



# Yobe Floods: Displacement and Humanitarian Needs Brief

Gulani, Gujba, Tarmua LGAs, Yobe State, Northeast Nigeria, July 2022



## Introduction

Following the start of the 2022 rainy season, rainstorms have led to flash floods and flooding incidents across the Borno, Adamawa, and Yobe (BAY) states leading to the loss of lives, injuries, damage to shelters and other infrastructure, as well as to property and agricultural land, impacting livelihoods.<sup>1</sup> Following heavy rainfall around the week of the 11th of July across parts of Yobe state, several communities experienced flooding which led to the destruction of shelters, farmland, property, and public infrastructure such as roads, bridges, and communication equipment. This led to the displacement of hundreds of households, with some communities also being cut-off from neighbouring settlements and essential supply routes. An estimated 1.6 million people are believed to be in need of humanitarian assistance in Yobe state, with an estimated 160,000 IDPs spread across the state.<sup>2</sup> While flooding was reported to have affected communities in other LGAs (Bade, Damaturu, Fika, Geidam, Karasuwa, Machina, Nguru, Potiskum and Yusufari) within Yobe state, this assessment focuses on flood affected populations in the LGAs of Gujba, Gulani and Tarmua which are among the most affected LGAs according to media reports, partners and key informants.<sup>3</sup> The floods in these areas have left many in need of immediate assistance, including food, shelter, healthcare, water, and livelihood support.

## Methodology and limitations

From July 21-22, 2022, REACH conducted a rapid assessment through remotely conducted interviews and participatory displacement mapping with 12 key informants (KIs) displaced from flood-affected settlements in Gujba (5), Gulani (4) and Tarmua (3).

Most of the interviews were conducted remotely by field officers with the assistance of enumerators and local guides, most of whom were present in person during the interview. Remote data collection methods were employed because of access issues caused by the floods, which rendered some areas inaccessible, as well as the pre-existing barriers posed by security and safety concerns in some areas. The data collected was triangulated using evidence obtained via satellite imaging, partner assessments, and incident reports in the news media and from government bodies. The methodology follows REACH's rapid assessment toolkit, which is focused on gathering information on causal factors of severe needs, including displacement patterns, asset losses, food access, livelihood coping strategies and service access. The situation in the affected LGAs in Yobe continues to evolve at the time of writing and findings adduced includes information received up until July 27th. **All findings in this brief are indicative only and should be triangulated with data from other sources.**

The main limitations faced during data collection involved communication difficulties caused by the floods rendering some communities, particularly in Gulani and Gujba, unreachable and inaccessible, with reports of some communication infrastructure seemingly affected. Other limitations were those imposed by time and the size of the sample given that several LGAs were affected, with LGAs where REACH field officers were able to identify locations hosting newly displaced people being prioritised. This means that this brief is unable to provide a full overview of all flood-affected areas across Yobe state, or of the scale of displacement in numerical terms.

1. UN OCHA, [Nigeria Situation Report for Borno, Adamawa and Yobe States No 21, as of 30 June 2022](#), (July 2022).

2. UN OCHA, [Nigeria Humanitarian Needs Overview 2022](#) (February 2022).

3. "Flood cuts off Gulani LGA from Yobe – Buni," *The Guardian* (18 July 2022); European Civil Protection and Humanitarian Aid Operations (ECHO), "[ECHO Daily Flash of 19 July 2022](#)," ECHO (19 July 2022).

Photo: Flood damage in Yobe, Nigeria, July 2022, State Emergency Management Agency (SEMA).

## Key findings

Information gathered by REACH indicates a rapidly deteriorating humanitarian situation, with flooding exacerbating existing vulnerabilities and driving needs, particularly for food, non-food items (NFIs), and shelter. Given the extent of destruction to shelters and livelihoods, and the need for urgent humanitarian support to mitigate resource gaps for an already vulnerable population, a prolonged disruption of livelihoods and/or any further flooding, even on a similar scale, may lead to a further deterioration of conditions in these areas.

