Food Security and Livelihoods County Profiles

South Sudan Food Security Crisis - Upper Nile State

May-July 2017

Background and Methodology

As of June 2017, an estimated 45,000 South Sudanese were facing catastrophic humanitarian conditions and 1.7 million experienced emergency levels of food insecurity, according to the Integrated Food Security Phase Classification (IPC).[1] With the aim of facilitating a better understanding of the food security and livelihoods situation in South Sudan and to inform the IPC September 2017 Update, REACH has developed food security and livelihood (FSL) profiles of counties where settlements have been assessed using the Area of Knowledge (AoK) methodology. REACH employs its remote AoK monitoring methodology to collect relevant information in hard-to-reach and inaccessible areas to inform humanitarian planning and interventions outside formal settlement sites.

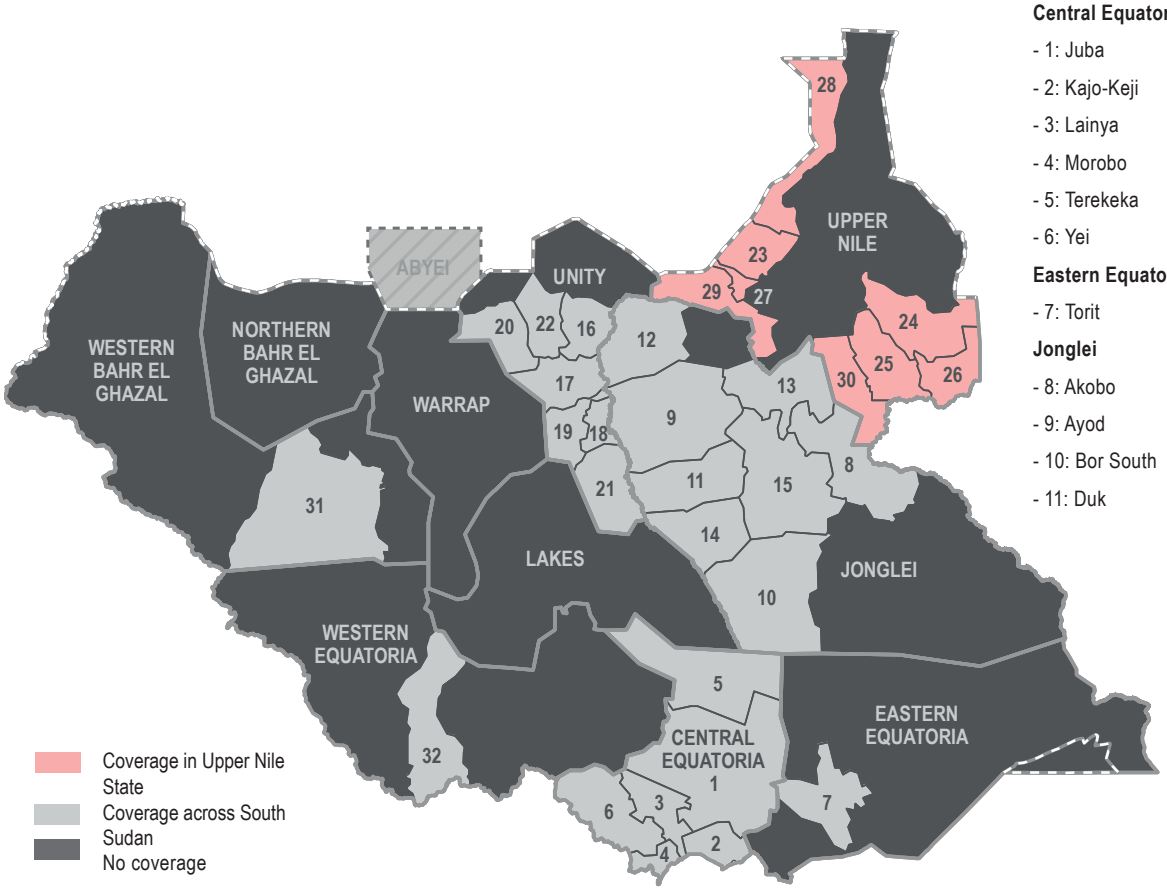
Using the AoK methodology, REACH remotely monitors needs and access to services in Greater Upper Nile, Greater Equatoria and Western Bahr el Ghazal. The information presented in these FSL profiles refers to the settlements level rather than the household level and is collected through interviews with the following typology of Key Informants (KIs):

- KIs who are newly arrived internally displaced persons (IDPs) who have left a remote settlement in the last month
- KIs who have either been in contact with someone living in, or who have been to a remote settlement in the last month (traders, migrants, family members etc.)
- KIs who are remaining in remote settlements, contacted through phone

Findings presented are based on primary data collected from 460 KIs covering 186 settlements in 8 counties in Upper Nile State from May to July 2017. Unless otherwise stated, figures in the profiles refer to averages across May, June and July 2017. County profiles for other states are available on the REACH Resource Centre.

