Cropland category map of the Gaza Strip from June–September 2023

Cropland assessment

FAO and UNOSAT have conducted a series of geospatial assessments of agricultural land and infrastructure to assess damage due to the conflict in the Gaza Strip. Cropland category maps will facilitate assessments of damage to key agricultural sectors and inform rehabilitation strategies.

Pléiades very-high resolution multispectral (2m) and panchromatic (0.5m) satellite imagery and Sentinel-2 (10m) multispectral monthly imagery from June–September 2023 were used.

539 training data points were collected, identifying crops based on NDVI profiles, crop calendars, and Pléiades VHR imagery. An accuracy assessment was conducted using 30 percent of the samples to validate the map. The cropland category map achieved an overall accuracy rate of 70 percent. The field crop category, consisting of wheat and barley, is not cultivated in this time period.

Key messages

1. The area of cultivated cropland in the Gaza Strip was 9 637 ha (26.8% of the total land area), while the area of uncultivated cropland was 5 487 ha (15.2% of the total land area).

2. The largest category is orchards and other trees** (8 854 ha), followed by uncultivated land (5 487 ha) and vegetables (783 ha).

3. Khan Younis has the largest area of vegetables (206 ha) followed by North Gaza (197 ha).

* To convert to the locally used unit of dunums, divide by 10 (1 ha is equal to 10 dunums).

** The land area estimate for the class “orchards and other trees” includes trees in agriculture, orchards and plantations, and is different from the class “tree horticulture” from the Agriculture Census (Palestinian Central Bureau of Statistics, 2021).