**Damage to agricultural wells due to the conflict in the Gaza Strip as of 31 December 2023**

**Damage to agricultural wells**

The damage to agricultural wells was estimated using the available Sentinel 1 SAR images on October 12, 13, 24, 25, December 11, 12, 22 and 23. This is a proxy measure of damage estimated by implementing the so-called coherence change detection (CCD) algorithm. Three image pairs were used — two pre-event sets and one post-event set.

The coherence layers were calculated for each pair to assess the changes. This damage proxy map (DPM) detects the changes in the built-up area.

The number of damaged agricultural wells was calculated based on their location within a 15-meter radius area around a damaged site. The grid depicts the severity of damage in localised areas; in each tile number of damaged wells was divided by the total number of wells.

**Total damaged agricultural wells**: 488

1. **North Gaza**: 614 wells, 184 damaged (30%)
2. **Gaza**: 609 wells, 178 damaged (29.2%)
3. **Deir Al-Balah**: 464 wells, 44 damaged (9.5%)
4. **Khan Younis**: 410 wells, 66 damaged (16%)
5. **Rafah**: 164 wells, 16 damaged (9.8%)

**Total**: 2,261 wells, 488 damaged (21.6%)

**Key messages**

1. The total number of damaged agricultural wells in the Gaza Strip was 488.
2. The governorate of North Gaza had the largest number of damaged wells (184 damaged).
3. The governorate of Gaza had the second largest damage to wells (178 damaged).