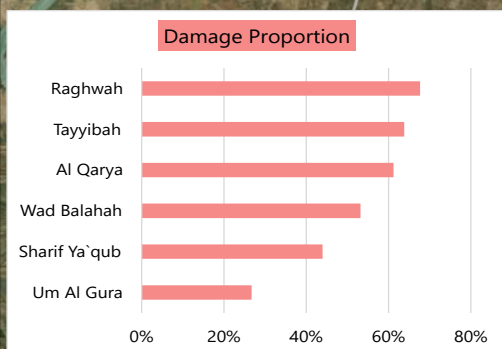
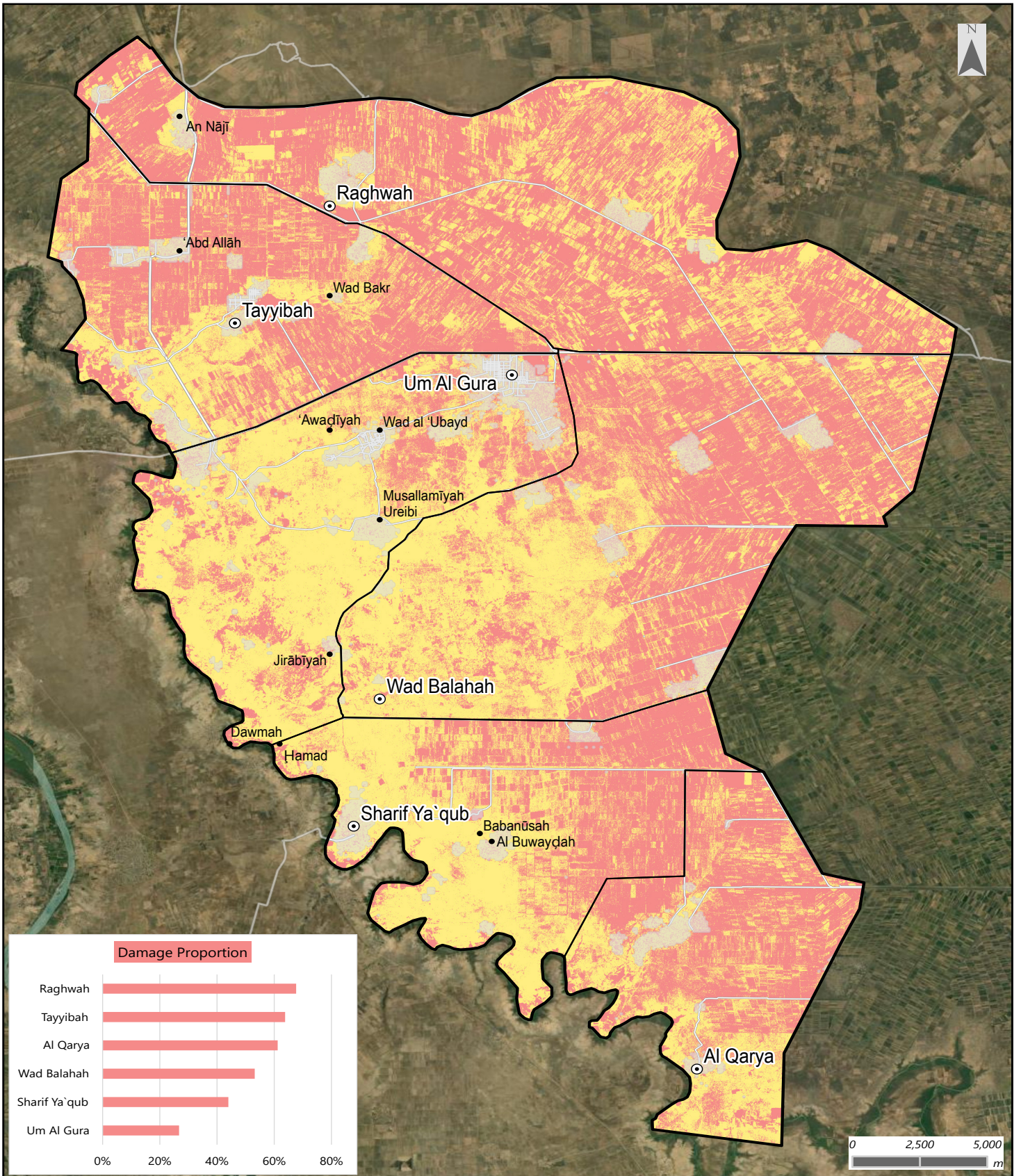


