

Situation Overview: Jonglei State, South Sudan

October - December 2019

REACH An initiative of
IMPACT Initiatives
ACTED and UNOSAT

Introduction

Humanitarian needs remained high across Jonglei State in the fourth quarter of 2019. In particular, flooding limited access to food, livestock and markets in many parts of the state, exacerbating the existing humanitarian crisis.

To inform humanitarian actors working outside formal settlement sites, REACH has conducted assessments of hard-to-reach areas in South Sudan since December 2015. Data is collected on a monthly basis through interviews with key informants (KIs) with knowledge of a settlement and triangulated with focus group discussions (FGDs). Specific information about humanitarian needs in remote areas of the state remained scarce and difficult to obtain, creating barriers for humanitarian programming and the targeting of assistance.

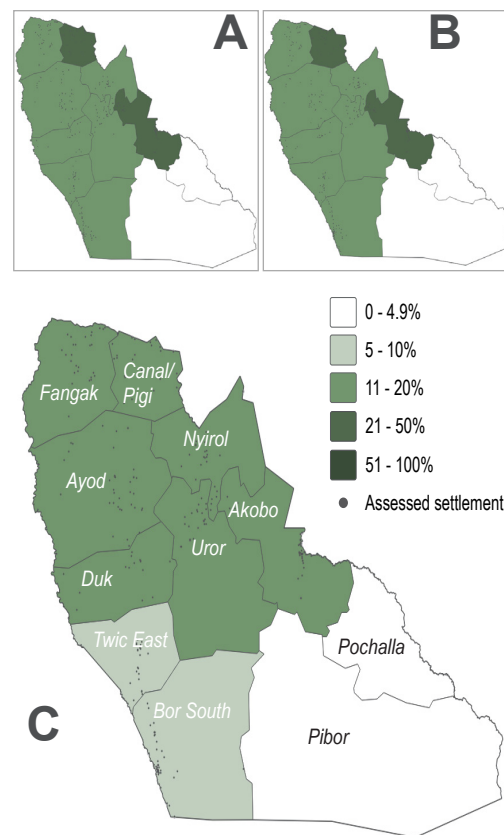
Key Findings

- The proportion of assessed settlements reporting the presence of **internally displaced persons (IDPs)** across Jonglei State increased from 29% in September to 51% in December 2019. This could be related to insecurity caused by the continuation of protracted inter-communal clashes and may also be indicative of a reduction in floodwater levels in some locations,³ allowing flood-

affected populations to travel in search of humanitarian assistance.

- Access to food** across Jonglei remained low but stable with 68% of assessed settlements reporting that most people had adequate access to food in December 2019 (71% in September). However, in many areas of Jonglei, improvements usually associated with the harvest have not materialised. This is concerning moving into the lean season as limited food stocks will begin to deplete, which will probably result in a further deterioration of the food security situation. Projections from the Integrated Food Security Phase Classification (IPC) suggest that the majority of the population of Jonglei will be experiencing either Crisis, Emergency or Catastrophic levels of acute food insecurity in the coming months.⁴ Needs appear to be particularly high in Northern Uror, Southern Nyirol, Akobo West, Duk and Ayod.
- The **protection** situation across Jonglei State appeared to remain relatively stable, with the exception of Duk. The proportion of assessed settlements reporting that most people felt safe most of the time remained unchanged from the previous reporting period (81% in December 2019). However, in Duk, the proportion of assessed settlements reporting most people feeling safe most of the time decreased from 59% in September,

Map 1: Assessment coverage in Jonglei State in October (A), November (B) and December (C), 2019:



of key informant interviews conducted: **1,294**
of assessed settlements: **866**
of counties covered consistently: **9 (of 11)**
of focus group discussions conducted: **14**

METHODOLOGY

To provide an indicative overview of the situation in hard-to-reach areas of Jonglei State, REACH uses primary data from key informants (KIs) who have recently arrived from, recently visited, or receive regular information from a settlement or "Area of Knowledge" (AoK). Information for this report was collected from KIs in Bor Protection of Civilians (PoC) site, Bor Town and Akobo Town in October, November and December 2019. AoK findings are triangulated with focus group discussions (FGDs) with participants who were recently displaced from hard-to-reach areas across Jonglei State.

Monthly interviews on humanitarian needs were conducted using a structured survey tool. After data collection was completed, all data was aggregated at settlement level, and settlements were assigned the modal or most credible response. When no consensus could be found for a settlement, that settlement was not included in reporting.

Only counties with interview coverage of at least 5% of all settlements¹ in a given month were included in analysis. Due to access and operational constraints, the specific settlements assessed within each county each month vary. In order to reduce the likelihood that variations in data are attributable to coverage differences, over time analyses were only conducted for counties with at least 70% consistent payam² coverage over the period.

AoK findings from KIs and FDGs were further triangulated with available secondary sources. More details of the methodology can be found in the [AoK ToRs](#).

1. To calculate the percentage of AoK coverage, the total number of settlements per county is based on OCHA settlement lists in addition to new settlements mapped by KIs reached each month.

