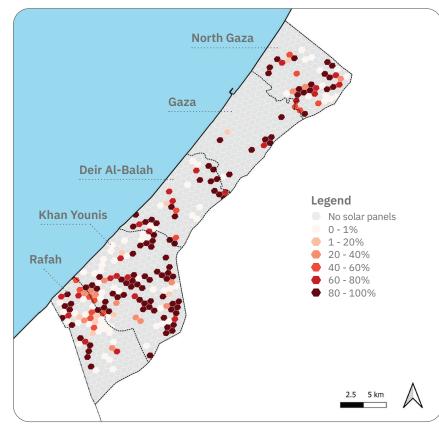


Food and Agriculture Organization of the United Nations

Damage assessment of solar panels in the Gaza Strip as of 29 March 2024

Proportional damage to solar panels in the Gaza Strip

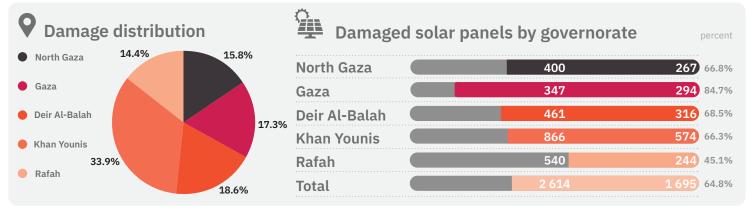


Solar panel damage assessment

FAO has conducted a series of periodic geospatial assessments of agricultural land and infrastructure to assess damage due to the ongoing conflict in the Gaza Strip. GPS coordinates provided by FAOPAL were assessed and used to develop training data for solar panels.

Pléiades multispectral (2m resolution) and panchromatic (0.5m resolution) satellite imagery from August 2023 was used to develop a baseline layer delineating solar panel locations. A thorough evaluation of damage to solar panels was performed, comparing pre-conflict imagery with Pléiades imagery from 29 March 2024.

The severity of damage to solar panels was determined by overlaying the solar panel layer with the damage layer (damage proxy map). The grid depicts the severity of damage in localised areas; in each tile the number of damaged solar panels was divided by the total number of detected solar panels.



Key messages

- 1. A total of 1 695 solar panels (64.8%) have been damaged.
- 2. The region with the largest number of damaged solar panels was Khan Younis, where 574 solar panels (66.3%) have been damaged.
- 3. The region with the largest proportion of damaged solar panels was Gaza, where 84.7% of solar panels (294) have been damaged.

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.



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