gaza Strip (54% crop production and 46% livestock). Before the war, employment in Gaza's agricultural sector was estimated at about 55,000 workers.
- "According to OCHA updates based on FAO/UNOSAT analysis, after the ceasefire the accessibility of cultivated land improved to around 37% of total cultivated land (damaged and undamaged), while about 63% remains inaccessible. This is linked to movement and access restrictions in areas beyond the 'yellow line' and in military deployment zones, where access to agricultural land remains restricted/prohibited."
- Cropland damage: 130,800 dunums damaged (86.9%) as of 28 September 2025.
- Orchard damage dominates: 78,710 dunums of orchards/trees damaged (60.2% of total cropland damage).
- Land accessibility constraints: 98.5% damaged and/or inaccessible; only 1.5% (2,320 dunums) is suitable for cultivation according to the accessibility classification.
- Agricultural infrastructure damage: 4,430 facilities damaged (3,395 inaccessible + 1,035 accessible) as of 26 September 2025.
- Irrigation wells: 1,960 wells affected out of 2,261 (86.7%).
- Greenhouses: 1,038.7 dunums damaged out of 1,305.3 (79.6%) as of 5 October 2025.
- Solar energy: 1,695 panels damaged out of 2,614 (64.8%).
- Livestock: cattle deaths estimated at 15,000 head (95%) and a major decline in poultry (only 34,000 remaining).
- Fisheries: fishermen's facilities and fishing assets were damaged, along with the port and fish market.
- Recovery/Reconstruction cost: preliminary estimate of USD 8.4 billion to rebuild agriculture (February 2025).

4. Methodology and Data Sources

- This fact sheet compiles and analyzes recent data issued by FAO and UNOSAT on damage to cultivated land and agricultural infrastructure up to the end of September 2025, with updates up to 5 October 2025 for some components (greenhouses). It is complemented by contextual references and reconstruction estimates.
- Satellite imagery may not capture all operational details (such as repairability or the extent of partial damage). The results are recommended for scoping and identifying hotspots for intervention, to be complemented by field assessments when access becomes possible.

5. Operational Definitions

- Damaged—Inaccessible: damaged assets or facilities located in areas that are inaccessible, or where access restrictions prevent operation.
- Early recovery: interventions implemented during the emergency or immediately afterward to restore operability and reduce dependence on aid.
- Orchards/trees: long-term productive assets that require several seasons to regain production capacity.

6. Scale of Damage to Cultivated Land

Data show that damage to cultivated land has reached a large-scale level, with a clear predominance of orchards and other tree crops. This means a substantial share of losses is not only seasonal but affects long-term productive assets.

- The dominance of orchard damage means recovery requires a dual track: rapidly saving what can be saved + gradual replacement of seedlings.
- Damage to vegetables and field crops deepens the gap in rapid food availability and increases the cost of the food basket.
- Variation in damage across governorates requires flexible, targeted planning based on accessibility.

6.1 Damage distribution by governorate and category (dunum)

Vegetables	Orchards and other trees	Field crops	Governorate
3,090	17,730	8,630	North Gaza
3,030	19,850	5,850	Gaza
2,770	15,930	3,380	Deir al-Balah
11,150	18,620	5,540	Khan Younis
5,680	6,580	2,960	Rafah

6.2 Priority for saving orchards

Orchards represent long-term productive capital; early interventions (therapeutic pruning, pest control, low-cost irrigation restart) can reduce cumulative losses and accelerate income recovery.

Technical priority: a program to save remaining trees in parallel with the gradual replacement of seedlings where access allows.

7. Agricultural Infrastructure, Water, and Energy

Damage to agricultural infrastructure reflects the scale of operational disruption, especially in livestock production facilities, storage, and ponds/basins. These components are foundational to restoring animal protein and reducing losses.

7.1 Categories of damaged facilities with operational priority

- Broiler chicken farms
- Backyard/home-based pens
- Sheep farms
- Agricultural warehouses
- Ponds/Basins

Operational note: restoring operations requires a package of rapid repairs and inputs + technical/veterinary services + a marketing/storage pathway.

Table showing selected damage in agricultural infrastructure

Total damaged	Damaged – Accessible	Damaged – Inaccessible	Damage to agricultural infrastructure – 26 September 2025
			Infrastructure
924	173	751	Backyard pen
356	117	239	Animal shelter
36	4	32	Rabbit farm

100	38	62	Dairy farm
391	48	343	Pond/Basin
44	9	35	Agricultural supplies
31	7	24	Calf farm
689	212	477	Sheep farm
30	3	27	Turkey farm
276	91	185	Farm storage
1	1	0	Port
962	227	735	Broiler chicken farm
103	8	95	Pigeons/Other
487	97	390	Agricultural warehouse
4430	1035	3395	Total

7.2 Damage to agricultural wells (as of 26 September 2025)

Damage to irrigation wells is one of the largest determinants of restoring production, especially for vegetables and orchards. Restarting operations requires technical repairs, spare parts, and alternative energy solutions as feasible.