- As a result of the flooding in many parts of Gujba, Gulani, and Tarmua, **many communities were faced with the destruction of their shelters, farmland, livelihood assets and other household resources.** Access roads, bridges, public buildings, and some communication lines have been reportedly affected by the floods, and in some cases have led to entire communities being cut-off from key supply and travel routes. Satellite imagery based on REACH and UNOSAT data as of the 18th of July shows large sections (marked in red) of these LGAs covered by flood waters, including extensive farming areas and around populated zones (see maps at the end of this brief).
- **Reports indicate hundreds of households were displaced as a result of the flooding. Most KIs reported that most of the population in affected communities, and in some cases whole communities, have been displaced due to the flooding.** Most KIs reported people left with their entire households, travelling together or in groups of households initially on foot and then, where possible, in vehicles in most cases. Destinations were reportedly selected on the basis of proximity, available shelter, security, likelihood of receiving aid, and/or the presence of friends and relatives. The majority of KIs reported that those displaced expressed a desire to return if they obtained support to rebuild their shelters and restore their livelihoods once the water recedes, while some KIs reported that others intend to remain in their current location, citing a lack of basic amenities in their settlement.
- In the 2022 Humanitarian Needs Overview (HNO), **Gujba and Gulani were classified as phase 4 (extreme) on the Joint Intersectoral Analysis Framework (JIAF) severity scale.** This indicates a collapse of living standards, with survival being dependent either on humanitarian assistance or corrosive and extreme coping strategies. **Tarmua was classified as phase 3 (severe),** indicating degrading living standards and the inability to meet some basic needs without resorting to negative/emergency coping mechanisms. These give an indication of adverse humanitarian conditions in these LGAs, which may have been exacerbated by the flooding.

- According to KIs, the primary needs among populations remaining in flood-affected areas, as well as among those displaced by the flooding, are food, non-food items and household resources, such as clothing, mosquito nets, and blankets, as well as shelter. With reports that food stocks and large swathes of farmland have been affected by the flooding, and KIs reporting that some of the displaced and those remaining in the affected settlements were already adopting coping mechanisms such as foraging and eating wild foods, there is an increased risk that many of those affected may exhaust available coping mechanisms and require emergency support.
- Some KIs reported that the remaining population in their settlement had not received any kind of aid or support at the time of data collection. For those displaced as a result of flooding, the majority of KIs reported that any aid or support they had received so far came from the host communities in the form of shelter, food and access to services.

## Humanitarian overview

In the HNO 2022, the JIAF severity scale classifications of LGAs in the BAY states classified Gujba and Gulani as phase 4 (extreme), while Tarmua was classified as phase 3 (severe). Phase 4 indicates a collapse of living standards and survival being dependent on humanitarian assistance or corrosive and extreme coping strategies, while phase 3 indicates degrading living standards, which may lead to the adoption of negative coping mechanisms, and the inability to meet some basic needs without adopting crisis/emergency coping mechanisms.<sup>4</sup> These give an indication of humanitarian conditions in the affected LGAs, with estimates of anywhere between 20,000 and 120,000 people across each LGA believed to be in need of urgent humanitarian assistance prior to the flood incidents.<sup>5</sup>

OCHA predicted that flooding in the 3rd quarter of 2022 was expected to be severe in the BAY states, with an estimated 26% of LGAs across the BAY states, including Gujba, Gulani and Tarmua, projected to be at major risk of flooding. Additionally, OCHA also designated Gujba and Gulani as part of 24 high risk priority LGAs likely to require humanitarian assistance between July and September 2022. Some parts of these LGAs have also recently encountered organised armed group (OAG) activities that have displaced many and led to general increases in humanitarian need for those affected. KIs reported that some of these communities were hosting IDPs, who had in many cases been re-displaced as a result of the recent flooding.<sup>6</sup>

In recent years, flood frequency in the BAY states has increased, often leading to displacement, destruction of basic service infrastructure,