# REPUBLIC OF SUDAN- Aj Jazirah State

## Um Al Gura Crop Damage Assessment

For humanitarian purposes only  
Production date March 2, 2026

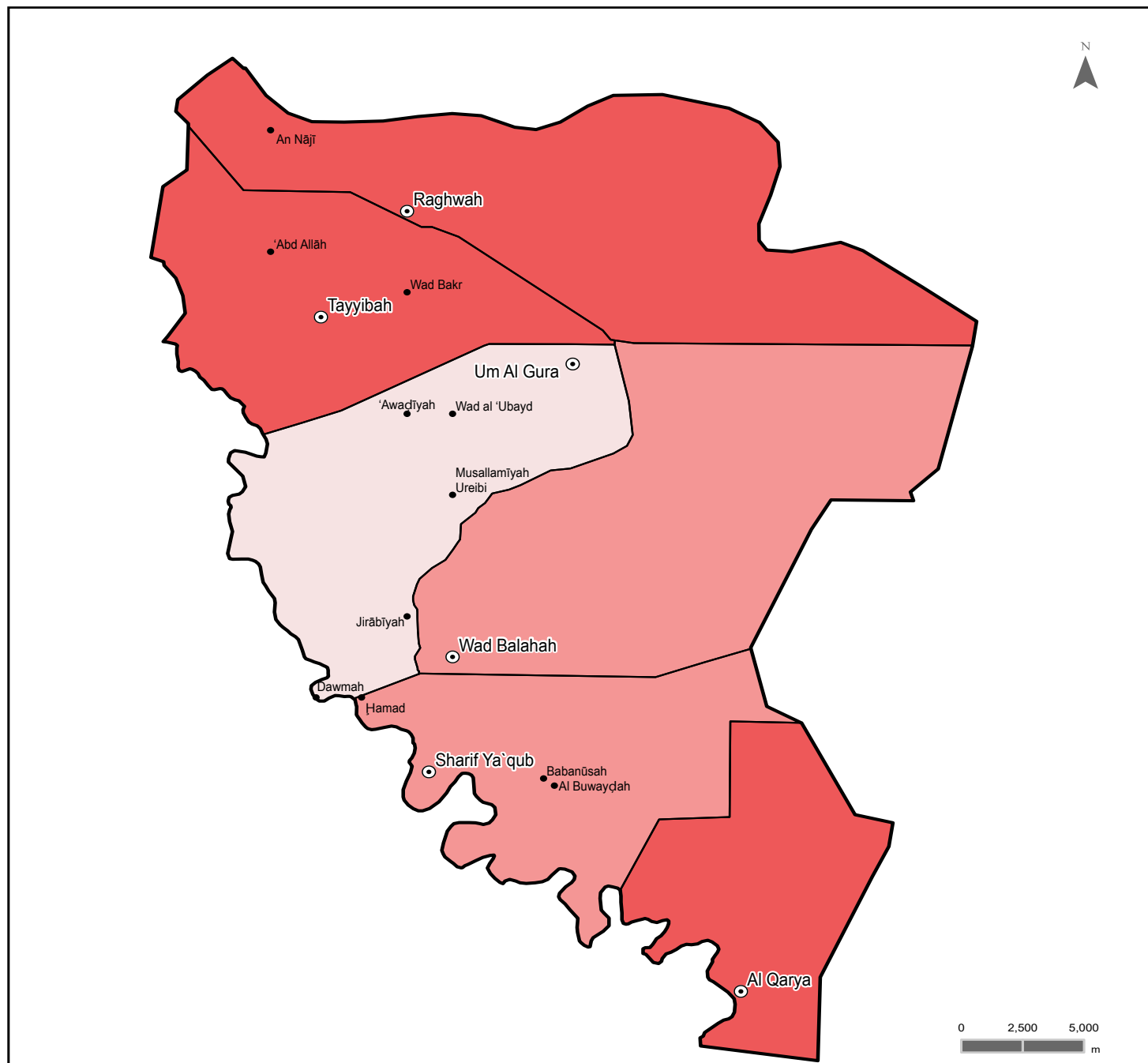


- ⊙ Village
- Hamlet
- Road
- Um Al Gura
- Village boundary
- Settlement Extent
- Damaged Agriculture land
- Non Damaged Agriculture land

Data sources:  
Satellite data: Copernicus Sentinel-2 MSI, Level-2A Surface Reflectance, accessed and processed via Google Earth Engine.  
Date: 1 to 30 June 2022 and 1 to 30 June 2025  
Roads - OpenStreetMap  
Infrastructures- OpenStreetMap  
Crops Damage Analysis : Impact Initiatives-Sudan  
Coordinate System: GCS WGS 1984  
Contact: [impact.geneva.mapping@impact-initiatives.org](mailto:impact.geneva.mapping@impact-initiatives.org)  
Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by Impact Initiatives partners, associates or donors mentioned on this map.



Limits and names are indicative and intended for contextualization purpose.



- Village
  - Hamlet
  - Um Al Gura
  - Village boundary
- | Damage Density |        |
|----------------|--------|
|                | Low    |
|                | Medium |
|                | High   |

Limits and names are indicative and intended for contextualization purpose.

Data sources:  
 Satellite data: Copernicus Sentinel-2 MSI, Level-2A Surface Reflectance, accessed and processed via Google Earth Engine.  
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### Abstract

This analysis evaluated conflict induced degradation of agricultural land in Um Al Gura locality in Aj Jazirah state in Sudan. This analysis incorporated multi-temporal Sentinel-2 satellite imagery. Um Al Gura falls within the Central Irrigated Systems livelihood zone, one of Sudan's most productive agricultural belts, [Reference: <https://fews.net/east-africa/sudan/livelihood-zone-map/august-2014>]. The analysis applies the Normalized Vegetation Index (NDVI) from pre-and post-conflict agricultural season imagery, with an arithmetic change detection method used to quantify cropland damage across villages. The broader conflict context indicates over 2,371 conflict events recorded across the state of Aj Jazirah between 1 June 2022 and 30 June 2025, of which 195 events were recorded within Um Algura locality alone, [Reference: <https://acleddata.com/>]. This reflects sustained and concentrated patterns of conflict with direct implications on agricultural activity. The results confirm that more than 370,000 ha (46% of total cropland in the locality) were degraded following the onset of the conflict. Damage levels varied considerably among villages, with Al Qarya, Raghwah and Tayyibah experiencing the most severe impact, with over 60% of cropland affected. Wad Balahah recorded damage exceeding 50%, while Um Al Gura and Sharif Ya'qub showed losses of less than 50%. The scale and geographic concentration of cropland loss within the critical irrigated livelihood zone highlight critical information gaps for which further evidence is needed to identify the drivers of damage and assess the vegetation health in the medium to long term. Generating evidence through sustained remote sensing monitoring, complemented by ground-level assessments, would strengthen the foundation needed to appropriately target programmatic responses.