2. Payams are the administrative unit at the sub-county level in South Sudan.

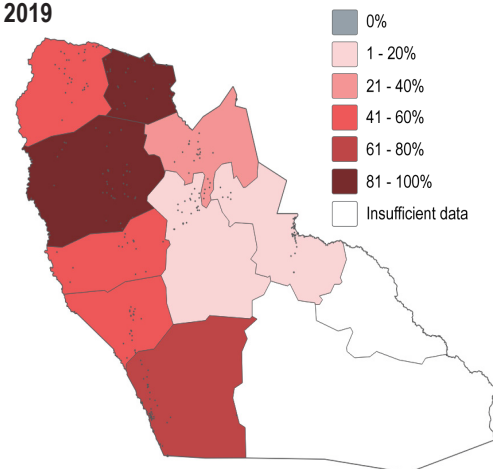
3. FEWS NET, [Food Security Outlook Update](#), December 2019.

4. IPC, [Integrated Food Security Phase Classification, South Sudan](#), September 2019.

to 33% in December 2019. This is likely a result of the annual spike in cattle raiding, which corresponds with the beginning of the dry season, as movement becomes easier.

- **Water, health and sanitation (WASH)** needs remained high. The proportion of assessed settlements reporting that no people were using latrines rose from 43% in September, to 54% in December 2019. Notable increases during this period were reported in assessed settlements in Canal/Pigi (56% to 100%), Duk (52% to 73%) and Akobo (36% to 57%).
- Host community members reportedly continued to live in more permanent **shelter** types⁵ compared to IDPs. In December 2019, 90% of assessed settlements across Jonglei State reported that, in the month prior to data collection, most host community members were living in tukuls⁵ (91% in September). In comparison, just 29% of assessed settlements with IDPs reported the same for IDPs (41% in September 2019).
- Access to **education** appeared to remain stable, with 83% of assessed settlements across Jonglei reporting that education services were available within walking distance in December 2019. Boys reportedly continued to have higher rates of school attendance: 79% of assessed settlements reported that half or more of boys were attending school in December 2019, 40% of assessed settlements reported the same for girls.

Map 2: Proportion of assessed settlements reporting the presence of IDPs in December 2019



Population Movement and Displacement

The proportion of assessed settlements reporting the presence of IDPs in the month prior to data collection increased from 29% in September to 51% in December 2019. The increase could be related to insecurity caused by the continuation of protracted inter-communal clashes and an increase in IDP mobility in some areas as flood waters gradually began to recede towards the end of the reporting quarter.

Flooding-Driven Displacement

Between July and September 2019, flooding reportedly altered the geographic dynamics of internal displacement, severely limiting displacement options in hard-to reach areas as flood waters often cut off movement to further away locations with access to services and

humanitarian assistance. As such, affected populations were often pushed to higher areas either within their own settlements, or to high ground in neighbouring settlements.^{6,7,8,9,10} Therefore, the increase in assessed settlements reporting the presence of IDPs between September and December may not necessarily mean that more people were displaced during this period, but could be indicative of a reduction in floodwater levels in some locations,¹¹ which may be facilitating longer internal population movements, possibly driven by the expectation of humanitarian assistance, moving into the dry season. For example, FGD participants, displaced from Duk to Bor Town,¹² reported that the primary push factor driving their displacement was an inability to access sufficient food, reportedly due to flooding.

Nevertheless, displacement options for many flood-affected populations reportedly remained limited, particularly at the beginning of the reporting quarter. Most of the affected population in Panyang, Duk reportedly remained displaced upon high ground within their original settlement, unable to access sufficient food as flooding destroyed crops, limited access to livestock and prevented local markets from being restocked (see Food Security and Livelihoods section).¹³ Lack of food, coupled with limited mobility reportedly resulted in many of the displaced, including children, suffering from acute malnutrition.

Displacement options also reportedly remained limited in Bor South and Uror. FGD participants, displaced from Baidit and Jalle Payams,¹⁴

reported that most of the local population were forced to construct temporary shelters upon high ground within or near their settlements. In Uror, affected populations reportedly sheltered in communal buildings in higher areas, for example, IDPs in Motot center reportedly sought shelter in Warbek primary school and the Presbyterian Church and, in the settlements of Nyakhor Man-Nyaak and Nyakhor Kamel, IDPs reportedly sheltered in the Boma headquarters.¹⁵

While flood waters have begun to recede in some areas, most riverine and low-lying areas in Jonglei state, especially in Pibor, Duk, Twic East and Akobo, remained submerged as of mid-December.¹⁶ As flooding has limited displacement options from hard-to-reach areas, the full impact of flooding on displacement and on the needs of affected populations is not yet fully understood.

Insecurity-Driven Displacement

Insecurity continued to reportedly drive displacement throughout Jonglei State. Consistent with the previous reporting period, in December 2019, 53% of assessed settlements with IDPs reported insecurity¹⁷ as the main IDP push factor in the month prior to data collection (58% in September). The proportion remained highest in assessed settlements in Ayod (91%), Canal/Pigi (69%) and Fangak (62%), (97%, 64% and 88% of assessed settlements respectively, in September 2019). This could be related to the continuation of protracted inter-communal clashes.