4. UN OCHA, [Nigeria Humanitarian Needs Overview 2022](#) (February 2022).

5. Ibid.

6. REACH, [Humanitarian Situation Overview in Hard-to-Reach Areas, Quarter 1](#) (April 2022).

and increasing the risk of illnesses such as malaria and other waterborne ailments.<sup>7</sup> Climate and ecosystem changes, including rainfall variability, desertification, overgrazing and overcultivation, have created a threatening situation of food scarcity where food security and livelihood access have become intertwined with weather and environmental effects. Flooding on this scale was predicted to cause a further reduction in food access and availability, and likely to cause an increase in humanitarian needs for emergency shelter and household non-food items (NFIs), food support, latrines, hygiene kits, water purification tablets, among others.<sup>8</sup> KI reports and other publications indicate that many houses were submerged or destroyed, leading to people being housed in temporary shelters or stranded without accommodation. Major access routes and bridges have also reportedly been affected or even washed away by flood waters, cutting certain communities off from the rest of the LGA. With further reports of farmland, crops and livestock being destroyed by the flooding, affected people in these communities may be facing a deepening of their pre-existing vulnerabilities, leaving many in need of critical assistance.<sup>9</sup>

## Impact of the flooding on property, livelihoods, and infrastructure

Multiple heavy rainfall incidents spread across several days from around the start of July leading into the end of the week of the 11th of July have led to reports of severe flooding across communities in several LGAs in Yobe state, including but not limited to Gujba and Gulani and to a slightly lesser extent Tarmua. KIs from affected communities across these LGAs indicated the flooding generally started on the second or third day of heavy rainfall, with many identifying the days of or between the 17th and 21st of July as being the worst days of flooding. Most KIs reported that while flooding had occurred in their settlements in the past, the most recent incidents were unprecedented in scale and severity. Five KIs reported flooding had either never occurred in their settlements in the past or at least not like this.

Shelters in most affected communities were reportedly destroyed, rendering hundreds of people homeless. Food stocks and other livelihoods were also affected by the floods, with farms destroyed and livestock lost. Some major roads and access routes including key bridges linking several communities to other parts of the LGAs have either been damaged or blocked off. News reports cited authorities who stated that entire communities especially in Gulani were rendered inaccessible.<sup>10</sup> The floods caused injuries, as well as some fatalities, with half of the KIs stating they were aware of at least one death as a result of the flooding in the affected communities, mostly citing collapsing shelters and walls as the predominant cause of the deaths.

## Displacement journeys

A majority of the KIs reported that more than half of the population in their settlements, and in some cases everyone in the settlement, became displaced due to the flooding. Most KIs confirmed that there had been IDPs living in their settlements prior to the flooding, with most of those noting that the IDPs became re-displaced as a result. Some of those who remained in affected settlements reportedly wanted to leave but were unable to do so due to a lack of financial means, as well as not having relatives in nearby garrison towns to support or accommodate them. Two KIs mentioned that community leaders asked people to wait until the water levels receded before leaving, with one KI noting that the community leader feared that people would drown but also wanted to avoid the settlement becoming deserted.

All KIs reported that displaced populations left their settlements with their entire household, travelling on foot initially, and then where possible in vehicles (depending on financial capacity) for between a day and two days until settling in their current area of displacement. It was noted by a few KIs that in some cases certain family members would stay behind initially, such as the elderly, so that children could be brought to safety first, before those who remained would be picked up. Flooded routes, including waterlogged or destroyed roads and bridges, led to restrictions on or delayed movements of affected people. Most KIs cited a lack of food as a challenge on the displacement journey, with several also noting a lack of water and shelter, leading some to sleep out in the open along the route. Having to pay for transportation was also a challenge, as mentioned by several KIs. The physical difficulty of the journey and exhaustion was also mentioned by a few KIs, although the majority noted that they were not aware of any deaths along the displacement journeys. According to several KIs, there were no reported deaths or injuries in transit, with those who had been injured during the initial flooding seeking medical attention upon arrival in the areas of displacement.