Share of damage by governorate	Damage rate	Affected wells	Total wells	Damage to agricultural wells – 26 September 2025
				Governorate
28.4%	90.6%	556	614	North Gaza
16.6%	70.0%	325	464	Deir al-Balah
17.9%	85.6%	351	410	Khan Younis
29.7%	95.6%	582	609	Gaza
7.4%	89.0%	146	164	Rafah
100.0%	86.7%	1960	2261	Total

7.3 Greenhouses and solar energy

Damage to greenhouses and supporting systems reduces high-intensity vegetable production and increases seasonal volatility in supply. Solar energy also represents

an operational enabler for irrigation amid fuel and electricity constraints.

Share of damage by governorate	Damage rate	Damaged greenhouse area (dunum)	Total greenhouse area (dunum)	Damage to greenhouses – 5 October 2025
				Governorate
7.2%	99.8%	74.70	74.80	North Gaza
3.7%	100.0%	37.90	37.90	Gaza
13.3%	62.3%	138.40	222.20	Deir al-Balah

35.1%	70.3%	364.70	518.90	Khan Younis
40.7%	93.7%	422.90	451.40	Rafah
100.0%	79.6%	1038.70	1305.30	Total

7.4 Damage to agricultural solar panels

Share of damage by governorate	Damage rate	Damaged	Total panels	Governorate
15.8%	66.8%	267	400	North Gaza
18.6%	68.5%	316	461	Deir al-Balah
33.9%	66.3%	574	866	Khan Younis
17.3%	84.7%	294	347	Gaza
14.4%	45.2%	244	540	Rafah
100.0%	64.8%	1695	2614	Total

8. Livestock and fisheries production

Damage to livestock and fisheries reflects a decline in sources of animal protein and cash income. It worsens when damage to pens and facilities intersects with shortages of feed, water, veterinary services, and marketing chains.

8.1 Selected indicators of livestock losses

Rate	Change/Loss	Category
%95	15,000 (deaths)	Cattle
%43	25,000 remaining	Sheep
%37	3,000 remaining	Goats
%1	34,000 remaining	Poultry

What does this mean in practice?

Supporting the “survival” of the remaining herds (feed + veterinary care) prevents additional losses and lowers the cost of recovery.

8.2 Damage to fishing and fisheries assets

Extent of damage/loss	Asset
259 rooms damaged/destroyed	Fishermen’s rooms
More than 900 boats	Small boats without engines
96 boats	Motorized boats
2 damaged	Aquaculture farms
Damaged/destroyed	Gaza fish market and port
150 killed and 250 missing	Human losses among fishers

The loss of boats and facilities, and damage to the port and fish market, reduces fishing days, disrupts the fisheries value chain (landing–handling–cooling–selling), and increases occupational risks for fishers.

9. Soil, agricultural environment, and war debris

The agricultural impact goes beyond asset destruction to include soil and water degradation and elevated environmental risks, which may prevent production recovery even after infrastructure is repaired. Unexploded ordnance poses a direct barrier to safe access to land.

9.1 Risk matrix and response priorities

Response priority	Expected agricultural outcome	Risk/Impact
High	Loss of soil fertility; difficulty in reclamation and ploughing	Rubble and soil covered with debris
High	Health risks; environmental degradation; water/soil contamination	Chemical contamination/burning agents (e.g., white phosphorus)
Medium–High	Lower productivity and soil salinization	Flooding/salinity and deterioration of irrigation networks
Very High	Inaccessibility; danger to farmers; disrupted reclamation	Unexploded ordnance (UXO/ERW)

10 Recommendations

1. Safe, Regular Access to Agricultural Land Linked to an "Accessibility Index": We recommend adopting a national/sectoral protocol that ensures safe and regular access to agricultural land based on clearly defined priority areas, recognizing that access is a governing prerequisite for any recovery or land-rehabilitation intervention. The policy should be anchored in practical protection arrangements for farmers that reduce risk and prevent disruption of seasonal agricultural activities.
2. Clearance of War Remnants/Unexploded Ordnance (UXO) as a Precondition for Land Rehabilitation: We recommend treating UXO survey and clearance as a mandatory regulatory prerequisite prior to any land rehabilitation or replanting activities in areas classified as high-risk. Any intervention without verified clearance endangers lives and converts resources into recurrent losses. The policy should include periodic updates of risk maps, advocacy to secure dedicated survey and explosive ordnance disposal (EOD) teams, and parallel, targeted safety awareness measures for farmers to reduce incidents during the gradual return to land.
3. Restoring Irrigation Through Rehabilitation of Wells and Alternative Energy Solutions (Solar/Hybrid): We recommend directing financing toward rapid reactivation of agricultural water infrastructure rather than expansion, as the restoration of regular irrigation is the primary lever for resuming production, reducing input costs, and addressing the food gap. The policy should prioritize rehabilitation of wells and pumping networks and the provision of alternative energy solutions (solar/hybrid), alongside protective measures and maintenance-ready configurations, to ensure operational continuity amid fuel scarcity and unstable electricity grids. Implementation should rely on urgent repair packages, spare parts, and energy systems designed for field maintainability.
4. Input Packages and Targeted Cash/Voucher Assistance to Rapidly Restore Livelihoods: We recommend adopting a dual-track program combining production inputs (seeds,

