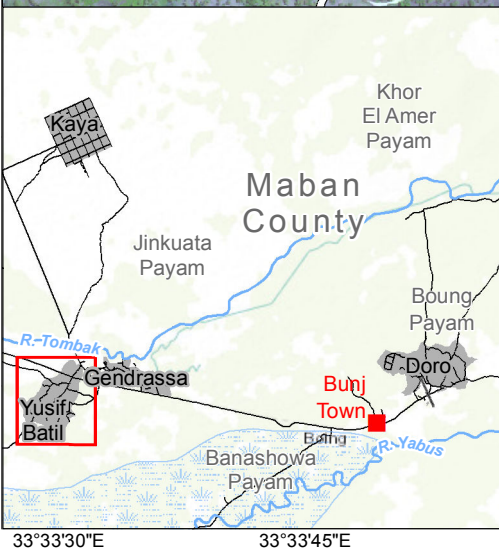
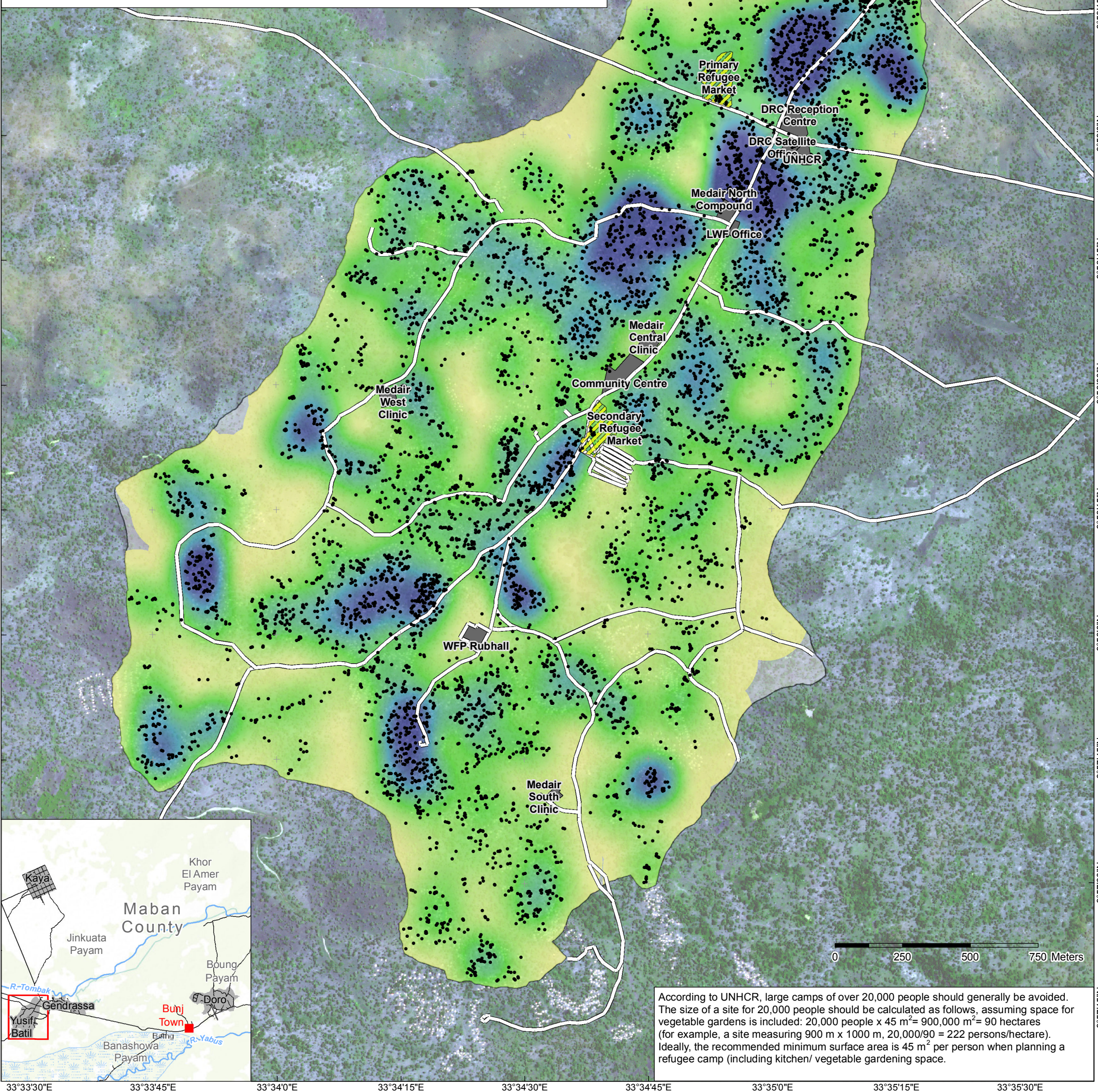


Introduction: This map shows the number of shelters owned by refugee families based on a camp survey of 7,189 households by REACH in July 2015. This is approximately 78% of the 9,242 households registered by UNHCR in January 2015. The data shown is expected to be representative of the population in Yusif Batil Camp due to the robust sampling methodology used.

Methodology: During the survey, respondents were asked to identify the number of shelters that they owned. Responses ranged from 1 to 9 individual shelters. A kernel density was then generated to show how ownership of shelters was concentrated.

Results: The map below shows the concentrations of shelter ownership in Yusif Batil camp. Shelter ownership is highest in more densely populated areas (north near the main roads, markets, and NGO satellite offices).



- Shelter Density**
- High Density: 9
 - Low Density: 1
- Camp Features**
- Camp Boundary
 - Compound Boundary
 - Market
 - Roads
- Household Locations

According to UNHCR, large camps of over 20,000 people should generally be avoided. The size of a site for 20,000 people should be calculated as follows, assuming space for vegetable gardens is included: 20,000 people x 45 m² = 900,000 m² = 90 hectares (for example, a site measuring 900 m x 1000 m, 20,000/90 = 222 persons/hectare). Ideally, the recommended minimum surface area is 45 m² per person when planning a refugee camp (including kitchen/ vegetable gardening space).

Data sources: roads: PAE (2015); satellite imagery: WV-2 satellite (2013); administrative units, hydrology: OCHA COD; Basemap: Esri; All other features: REACH (2015).

Coordinate System: GCS WGS 1984
Contact: reach.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 the REACH partners, associates, donors or any other stakeholder mentioned on this map.

File: REACH_SSD_Map_YusifBatil_CAMP_HouseholdShelters_07JUL2015_A3