Half of the KIs cited the presence of friends or relatives in the area of displacement (AoD), as well as the proximity of the AoD to areas of origin (AoO) as key factors in determining where flood-affected populations went to when they left, with many hoping for a possibility to return to their homes and livelihoods as soon as possible. The availability of shelter and security, and the hope of receiving assistance in these locations, were also cited by several KIs as factors.

7. UN OCHA, [Nigeria Humanitarian Needs Overview 2022](#) (February 2022).

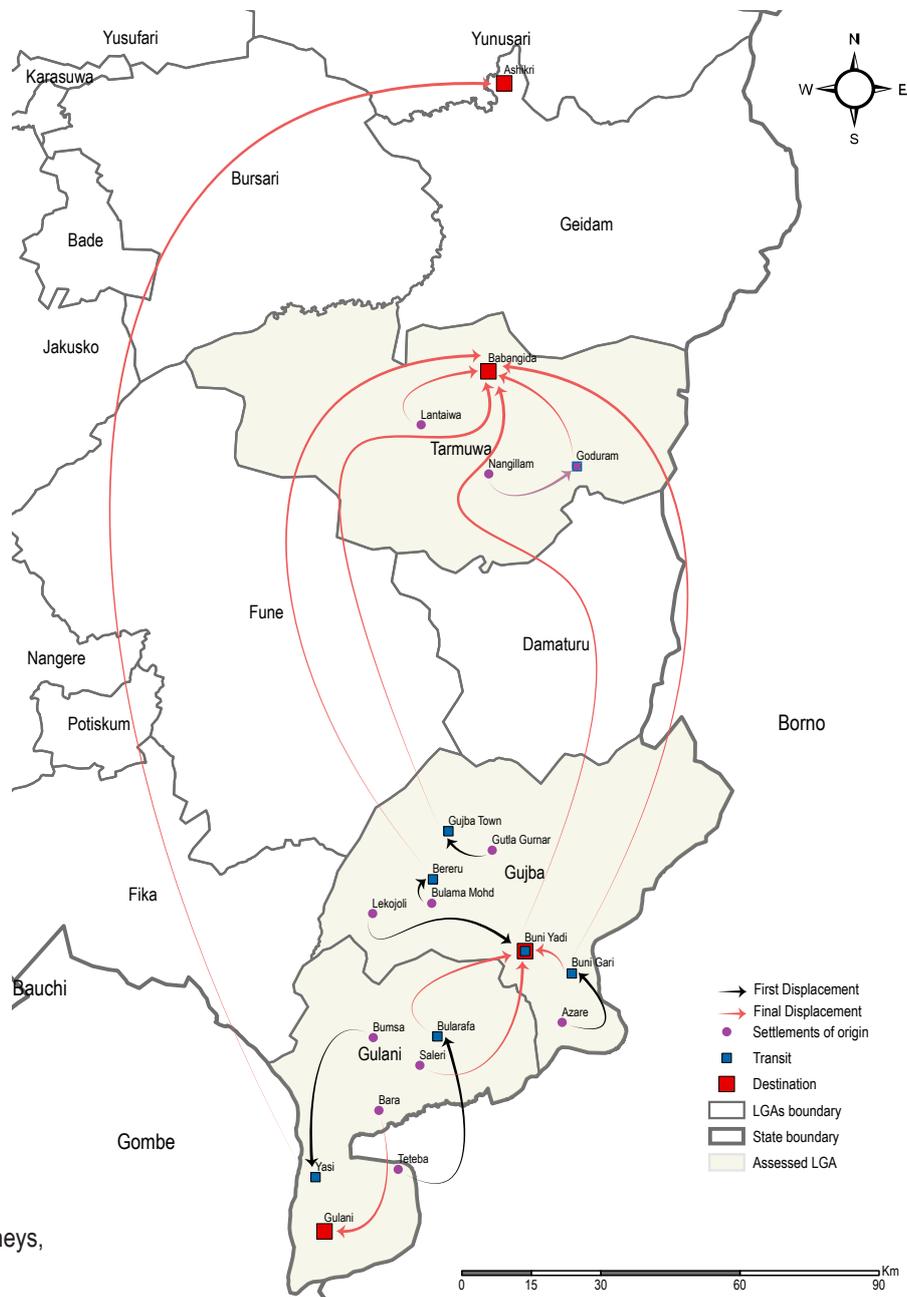
8. Ibid.