5. Although tukuls and rakoobas are both categorised as semi-permanent forms of shelter, tukuls are constructed with mud bricks and a grass thatch roof while rakoobas are made from poles and plastic tarpaulin. As such, tukuls are considered to be a more permanent type of shelter.

6. FGD with participants from Bor South displaced to Bor Town, July 2019.

7. FGD with participants from Uror displaced to Bor PoC, July 2019.

8. FGD with participants from Fangak displaced to Bor PoC, July 2019.

9. FGD with participants from Ayod displaced to Bor PoC, July 2019.

10. FGD with participants from Nyirol displaced to Bor PoC, August 2019.

11. FEWS NET. [Food Security Outlook Update](#), December 2019.

12. FGD with participants from Duk, displaced to Bor Town, October 2019.

13. Ibid

14. FGD with participants from Bor South displaced to Bor Town, November 2019.

15. FGD with participants from Uror displaced to Bor PoC, November 2019.

16. FEWS NET. [Food Security Outlook Update](#), December 2019.

17. Insecurity incorporates killing, rape, fighting and looting.

18. FGD with participants from Uror displaced to Akobo Town, November 2019.

Legacies of the national-level conflict may have driven displacement by eroding resilience and increasing vulnerability to the effects of flooding. FGD participants, displaced to Akobo Town from Tiam settlement in Uror, reported that armed forces destroyed the majority of shelters in the settlement, first in early 2017 and again in early 2019¹⁸. An inability to rebuild most of the shelters that had previously been destroyed reportedly forced host community members and IDPs, most of whom were displaced to Tiam from Puktap by flooding, to sleep in communal open shelters. FGD participants reported that a majority of these communal shelters were washed away by the recent floods.

Self-reported returns

The proportion of assessed settlements reporting the presence of refugee returnees remained stable between September and December 2019. However, during the same period, there were large decreases in reporting in assessed settlements in Canal/Pigi (76% to 0%) and Ayod (100% to 63%).

REACH Port and Road Monitoring (PRM) in Akobo tracks the movement of South Sudanese households travelling to and returning from Ethiopia, predominantly to refugee camps in the Gambella region. Between September and December 2019, the estimated number of inbound individuals fell from 767²⁰ to 570.²¹ Consistent with PRM findings from September, 53% of households (HHs) reported intending to stay in their final location in South Sudan for less than six months,²² possibly explaining why just 29% of assessed settlements in Akobo County

reported the presence of refugee returnees, in December 2019 (13% in September).

For households returning to South Sudan from Ethiopia in December 2019, the primary reported pull factor was rejoining family and home (68%).²³ This finding is supported by AoK data from December 2019, as 33% of assessed settlements reporting the presence of refugee returnees reported family/home as the main pull factor.

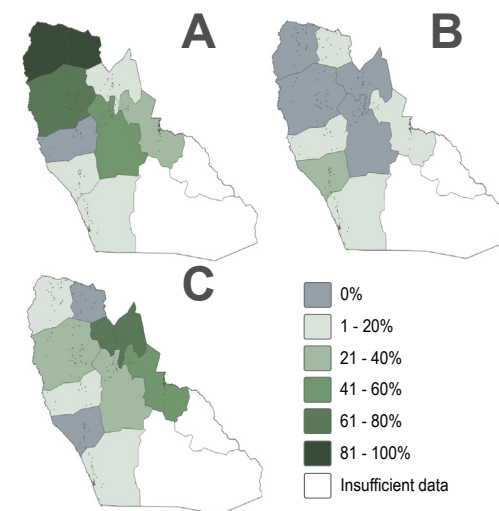
FGD participants, returning from both Jewi²⁴ and Kule 1²⁵ camps, in the Gambella region of Ethiopia, reported perceived security as a key pull factor to return to Akobo. Returnees from Jewi camp reported that tensions between different ethnic groups, caused internal displacement within the refugee camp.²⁶ Insecurity also reportedly limited movement and access to key services in Pinyudo Camp. FGD participants reported that tensions limited access to secondary education as most secondary schools are located in host community settlements.²⁷

Situation in Assessed Settlements

Food Security and Livelihoods (FSL)

Despite the arrival of the harvest, FSL needs remained high across Jonglei. Consistent with the previous reporting period, 68% of assessed settlements reported that most people had adequate access to food in December 2019, (71% in September). However, seasonal improvements in access to food, which may

Map 3: Proportion of assessed settlements reporting cultivation (A), livestock (B) and humanitarian assistance (C) as the main source of food in December 2019



have been expected with the October and November harvest, do not appear to have materialised. This is likely due to the effects of flooding on access to crops, livestock and functional markets. The IPC projects that, between January and April, 61.1% of the population of Jonglei State will experience Crisis (Phase 3), Emergency (Phase 4) or Catastrophe (Phase 5) levels of acute food insecurity, the highest proportion of all states in South Sudan.²⁸ FSL needs appear to be particularly high in Northern Uror, Southern Nyirol, Akobo West, Duk and Ayod.