Data from counties where less than 5% of settlements have been assessed across the May to July period have not been included in these profiles. Further, AoK data are not collected on the basis of random sampling, and therefore trends presented in these profiles, unless stated otherwise, should be taken as indicative rather than representative of the geographic areas assessed.

Map 1: County coverage, May - July 2017



Central Equatoria
- 1: Juba
- 2: Kajo-Keji
- 3: Lainya
- 4: Morobo
- 5: Terekeka
- 6: Yei

Eastern Equatoria
- 7: Torit

Jonglei
- 8: Akobo
- 9: Ayod
- 10: Bor South
- 11: Duk
- 12: Fangak
- 13: Nyirol
- 14: Twic East
- 15: Uror

Unity
- 16: Guit
- 17: Koch
- 18: Leer
- 19: Mayendit
- 20: Mayom
- 21: Panyijiar
- 22: Rubkona

Upper Nile
- 23: Fashoda
- 24: Longochuk
- 25: Luakpiny/Nasir
- 26: Maiwut
- 27: Malakal
- 28: Manyo
- 29: Panyikang
- 30: Ulang

Western Bahr el Ghazal
- 31: Wau

Western Equatoria
- 32: Yambio

Interactive: please click on county name to go directly to the respective FSL profile.

References:

IPC South Sudan, Communication Summary, May 2017.

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Fashoda County: Food Security and Livelihoods Profile

Upper Nile State, South Sudan, May-July 2017

of KI interviews conducted: 72
# of assessed settlements: 37
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Pre-crisis livelihood sources in Fashoda County, traditionally an agro-pastoralist area, were small scale cultivation sorghum and maize and, to a lesser extent, the rearing of livestock. Fashoda is located in a semi-arid climate zone, which largely limited the possibilities to cultivate drought resistant crops. Fashoda is bordered by the White Nile, which made fishing central to households' (HHs) traditional livelihoods.[1] During the lean season, HHs typically conducted small scale fishing, planted crops around the homestead and foraged for wild foods to supplement food sources.[2]

Hazards (Shocks)

- Fighting in neighbouring Malakal at the end of January drove thousands of people to seek safety in settlements of Fashoda County, and primarily Aburoc.[3] Further fighting in Kodok at the end of April/early May led to more internal displacement within Fashoda. Reflective of this, during the reporting period 94% of assessed settlements reported that shelters were partially or totally destroyed.

Vulnerability (Resilience)

Insecurity in and around Fashoda County limited access to livelihoods following the clashes in May (Figure 1). Agriculture began to recover in the months that followed. As the proportion of assessed settlements reporting access to land increased (38% in May to 81% in July), so did the proportion reporting subsistence agriculture as a livelihood source (29% in May to 73% in July).

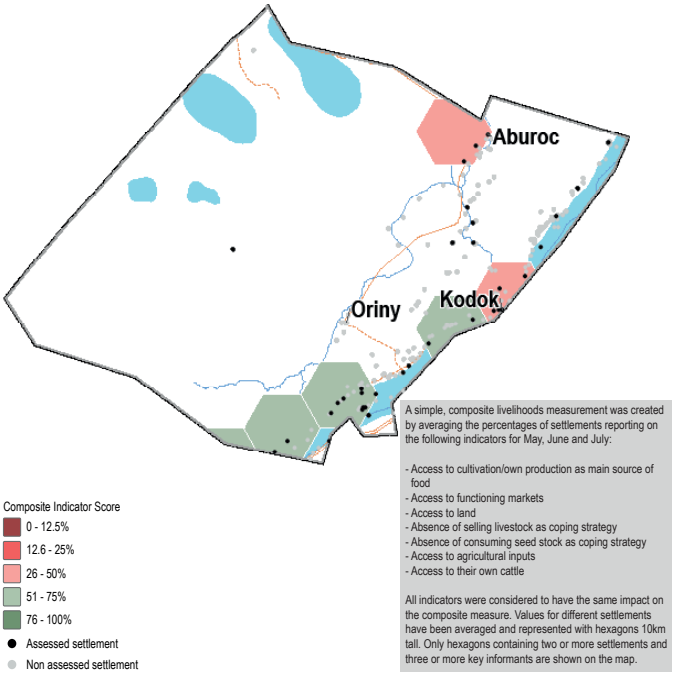
While fishing normally diminishes during the rainy season as the White Nile swells from rainfall, HHs usually continue smaller scale fishing in ponds and swamps. However, the proportion of assessed settlements that reported fishing and hunting as a livelihood source (19%) was low. This suggests fishing as a livelihood source was inhibited both by the prevention of access to waterways and fishing gear being stolen during fighting.