9. ["Flood ravages 59 communities, sacks scores in Yobe."](#) Daily Post, (24th July, 2022).

9. ["Flood cuts off Gulani LGA from Yobe – Buni."](#) The Guardian (18 July 2022).

## Common areas of displacement

- Babban Gida**, a garrison town in Tarmua LGA, became a common destination for those displaced due to the flooding. Many reportedly headed there due to perceptions of better security, with all KIs who named security as a pull factor having displaced to Babban Gida. All of those displaced in Babban Gida stated that IDPs had access to water and a functioning market, with a few also mentioning that IDPs were able to access health facilities. The host community in Babban Gida was also reportedly welcoming, with one KI raising that the newly displaced have been accepted as part of the community.
- Buni Yadi**, Gujba LGA also saw arrivals from flood-affected areas. Some only transited through Buni Yadi while others settled there, with newly arrived IDPs noting access to healthcare.
- Most of those affected in Gulani LGA have reportedly been displaced within the LGA, with some who were living in areas that have not been cut off and who had the financial means, leaving to nearby towns or to Buni Yadi, Gujba LGA, or to Damaturu, or in a few cases, as far as Geidam LGA. Most of those who have been displaced to **Gulani town** are reportedly living in unoccupied government buildings and are predominantly collecting rainwater or drinking water from unimproved wells. Bridges connecting Gulani town to other areas have been affected by the floods, which has led to increases in market prices as traders are only able to bring goods to the outskirts and then use manual labour to transport them to the town.



Map 1: Displacement journeys, according to KIs

## Humanitarian conditions and needs

According to KIs, the primary needs among both populations remaining in flood-affected areas, as well as those displaced by the flooding, are food, non-food items and household resources, such as clothing, mosquito nets, and blankets, as well as shelter. With homes, property, food stocks, and farmland having been destroyed, both those remaining and those displaced have lost much of the resources on which they depended. While healthcare was named as a primary need among those remaining in flooded settlements, a majority of KIs noted that those displaced had access to healthcare in their areas of displacement. Among displaced populations, livelihood support was named as another primary need, with half of the KIs stating that displaced populations were already engaging in casual labour in their areas of displacement as a coping mechanism, particularly to earn money to buy food at the markets. A third of KIs mentioned that some of those displaced were foraging and eating wild foods. This was also noted as a likely coping mechanism among people remaining in flood-affected settlements, as almost half of the KIs noted that they believe any remaining food stocks in the flood-affected settlements will soon be depleted.