Reduced harvest yields

Unusually high levels of rainfall and flooding continued to limit harvest yields across Jonglei,

in December 2019. Of the 32% of assessed settlements reporting that most people did not have adequate access to food, 23% reported that this was because flooding had destroyed crops (28% in September). FGD participants displaced from Twic East,²⁹ Duk,³⁰ Nyirol,³¹ Bor South,³² Akobo,³³ Uror,³⁴ Ayod³⁵ and Fangak³⁶ consistently reported that flooding either severely limited harvests in their settlements, or prevented any harvest from taking place altogether.

FGD participants, displaced from Fangak, reported that, in the settlements of Nyareay, Kuer-Choat, Kuer-Nyoak, Paguir, and Diangdiang, flooding washed away all crops, preventing any harvest from taking place. While cultivation was reportedly possible in the settlements of Kuong, Kamel, Kuer-Lual, Kuer-Nyang and Banyjier, farmers reportedly only managed to harvest a quarter of their expected yield.³⁷ In addition, FGD participants displaced from Akobo West³⁸ and Uror³⁹ reported that, although harvests took place, yields were very low and were of a lower quality compared to previous harvests.

This may explain why 74% of assessed settlements (which reported that the recent harvest was worse than the last) attributed lower yields to flooding. This could explain why the proportion of assessed settlements reporting cultivation as the main source of food for most people remained consistent between September (36%) and December (43%), despite the harvest taking place. The proportion of assessed settlements reporting

19. *ibid*

20. [REACH Port and Road Monitoring, Akobo, September 2019.](#)

21. [REACH Port and Road Monitoring, Akobo, December 2019.](#)

22. *ibid*

23. *ibid*

24. FGD with participants displaced from Jewi Refugee Camp to Akobo Town, October

2019.

25. FGD with participants displaced from Kule 1 Refugee Camp to Akobo Town, December 2019.

26. FGD with participants displaced from Jewi Refugee Camp to Akobo Town, October 2019.

27. *ibid*

28. IPC. [Integrated Food Security Phase Classification, South Sudan.](#)

September 2019

29. FGD with participants from Twic East displaced to Bor Town, October 2019.

30. FGD with participants from Duk displaced to Bor Town, October 2019.

31. FGD with participants from Nyirol displaced to Akobo Town, October 2019.

32. FGD with participants from Bor South displaced to Bor Town, November 2019.

33. FGD with participants from Akobo West displaced to Akobo Town, November 2019.

cultivation as the main source of food for most people remained particularly low in Duk (0%), Bor South (12%), Nyirol (13%), Twic East (19%) and Akobo (23%).

Access to livestock

Flooding also reduced access to livestock, reportedly limiting the availability of grazing pastures for cattle and heightening the vulnerability of livestock to disease. According to the Food and Agriculture Organisation (FAO), severe rainfall across South Sudan has put livestock at high risk of contracting the deadly Rift Valley Fever (RVF).⁴⁰ This may explain why, in the month prior to data collection, 36% of assessed settlements across Jonglei State reported the occurrence of a disease outbreak which resulted in the death of livestock, in December 2019. Reporting of disease outbreaks were particularly high in assessed settlements in Fangak (70%), Canal/Pigi (58%), Nyirol (50%) and Akobo (49%). FGD participants, displaced from Bor South,⁴¹ Akobo,⁴² Uror,⁴³ Ayod,⁴⁴ and Twic East,⁴⁵ all reported the occurrence of livestock disease outbreaks. In addition, FGD participants, displaced from Uror⁴⁶ reported that affected populations have no access to medicine or vaccinations for their livestock.

The effect of limited grazing pastures on the vulnerability of livestock to disease was further reflected in FGDs with participants displaced from Uror⁴⁷ and Ayod⁴⁸ who reported that grazing pastures had been waterlogged since June, limiting the primary source of food for cattle and resulting in malnutrition. Limited access to

grazing pastures and associated malnutrition, often a result of flooding, has reportedly altered seasonal cattle migration patterns according to FGD participants displaced from Twic East⁴⁹, Bor South⁵⁰ and Nyirol.⁵¹ In Bor South, while cattle would usually remain in cattle camps near to the settlement, many farmers from Kolnyang, Ayidi and Makuach had to migrate with their livestock to Gemmeiza in Central Equatoria, while farmers from Baidit and Jalle payams have reportedly migrated to the Achiulbaa area of Bor South, in search of fertile grazing grounds.⁵² New cattle migration routes have reportedly resulted in the overgrazing of pastures, creating tensions between cattle keepers and host communities.⁵³