Livestock rearing as a livelihood source and livestock sales as a coping strategy were utilised by small proportions of assessed settlements. Improved access to livestock (80% of assessed settlements in May to all in July) may have facilitated livestock sales. Over the reporting period more assessed settlements reported selling livestock as a coping strategy (Figure 2), and the proportion of assessed settlements reporting owning livestock decreased (50% in May to 20% in July).

Figure 1: Top three sources of livelihood in assessed settlements[4]

Subsistence farming	52%
Fishing and hunting[5]	19%
Livestock	11%

Map 1: Level of livelihood vulnerability



Finally access to a functioning market continued to decline throughout the reporting period, from 50% of assessed settlements in May to 25% in July. This was potentially the result of insecurity along supply routes from Sudan and inflation. Reported increases in the price of sorghum made it harder for HHs to afford this staple and further preventing HHs from relying on market commodities.[6]

Coping Strategies

Across the reporting period, assessed settlements without adequate access to food increasingly adopted coping strategies (Figure 2). There was a heavy turn turning toward gathering wild food as a coping strategy, which indicated that food stocks from the previous harvest were largely depleted. The combined impact of the depletion of reserves and the diminution of available livelihoods also prompted HHs to resort to strategies to be able to afford food sold at the market, such as begging. Moreover, a sharp increase was also noted in the proportion of assessed settlements reportedly consuming seed stocks.

No assessed settlement reported access to humanitarian assistance over the period outside of Aburoc and Kodok, suggesting that the impact of distributions in these areas has not trickled down to surrounding communities whose access to crops reserves, alternative incomes or markets is limited.

Figure 2: Top four coping strategies in assessed settlements without adequate access to food[4]

	May	June	July
Gathering wild food	17%	50%	67%
Borrowing food from neighbours	0%	9%	40%
Sending family members to beg	0%	27%	27%
Selling livestock	0%	11%	13%

Food Security Overview

Food Availability and Access

From May to July, the proportion of assessed settlements reporting adequate access to food dropped from 75% to none. Insecurity was the main reason reported in assessed settlements for inadequate access to food (46% unsafe to access land and 33% fighting destroyed crops). However, despite insecurity 56% of assessed settlements reported cultivation as the main source of food. This may be due to the start of the rainy season, which revitalised grazing fodder and small crops around the HH. Other assessed settlements reported foraging (25%) and family and friends (13%) as the main sources of food.

The increasing proportion of assessed settlements that reported inadequate access to food adopted numerous food consumption coping strategies (Figure 3). These strategies, combined with the increasing collection of wild food suggest that inadequate amounts of food, often with poor nutritional value, were consumed.

Conversely, the assessed settlements that reported adequate access to food increasingly consumed a larger variety of food from May to June (see Figure 4).[7] This increase may be attributed to increased access to livestock which provided dairy products and meat. However, as no assessed settlement reported adequate access to food in July, this indicated that the improved consumption of a more diverse diet was short-lived.

Finally, only 9% of assessed settlements reported access to a borehole within 30 minutes. Limited access to clean water, combined with poor nutritional uptake, increases the likelihood of water-borne diseases.