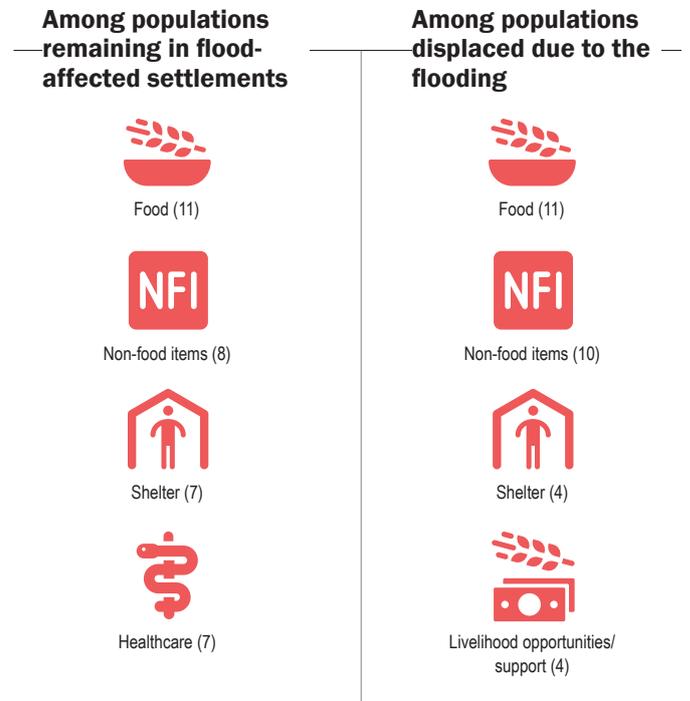
Most of the flood-affected areas from which people were displaced were already flagged as being in need of humanitarian assistance before the flooding,<sup>11</sup> with a few KIs highlighting that food and water shortages were prevalent before the recent events and that communities lacked key services, such as healthcare facilities. The flooding has exacerbated pre-existing issues, with all KIs stating that shelters were destroyed by the flooding and the majority noting that food stocks, farmland and crops had been destroyed. This will likely have a longer-term impact on communities in these areas, as not only their existing food stocks were affected, but also their livelihoods and future sustenance, as the impact of the flood on agriculture in the areas will become more evident in the harvest season.

Those remaining in flood-affected areas are likely to be highly vulnerable, with reports of elderly people and children, as well as those without the financial means to leave, having remained. Not having a place to stay elsewhere or knowing where else to go was also seemingly a factor in causing people to remain, as mentioned by five KIs. Those remaining were reportedly using makeshift shelters or sleeping out in the open and were resorting to drinking rainwater. The majority of KIs noted that the affected areas had yet to receive any aid or support.

In areas of displacement, access to food and NFIs were identified as primary needs among displaced populations, while a majority of KIs noted that IDPs had access to water, functioning markets, and healthcare. Those with financial means or friends/relatives in the areas of displacement are either renting accommodation or living within the host communities, while others are either staying in makeshift shelters, including tents, public buildings, mosques, or

are sleeping out in the open. The majority of KIs asserted that any aid or support that IDPs had received came from host communities, including shelter support, food, and NFIs.

### Priority needs



The number of KIs who mentioned each priority need is displayed in brackets.

### Movement intentions

A majority of KIs voiced intentions to return among those displaced due to the flooding, with several noting that people wanted to return to their farms, but that they would require support to rebuild their destroyed properties and replace lost food stocks and livestock. Returning to flood-affected areas is also reportedly dependent on the water levels receding, with intentions to remain in areas of displacement until the water levels recede and potential support is provided. However, several KIs stated that IDPs do not intend to return to their settlements, with a few mentioning that the schools in the AoDs are better and their children will have a better education if they stay there, as well as citing a lack of basic services in the settlements.

11. UN OCHA, [Nigeria Humanitarian Needs Overview 2022](#) (February 2022).

## Flooded areas - satellite map analysis

The red-coloured areas on the following maps highlight the zones affected by flooding on the 18th of July. More precisely, the colouring indicates where the differences in the backscattering signal from the surface before (6th or 11th of July, depending on location) and after the flooding (18th of July) surpassed a given threshold, indicating potential flooding. The maps only show flooded areas in Gujba, Gulani, and Tarmua, not in neighbouring LGAs that also appear on the maps.