Market access

Access to markets also appears to have been limited by flooding. Of assessed settlements reporting the presence of a functional market within walking distance in December 2019, 81% reported the presence of an access barrier (74% in September). The primary reported barriers were market distance (57%), high prices (55%), and the unavailability of items (46%). Furthermore, the proportion of assessed settlements reporting flooding as a barrier to market access was particularly high in October (39% of assessed settlements), although decreases in reporting were registered in November (26% of assessed settlements) and December (19%), as flood waters receded in some parts of the state. FGD participants from Baidit and Jalle Payams of Bor South reported that some residents had to walk for two days

to access food in Marol market in Bor town as flooding severely limited access to food in their settlements.⁵⁴

Even in settlements where there was still physical access to markets, flooding reportedly destroyed roads and limited the supply of local produce. High barriers to market access are particularly concerning given the reportedly severe effects of flooding on harvest yields and access to livestock, as this might increase reliance on markets as a source of food. According to FGD participants displaced from Ayod⁵⁵ and Twic East,⁵⁶ flooding has severely affected market supply chains, reportedly pushing up the prices of essential goods. Between September and November, the price of a 50kg bag of white sorghum in Twic East reportedly increased from 8,000 South Sudanese Pound (SSP) to 10,800 SSP.⁵⁷ FGD participants, displaced from Duk,⁵⁸ reported that many shops have closed as there are no items

available to sell, reportedly because flooding has cut off road access, making deliveries of goods impossible.

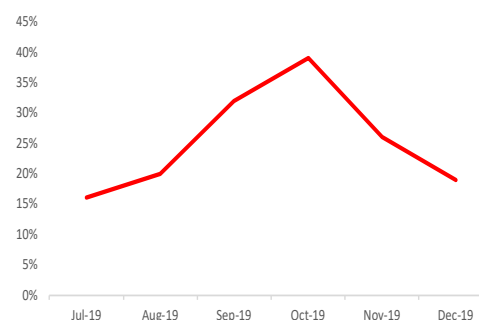
High prices are particularly concerning due to a reported increase in market reliance in some counties. Despite very high proportions of assessed settlements reporting the presence of barriers to market access in December 2019 (93% in both Duk and Bor South), the proportion of assessed settlements reporting markets as the main source of food for most people increased from 22% to 40% in Duk and from 17% to 32% in Bor South between September and December 2019.

High reported market prices, coupled with increased market reliance, could be linked to the relatively high proportions of assessed settlements in Duk and Bor South reporting asset liquidation as a coping strategy, in December 2019 (100% of assessed settlements in both counties reported selling home assets and 73% and 56% reported selling livestock). Such coping strategies can have long-term negative consequences, as they erode resilience to future shocks (see coping strategies section).

Humanitarian assistance

The proportion of assessed settlements across Jonglei State reporting humanitarian assistance as the main source of food for most people remained stable between September (25%) and December (21%). However, during this period, there were substantial decreases in Uror (100% to 38%), Nyirol (100% to 67%) and Fangak (36% to 7%). Reductions

Figure 1: Proportion of assessed settlements across Jonglei State reporting flooding as a barrier to market access for most people between July and December 2019



34. FGD with participants from Uror displaced to Akobo Town November 2019.

35. FGD with participants from Ayod displaced to Bor PoC, November 2019.

36. FGD with participants from Fangak displaced to Bor PoC, December 2019.

37. *ibid*

38. FGD with participants from Akobo West displaced to Akobo Town, November 2019.

39. FGD with participants from Uror displaced to Bor PoC, November 2019.

40. FAO. [Food Chain Crisis. Early Warning Bulletin](#). December 2019.

41. FGD with participants from Bor South displaced to Bor Town, November 2019.

42. FGD with participants from Akobo West displaced to Akobo Town, November 2019.

43. FGD with participants from Uror displaced to Akobo Town, November 2019.

44. FGD with participants from Ayod displaced to Bor PoC, November 2019.

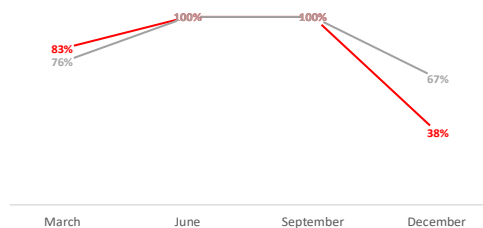
45. FGD with participants from Twic East displaced to Bor Town, November 2019.

in reporting could be related to reduced humanitarian access caused by flooding which is particularly concerning given the reported long-term dependence of assessed settlements on humanitarian assistance, particularly in Urur and Nyirol, and the negative effects of flooding on alternative sources of food, such as cultivation and livestock (discussed in the FSL section). FGD participants displaced from Urur,⁵⁹ reported that the only source of food in their settlements is humanitarian food assistance, due to the failure of the harvest and the inability of livestock to produce milk due to malnutrition. These reports raise concerns regarding the food security of flood-affected populations in hard-to-reach locations.