fertilizers, feed, veterinary medicines) with targeted cash/voucher support for farmers and fishers, given that rapid recovery requires operational capacity—not compensation alone. The policy can be implemented through geographically targeted prioritization of the most severely affected areas (with explicit prioritization—e.g., Khan Younis—based on verified damage data), supported by auditable beneficiary lists and a complaints and feedback mechanism to safeguard integrity and minimize exclusion errors.

5. Rebuilding Livestock and Fisheries Value Chains by Shifting from Fragmented Compensation to Value-Chain–Based Interventions: We recommend reorienting support from dispersed, stand-alone compensation toward value-chain interventions that reconnect production to services and markets, as genuine recovery cannot be achieved through isolated inputs but through restoring the system (husbandry–veterinary services–aggregation–marketing–storage). The policy should focus on establishing/rehabilitating community barns or aggregation points, reactivating mobile veterinary services, rehabilitating marketing points and cold-storage facilities, and implementing a phased plan for fisheries infrastructure (harbor/fish market) contingent on access and safety conditions.
6. Pollution Testing and Remediation of Soil and Water Based on Geographic Priorities: We recommend launching a laboratory and field testing program for soil and water contamination and linking results to practical remediation packages, as planting decisions without diagnostics may exacerbate salinity/contamination, reduce productivity, and increase health and food-safety risks. The policy should be based on clear sampling protocols, the activation of mobile laboratories or formal partnerships, and the development of a priority map updated regularly to direct resources to the most severely affected and highest-impact areas.
7. Governance and Financing Through a Multi-Donor Early Agricultural Recovery Basket: We recommend establishing a rapid coordination and financing mechanism for the agricultural sector through a multi-donor early recovery basket that integrates interlinked pillars: access/safety, irrigation and energy, inputs, veterinary services, markets, and pollution remediation/land rehabilitation. The aim is to reduce fragmentation and contradictory interventions and to consolidate the response into an integrated package with shared indicators and periodic reviews that recalibrate priorities in line with evolving access and needs. The policy should be operationalized through a sectoral steering committee, a unified interventions matrix, common indicators, and quarterly priority reviews.

11. Abbreviations

Meaning	Abbreviation
Food and Agriculture Organization of the United Nations	FAO
United Nations Satellite Applications Programme	UNOSAT
United Nations Office for the Coordination of Humanitarian Affairs – occupied Palestinian territory	OCHA oPt
Palestinian Agricultural Relief Committees	PARC
Unexploded ordnance / explosive remnants of war	UXO/ERW
UN Economic and Social Commission for Western Asia	ESCWA

12. References

a. FAO. 2025. Damage to cropland categories due to the conflict in the Gaza Strip as of 28 September 2025. (CD7336EN/1/11.25).

b. FAO. 2025. Damage to agricultural infrastructure due to the conflict in the Gaza Strip as of 26 September 2025. (CD7334EN/1/11.25).

c. FAO & UNOSAT. 2024. Cropland category map of the Gaza Strip 2023. Rome, FAO.

d. UNMAP. 2023. Administrative boundaries used as reference layers in the analysis.

e. OCHA oPt. Reported Impact Snapshot | Gaza Strip. 12 Nov 2025.

f. FAO Agro-informatics. New agricultural damage assessment data release for the Gaza Strip and Palestine. 12 Dec 2025.

g. World Bank. 2025. Preliminary estimate of reconstruction needs for Gaza's agriculture sector (February 2025).

h. https://www.aljazeera.net/ebusiness/2025/11/17/%D8%AD%D8%B1%D8%A8-%D8%B9%D9%84%D9%89-%D8%A7%D9%84%D8%AA%D8%B1%D8%A8%D8%A9-%D8%A7%D9%84%D8%AE%D8%B7-%D8%A7%D9%84%D8%A3%D8%B5%D9%81%D8%B1-%D9%8A%D9%84%D8%AA%D9%87%D9%85-50-%D9%85%D9%86

Arabic references

a. Analytical presentation of damage to the agricultural sector up to September 2024 (UNOSAT/Ministry of Agriculture).

b. Government Media Office: statements on the destruction of agricultural land and production.

c. Palestinian Central Bureau of Statistics / Palestinian Ministry of Agriculture: Agricultural Census 2020/2021.

d. Palestinian Center for Human Rights network: report “We Will Leave Them Nothing” (May 2025).

e. ESCWA: policy brief “The war on Gaza: when access to water, energy and food is used as a weapon” (December 2023).

f. Figures reflect damage estimates based on satellite imagery analysis and may change after field verification when access becomes available.