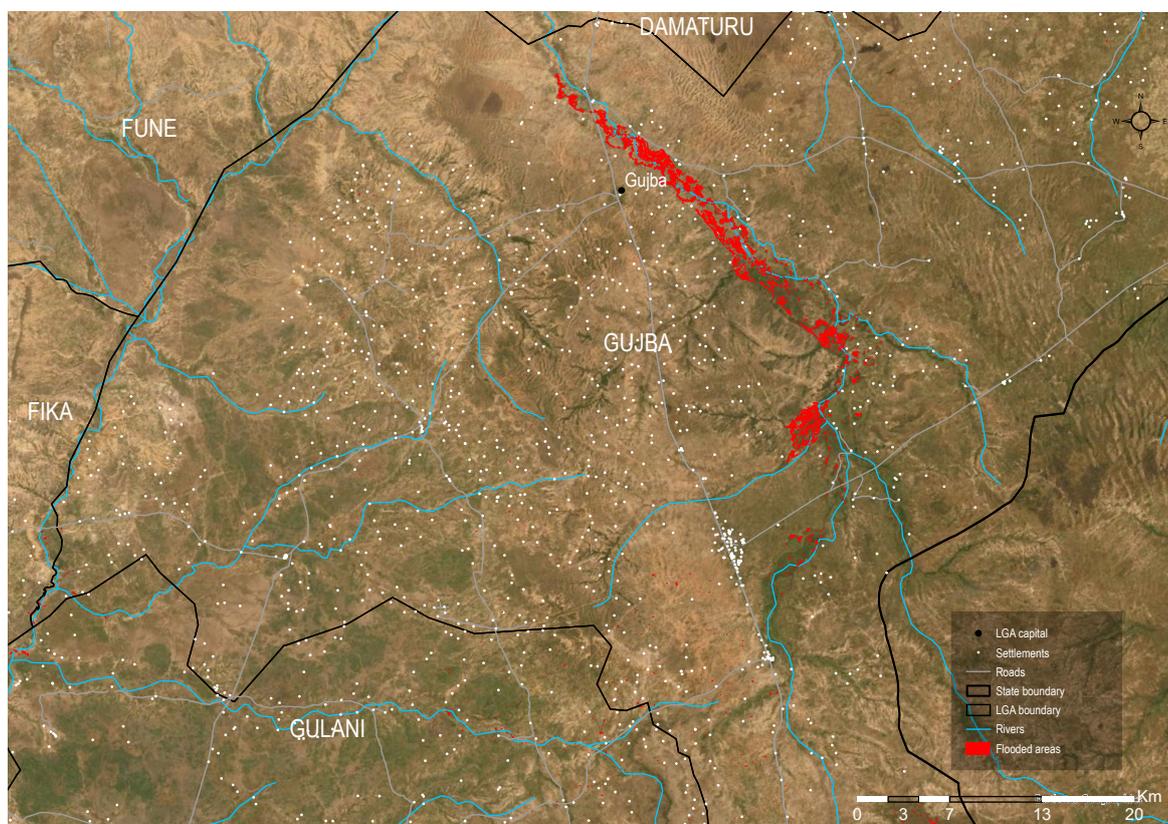
These findings largely correspond to the analysis conducted by UNOSAT for the LGA of Gujba (see their [imagery analysis](#)). However, a few caveats apply, as the computed flooded area is likely to be underestimated. KIs, humanitarian partners and media reports confirmed flooding in zones that aren't visualised on the map.<sup>12</sup>

- First, the threshold at which the difference in backscattering is classified as a flooded area involves discretion and is context-specific. In this case, the threshold chosen is similar to that of UNOSAT and thus corroborated to a certain extent. However, future assessments should examine the effect of different thresholds.

- Second, data was only available for the 18th of July at the time of the analysis. However, based on information from KIs, the peak of flooding occurred on the 19th. Furthermore, due to their dynamic nature, flash floods aren't represented in this analysis. Both data availability and flash flooding may therefore lead to an underestimation of the flooded areas.

The analysis is based on SAR (synthetic aperture radar) measurements and the differences in the reflective signal of a radar target over time. Agricultural surfaces before the flooding show a different backscattering pattern due to their roughness than flooded, water-covered, smoother surfaces after the flooding. If this difference in the radar signal passes a certain threshold, we can assume that these areas were/are probably flooded. For the analysis, the GIS specialists adopted the recommended flood mapping practices by the UN.<sup>13</sup>

The above points are important to note; while the maps do give a good indication of areas that were affected the most, they are not a proxy for the humanitarian impact of flooding in those zones, as other factors including drainage infrastructure, other pre-existing vulnerabilities and flood resilience influence impact levels.