Coping Strategies

Reflective of the high levels of food insecurity, people in Jonglei continued to adopt a range of coping strategies. In December, 65% of assessed settlements reported using livelihood coping strategies in the month prior to data collection, while 46% reportedly used food

Figure 2: Proportion of assessed settlements reporting humanitarian assistance as the main source of food for most people between March and December 2019



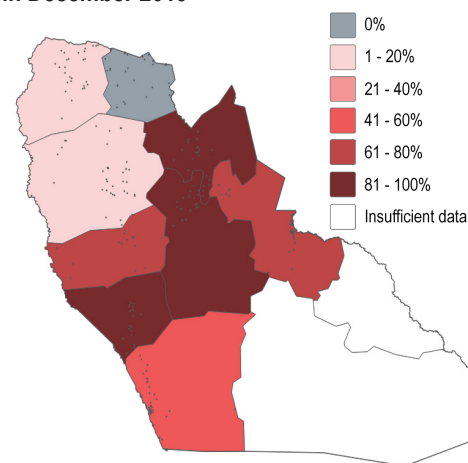
consumption coping strategies (71% and 42% in September, respectively).

Consistent with the previous reporting period, the most frequently reported food consumption coping strategies across Jonglei (in December) were limiting portion sizes (41% of assessed settlements) and consuming less expensive food (38%). The reported use of these specific coping strategies might be a consequence of increased market prices, limiting access to bought goods.

Food consumption coping strategies were frequently used in conjunction with livelihood coping strategies. All assessed settlements in Duk, Twic East and Bor South reported the implementation of both in December 2019. The most commonly reported livelihood coping strategies in assessed settlements across Jonglei were borrowing money (56%), and borrowing food (55%), (60% and 56% respectively, in September 2019). Consistent with the previous reporting period, 83% of assessed settlements in Fangak reported that, in the month prior to data collection, the consumption of wild foods had caused sickness in their settlement (86% in September 2019). As such, wild food consumption in Fangak, may be considered as a negative coping mechanism because consumption often has a reportedly negative impact on health, possibly suggesting that other coping strategies have been exhausted already.

Many assessed settlements also continued to report the use of extreme food consumption coping strategies in response to limited access

Map 4: Proportion of assessed settlements reporting selling livestock as a coping strategy in December 2019



to food. For example, in December 2019, 26% of assessed settlements reported that adults did not eat (19% in September 2019), while 13% of assessed settlements reported that residents had reduced the number of meals eaten in a day (34% in September). In Duk, the proportion of assessed settlements reporting using extreme food consumption strategies remained particularly high (47%) in December 2019 (56% in September). FGD participants, displaced from Nyirol⁶⁰ reported that most adults were consuming just one meal per day and that, occasionally, only children eat. The same was reported by FGD participants displaced from Twic East.⁶¹

In response to limited access to food, some residents in assessed settlements were forced to rely on negative livelihood coping strategies, in particular, selling home assets (55% of

assessed settlements) and selling livestock (48%) in December 2019. FGD participants displaced from both Urur⁶² and Akobo⁶³ reported that flooding forced many residents to sell an increased number of livestock, in order to access food, particularly compared to previous years. However, FGD participants displaced from Ayod reported that livestock disease severely limited the market for cattle, as people are unwilling to invest in sick and malnourished livestock, often limiting the possibility of flood-affected residents to employ this coping strategy.⁶⁴

Protection

The protection situation across Jonglei State appeared to remain relatively stable, with the exception of Duk. The proportion of assessed settlements reporting that most people felt safe most of the time remained unchanged from the previous reporting period (81% in December 2019). However, in Duk, the proportion of assessed settlements reporting that most people felt safe most of the time decreased from 59% in September, to 33% in December 2019. This corresponds with a simultaneous increase in the proportion of assessed settlements reporting the occurrence of a conflict which resulted in the death of a civilian in the month prior to data collection (from 22% of assessed settlements in September to 33% in December 2019). This is likely a result of the annual spike in cattle raiding which corresponds with the beginning of the dry season, as movement becomes easier.

FGD participants displaced from Duk reported

52. FGD with participants from Bor South displaced to Bor Town, November 2019.

53. *ibid*

54. *ibid*

55. FGD with participants from Ayod displaced to Bor PoC, November 2019.

56. FGD with participants from Twic East displaced to Bor Town, November 2019.

57. *ibid*

58. FGD with participants from Duk displaced to Bor Town, October 2019.

59. FGD with participants from Urur displaced to Akobo Town, November 2019.

60. FGD with participants from Nyirol to Akobo Town, October 2019.

61. FGD with participants from Twic East displaced to Bor Town, November 2019.

62. FGD with participants from Urur displaced to Akobo Town, December 2019.

63. FGD with participants from Akobo West displaced to Akobo Town, November 2019.

64. FGD with participants from Ayod displaced to Bor PoC, November 2019.

65. FGD with participants from Duk displaced to Bor Town, October 2019.

that armed cattle raiders were a primary cause of death in Panyang Payam.⁶⁵ This may explain why 47% of assessed settlements in Duk reported cattle raiding as the main protection concern for men (up 21% since September), in the month prior to data collection. In addition, between September and December 2019, there was a 40 percentage point increase in the proportion of assessed settlements reporting abduction as the main protection concern for boys in Duk in the month prior to data collection, (7% in September 2019).

