# Hard-to-Reach Areas of Borno State: Conclusions from a Food Security Sector Joint Analysis Workshop

On April 15, 2019 the Food Security sector convened a Joint Analysis Workshop to triangulate and draw actionable conclusions from stand-alone partner projects. All projects concerned areas of Borno State that are "hard-to-reach" for humanitarian actors due to ongoing conflict and compromised security. Contributing methodologies included focus group discussions, key informant interviews, and analysis of satellite imagery. The objectives of this workshop were to:

1. Identify the needs, vulnerabilities, and common experiences of populations in hard-to-reach areas, and whether these change over geographic space;
2. Identify which services and types of humanitarian assistance these populations can access;
3. Identify key displacement trends and how they might inform planning within the food security sector.

Collective conclusions are as follows:

**Vulnerable populations remain in hard-to-reach areas.** All data sources indicated that populations are remaining in hard-to-reach areas, and in some cases are continuing farming activities. Those left behind are more likely than new arrivals to be members of vulnerable groups: women and children, the elderly, unaccompanied children, and the very poor.

**Food security needs and barriers to farming are more severe in the central LGAs assessed (Bama, Gwoza, Dikwa, and Ngala) relative to northern LGAs.** In the central LGAs, populations frequently resorted to all-season foraging for wild foods; reported more severe movement restrictions, more severe retributions by armed groups when movements occurred, more frequent harvest confiscations and very limited access to food that can lead to severe hunger. Satellite data confirmed reduced agricultural activity in these areas. In northern LGAs, satellite imagery and key informant reports indicated more frequent ongoing harvest activity. Coping mechanisms utilized in the north were relatively less extreme, such as borrowing food or restricting meals, and while harvest confiscations were also frequently reported, identified food security needs were less dire than for populations in the central LGAs assessed.

**Most markets are either not functioning or functioning at a very limited scale, impeding food security.** Movement restrictions and security concerns have reduced the number of markets, and limited the availability of food and agricultural inputs at those that do exist.

**Outdated settlement lists impede analysis.** Widespread destruction of settlements over the course of the conflict has reduce settlement data validity; only 19% of settlements detected via satellite imagery could be matched to known names and locations using the VTS dataset. These discrepancies indicate potential migration to new locations within hard-to-reach areas after destruction. Improved geospatial information, while difficult to gather, is needed for reliable triangulation.

**Future Work:** Any meaningful response to the dire conditions identified is likely **contingent upon improved access dynamics and/or the creation of access corridors for humanitarian actors**. Without improved access, operationalization of these joint conclusions is likely to be extremely limited. Participants will continue to advocate for improved access in order to respond to the identified food security needs. Barring much-needed improvements, participants will continue to collaborate via the Cadre Harmonise and through the Hard-to-Reach Task Force within the Food Security Sector. These groups will facilitate ongoing triangulation of data coming from hard-to-reach areas.

## Participants, Work Inputs and Methods

**Work Input: Hard to Reach Ground Truth Findings**

**Partner(s):** REACH Initiative

**Data Source:** Key informant interviews (n=7588) and focus group discussions (n=71), November 2018 – March 2019
**Descriptive Methodology:** Key informant interviews are continuously conducted with newly-arrived internally displaced persons who have left hard-to-reach settlements 1-3 months prior to data collection. Individual responses are used to determine consensus

responses for settlements. Data at higher administrative levels are presented as the percentage of settlements reporting a particular result; at least 20% of settlements were assessed in all reported Local Government Areas. Semi-structured focus group discussions are used to gather more information on displacement patterns and access to services in inaccessible areas. Because sampling is dependent on the presence and identification of key informants with information concerning particular areas, findings from this project are indicative only.

**Work Input: Hard-to-Reach Remote Sensing Settlement Analysis**
**Partner(s):** REACH Initiative
**Data Source:** High-resolution satellite imagery of 4300 km$^2$ from pre-conflict (2011-2013) and conflict (2016-2018) periods.
**Descriptive Methodology:** This remote sensing analysis assessed ----- in the former extent of Lake Chad, primarily in Kukawa LGA. For two timeframes, all visible settlements in the area of interest were identified, digitized, and classified by size/type (city, settlement, cattle settlement, and isolated structure) and status (destroyed, remaining, larger in 2018, new in 2018, and unknown). Settlement locations, extents, and concentrations were compared between the 2011-2013 and 2016-2018 time periods, as well as compared against the VTS dataset.

**Work Input: Ground Truth Findings, Joint Bama Case Study**
**Partner(s):** NPFS, FEWSNET, FAO, and WFP
**Data Source:** Key informant interviews and focus group discussions
**Descriptive Methodology:** The assessment was conducted on the 18th January 2019 in Bama IDP Camp with new arrivals who came into the camp between the 1st and 17th of January 2019. Key informant interviews were held with staff of IOM to obtain more information on the trend of new arrivals, particularly those from inaccessible areas. IOM staff also supported with the identification of the new arrivals from inaccessible areas. **Five focus group discussions** were conducted with **male** and **female** groups of the newly arrived IDPs (within a period of 3 months) from villages that remained inaccessible to the humanitarian community. Discussions were conducted using interview guides with facilitation by trained IOM enumerators fluent in Hausa and Kanuri.

**Work Input: Population and Settlement Monitoring System**
**Partner(s):** WFP-VAM
**Data Source:** Satellite Imagery
**Descriptive Methodology:** This system exploits both very high resolution satellite imagery (about 50cm resolution, Pleiades, Digital Globe) and high resolution high frequency satellite imagery (Sentinel-2) to identify and monitor conflict affected populations observing displacement of populations and the creation of post-displacement settlements. It is mainly focused on: New urban/settlement land cover detected, new cultivation activities identified, and the extent of land left fallow or abandoned related to conflict and large-scale population displacements.

Evidence of large scale displacement flows detected by the system is used for monitoring cross border population flows.

This sub-system will scan wide areas (subnational to local scale) using specific indicators for burned areas and vegetation changes based on Sentinel-2 data, looking for disturbances and changes in land cover, indicative of settlement abandonment or of new displacement concentrations.

VHR image data is then introduced for a detailed assessment of the area, confirming the existence of a new settlement and estimating number of households structures present. By automating structure detection, WFP also aims to unlock the scalability of high-resolution images as a source of information on refugee and IDP camps.

Analysis of satellite imagery to identify instances of farmland abandonment and burning of agricultural areas helps to estimate agricultural losses and understand the impact on the food security of the area's population. In places where movements are restricted, assessing agricultural activities and crop production also provides insight into negative impacts on the environment caused by intensification of farming activities.