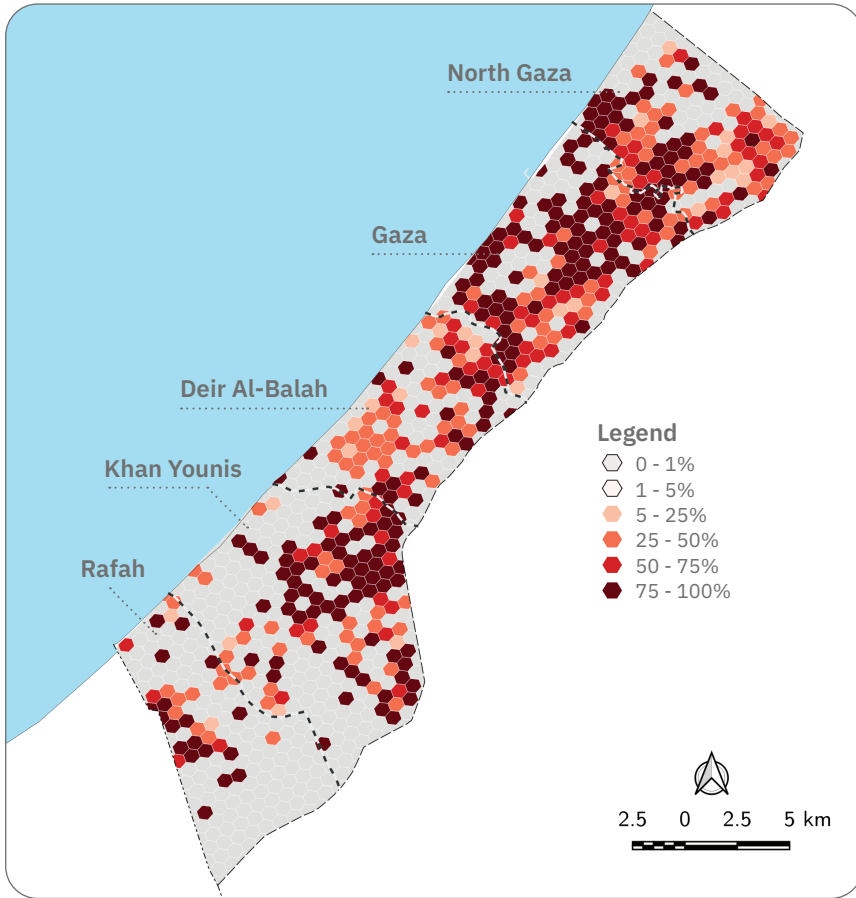




Damage to agricultural wells due to the conflict in the Gaza Strip as of 1 September 2024



Proportional damage to agricultural wells in the Gaza Strip



Damage to agricultural wells

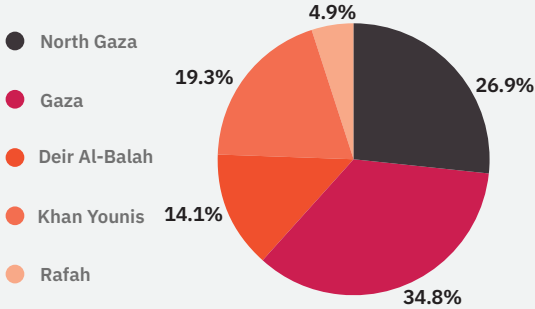
Utilising a baseline agricultural well layer and very high-resolution satellite imagery, FAO conducted an assessment of the number of agricultural wells damaged in the Gaza Strip as a result of the recent conflict escalation.

The damage was estimated using Sentinel-1 SAR imagery from 4, 5, 16, 17, 28, 29 January, 9, 10, 21, 22 February, 4, 5, 16, 28, 29 March, 9, 10, 21, 22 April 3, 4, 15, 16 27, 28 May, 8, 9, 20, 21 June, 2, 3, 14, 15, 26, 27 July, 7, 8, 19, 20 Aug and 1 September. The number of damaged agricultural wells was calculated based on their location within a 15-meter radius area around a damaged site.

A thorough evaluation of damage to agricultural wells was performed, overlaying the agricultural well layer with the damage layer (damage proxy map) from 1 September 2024. The grid depicts the severity of damage in localised areas; in each tile the number of damaged agricultural wells was divided by the total number of agricultural wells.



Damage distribution



Damaged wells by governorate

Governorate	Total Wells	Damaged Wells	Percent
North Gaza	614	319	52%
Gaza	609	413	67.8%
Deir Al-Balah	464	168	36.2%
Khan Younis	410	229	55.9%
Rafah	164	59	36%
Total	2 261	1 188	52.5%



Key messages

1. The total number of damaged agricultural wells in the Gaza Strip was 1 188 (52.5 percent).
2. The governorate of Gaza had the largest number of damaged wells (413 damaged, 67.8 percent).
3. The governorate of North Gaza had the second largest number of damaged wells (319 damaged, 52 percent).

This assessment has been conducted based on available satellite imagery, ancillary data and remote sensing analysis for the period 7 October 2023 - 1 September 2024 without field validation. Agricultural well data from 2021 was used as baseline data due to limited availability for data collection in the area of interest and time constraints related to the nature of the report. This assessment relates specifically to agricultural wells and does not include well rooms, which are a different feature of agricultural infrastructure. This assessment was conducted by the Geospatial Unit at the Land and Water Division (NSL) of FAO and will be further complemented with additional field assessment and use of very high-resolution imagery.

The boundaries and names shown, and the designations used on these map(s) do not express any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