The proportion of assessed settlements reporting any protection concerns for women (59%) and girls (49%) remained higher than for men (38%) and boys (29%), consistent with the previous reporting period. Assessed settlements across Jonglei State continued to report domestic violence as the main protection concern for women (28%) in December 2019 (18% in September). The proportion reporting this remained highest in assessed settlements in Bor South (54%), Twic East (48%), Duk (47%) and Ayod (45%), (54%, 48%, 47% and 45% of assessed settlements, respectively, in September 2019). Early marriage remained the main protection concern for girls (21%) in December 2019, (12% in September). There were particularly large increases in the proportion of assessed settlements reporting early marriage as the main protection concern for girls in Duk (52% to 80%), Bor South (19% to 44%) and Canal/Pigi (0% to 21%).

In addition, concerns of early marriage continued to reportedly limit access to education for girls.

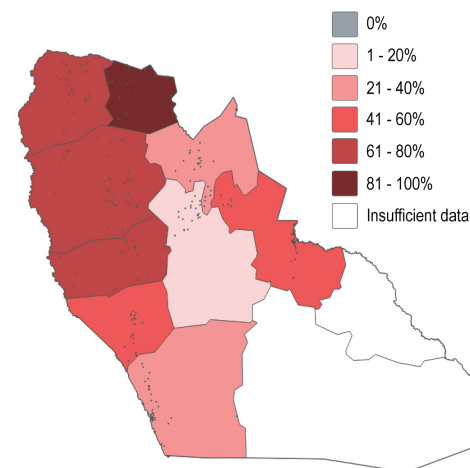
FGD participants, displaced from Fangak reported that fear of early marriage often meant that girls were unwilling to enter public places, including schools.⁶⁶ This possibly explains why 20% of assessed settlements reported early marriage as the main barrier to education for girls in December 2019 (more in the education section).

Water, Sanitation and Hygiene (WASH) and Health

There was an increase in the proportion of assessed settlements reporting that no people were using latrines in the month prior to data collection (from 43% in September to 54% in December 2019). During this period, there were particularly notable increases in assessed settlements in Canal/Pigi (56% to 100%), Duk (52% to 73%) and Akobo (36% to 57%). Consistent with findings from September, 80% of assessed settlements reporting latrine use reported that either half or less of the individuals in the settlement were using latrines in the month prior to data collection. Low reported latrine usage across Jonglei could be related to flooding. The primary reported reason for people not using latrines was that there were no latrines available (42% of assessed settlements). FGD participants displaced from Duk,⁶⁷ Nyirol,⁶⁸ Baidit and Jalle payams⁶⁹ and Uror⁷⁰ consistently reported that latrines had been destroyed by flood water.

Unchanged from the previous reporting period, 57% of assessed settlements reported boreholes as the main source of drinking water in the month prior to data collection. However,

Map 5: Proportion of assessed settlements reporting that no people were using a latrine in December 2019



access to boreholes varied across Jonglei. None of the assessed settlements in Canal/Pigi and just 37% of assessed settlements in Fangak reported the presence of any boreholes. In these counties, settlements reportedly relied on rivers as a primary source of drinking water (100% and 83% of assessed settlements in Fangak and Canal/Pigi, respectively). FGD participants, displaced from Fangak, reported that flooding compounded the existing shortage of boreholes, with many people having to rely on flood and river water⁷¹.

Restrictions in borehole availability and access appeared to be a cause of health related issues throughout the reporting period. In Canal/Pigi, 96% of assessed settlements reported that animals were using, or were kept close to, the same water source that was being used by

the community, in December 2019. This may explain why 50% of assessed settlements in Canal/Pigi reported waterborne diseases as the main health problem for people in the month prior to data collection. In addition, FGD participants, displaced from Fangak, reported a lack of clean drinking water and waterborne diseases as the main health risks faced by the community.⁷² This may explain why Fangak had the highest proportion of assessed settlements (90%) reporting that the primary source of drinking water (rivers) was a cause of sickness in the month prior to data collection.

Shelter and Non-Food Items (NFIs)

Host community members reportedly continued to live in more permanent shelter types compared to IDPs. In December 2019, 90% of assessed settlements across Jonglei State reported that, in the month prior to data collection, most host community members were living in tukuls (91% in September). In comparison, just 29% of assessed settlements with IDPs reported tukuls as the main shelter type for IDPs (41% in September 2019). Instead, 52% of assessed settlements reported that most IDPs were living in semi-permanent shelter types (37% in September).