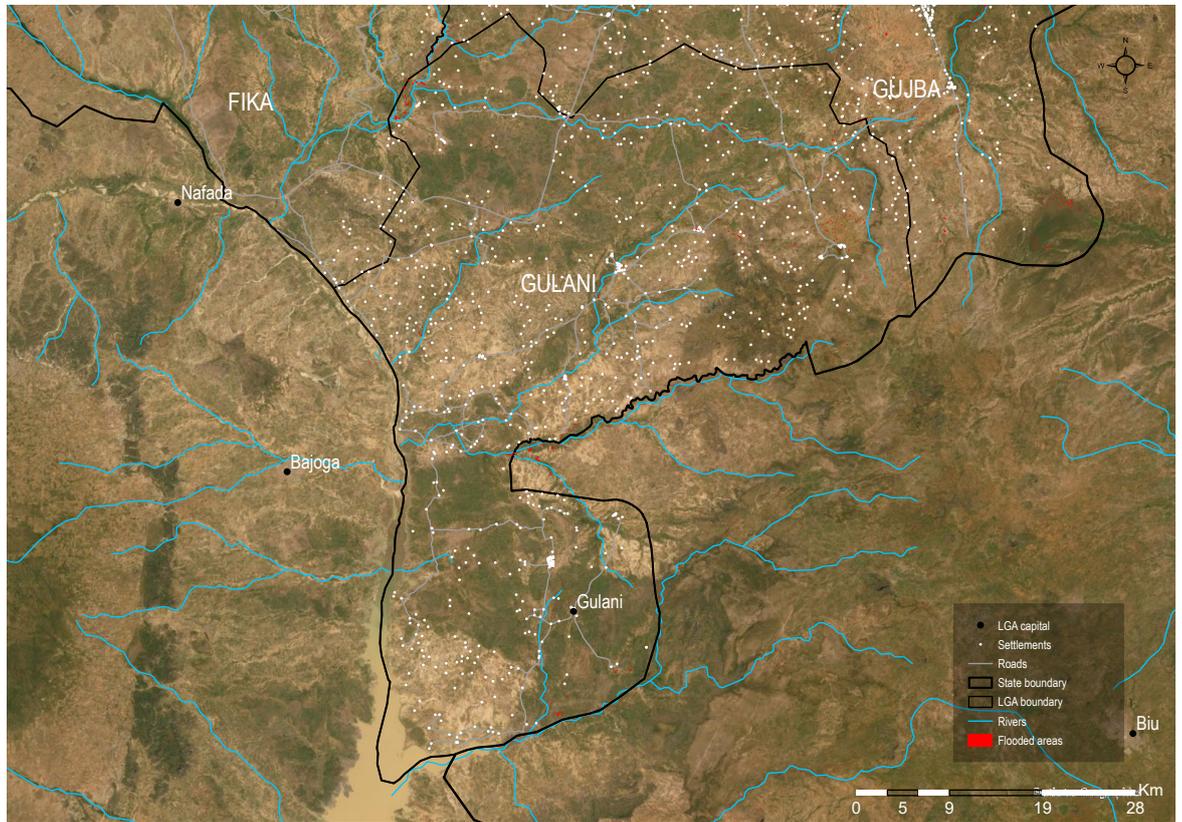


Map 2: Flooded areas in Gujba LGA, 18.7.2022

12. "Flood cuts off Gulani LGA from Yobe – Buni." The Guardian (18 July 2022); European Civil Protection and Humanitarian Aid Operations (ECHO), "ECHO Daily Flash of 19 July 2022," ECHO (19 July 2022).

13. For more information, see UN recommended practices: <https://un-spider.org/advisory-support/recommended-practices/recommended-practice-google-earth-engine-flood-mapping>.

Map 3: Flooded areas in Gulani LGA, 18.7.2022



Map 4: Flooded areas in Tarmua LGA, 18.7.2022