The reported worsening of IDP shelter conditions is possibly a consequence of flooding. According to FGD participants displaced from Nyirol,⁷³ Duk,⁷⁴ Baidit and Jalle Payams in Bor South,⁷⁵ and Uror,⁷⁶ flooding destroyed shelters and caused internal displacement while simultaneously limiting access to construction materials. For example, FGD participants

66. FGD with participants from Fangak displaced to Bor PoC, December 2019.

67. FGD with participants from Duk displaced to Bor Town, October 2019.

68. FGD with participants from Nyirol to Akobo Town, November 2019.

69. FGD with participants from Bor South displaced to Bor Town, November 2019.

70. FGD with participants from Uror displaced to Bor PoC, November 2019.

71. FGD with participants from Fangak displaced to Bor PoC, December 2019.

72. FGD with participants from Fangak displaced to Bor PoC, December 2019.

73. FGD with participants from Nyirol to Akobo Town, October 2019.

74. FGD with participants from Duk displaced to Bor Town, October 2019.

75. FGD with participants from Bor South displaced to Bor Town, November 2019.

76. FGD with participants from Uror displaced to Akobo Town, December 2019.

77. FGD with participants from Duk displaced to Bor Town, October 2019.

displaced from Duk reported that flood water washed away tukuls and rakoobas and the reported unavailability of construction materials, including grass, poles, plastic sheets and ropes limited the ability of displaced populations to construct permanent shelters.⁷⁷

Flooding also reportedly destroyed or washed away many of the affected populations' NFIs.^{78,79,80} In addition, just 13% of assessed settlements reported that there had been an NFI distribution in the three months prior to data collection (28% in September 2019). Of the assessed settlements reporting the presence of IDPs, mosquito nets (23%), plastic sheets (16%), cooking pots (15%) and blankets (10%) were reported as the main IDP NFI needs in December 2019. The reported lack of mosquito nets at a time of high mosquito and malaria prevalence,⁸¹ due to sitting floodwater, raises health concerns and may explain why 40% of assessed settlements across Jonglei State reported malaria as the main health problem in December 2019.

Education

Access to education appeared to remain stable, with 83% of assessed settlements across Jonglei reporting that education services were available within walking distance in December 2019. Canal/Pigi continued to have the lowest proportion of assessed settlements reporting access to educational services (25% of assessed settlements in December). Of the assessed settlements reporting that educational services were not accessible, the primary reported reasons were that school teachers

had been displaced and that there were no facilities within walking distance (37% and 19% of assessed settlements respectively), both of which may be consequences of flooding.

Of the assessed settlements reporting the presence of educational facilities within walking distance, 79% reported that half or more of boys between the ages of 6 and 17 were attending school in December 2019, up from 57% in September. Girls reportedly continued to face higher barriers to accessing education with the proportion of assessed settlements reporting the same for girls remaining low but stable during the same period (40% of assessed settlements in December 2019).

Consistent with findings since December 2018, the primary reported reasons for girls not attending school in December 2019 continued to be the need to work in the home (25% of assessed settlements) and concerns regarding early marriage (20%). However, barriers to educational access for boys appear to be

Figure 3: Proportion of assessed settlements reporting that half or more of boys and girls between the ages of 6 and 17 were attending school between March and December 2019

	March 2019	June 2019	September 2019	December 2019
Boys	88%	96%	57%	79%
Girls	52%	61%	37%	40%

imposed by the seasonal pressures of food production. FGD participants from Fangak reported that, while many boys do attend school, boys are expected to take the lead in caring for livestock.⁸² This may explain why 40% of assessed settlements reported that the primary reason for boys not attending school in December 2019 was the need to work outside the home, up from 29% in September.

Conclusion

Overall, the situation across Jonglei State appears to have remained stable between reporting quarters. Deteriorations in flood-affected areas have been offset by slight harvest related improvements in other areas of the state. However, in many areas of Jonglei, improvements usually associated with the harvest have not materialised, indicating increased vulnerability moving into the lean season as limited food stocks will deplete, likely resulting in a further deterioration of the food security situation.

Severe flooding across Jonglei State has, in many areas, continued to limit access to crops, livestock and functional markets, suggesting that access to food in the coming months may be contingent upon humanitarian assistance. Reductions in flood waters in some locations appear to have increased the mobility of some displaced populations in hard-to-reach areas, however many settlements remain cut off by flooding and therefore continue to be extremely vulnerable. As such, the true extent of flooding on food security and livelihoods across Jonglei

State is still yet to be fully understood, however projections from the IPC suggest that the majority of the population of Jonglei will be experiencing either Crisis, Emergency or Catastrophic levels of acute food insecurity in the coming months.⁸³ This raises important questions around the role of humanitarian assistance, in areas where needs appear to be particularly high, such as Northern Urur, Southern Nyirol, Akobo West, Duk and Ayod.

About REACH Initiative

REACH facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. The methodologies used by REACH include primary data collection and in-depth analysis, and all activities are conducted through inter-agency aid coordination mechanisms. REACH is a joint initiative of IMPACT Initiatives, ACTED and the United Nations Institute for Training and Research - Operational Satellite Applications Programme (UNITAR- UNOSAT).

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78. FGD with participants from Akobo West displaced to Akobo Town, November 2019.
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80. FGD with participants from Urur displaced to Bor PoC, November 2019.
81. WHO. [Malaria](#). December 2019.
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