Stability of Food Access

The current level of adequate access to food may improve as sorghum crops become available in August. The sharp increase in assessed settlements reporting engaging in subsistence agriculture coupled with sufficient rainfall and the increase of agricultural tools being with the owner (from no assessed settlement in May to 63% in July) should support good harvests.[9]

What may impact harvests is the Fall Army Worm (FAW). Although the Food and Agriculture Organization (FAO) is currently monitoring the presence of the FAW in Fashoda, the scale of the FAW is not yet known. However, preliminary reports suggest that potential crop destruction will be limited.[10]

In addition, insecurity may remain a concern as reports suggest a continued presence of armed actors and the movement of people towards and from IDP sites in Fashoda.[11] Thus market access and various livelihoods sources such as fishing may continue to be inhibited. The low proportion of assessed settlements reportedly fishing after fighting stopped in May suggested that the general climate of insecurity due to the presence of armed actors and the associated risks was enough to limit livelihood sources.

Despite the high humanitarian presence in Aburoc, in June and July only 6% of assessed settlements reported access to humanitarian assistance which indicates distributions are highly concentrated. Food distribution is planned in August for Aburoc, and over time such localized distributions could increasingly become a displacement pull factor for neighbouring settlements if adequate access to food does not improve in Fashoda.[12]

Figure 3: Top food consumption coping strategies reported in assessed settlements without adequate access to food[4]

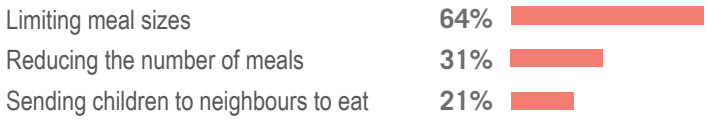
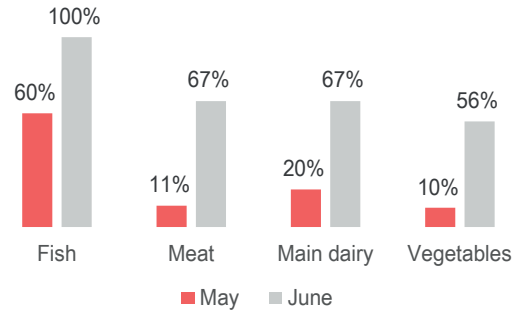
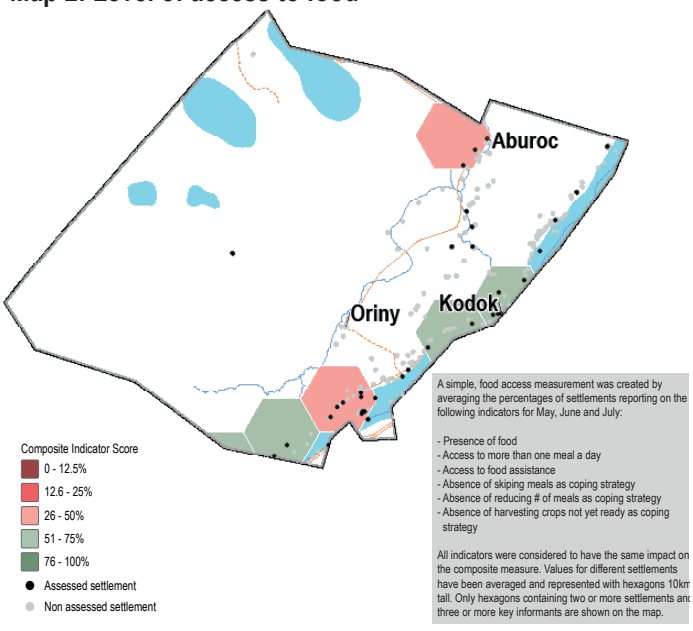


Figure 4: Food groups consumed in assessed settlements reporting adequate access to food[4 8]



Map 2: Level of access to food



Endnotes

1. Fewsnet. South Sudan Livelihoods Zones and Descriptions. August 2013.
2. Ibid.
3. DTM. Wau Shulluk, Malakal County. Biometric registration update. January 2017.
4. Participants could choose multiple responses.
5. Data related to fishing and hunting was not collected in May.
6. WFP.
7. No assessed settlement reported adequate access to food in July, hence dietary contents were not reflected in this month.
8. No consensus on consumption of the following foods was reported in assessed settlements with adequate access to food: main staples, vegetables, fish (7%), meat (14%).
9. FAO. South Sudan Crop Watch. March-July 2017.
10. Ibid.
11. IOM. South Sudan Conflict and Displacement Analysis, Weekly Brief. July 2017.
12. WFP. IRRM Mission Plan. August 2017.

Longochuk County: Food Security and Livelihoods Profile

Upper Nile State, South Sudan, May-July 2017

of KI interviews conducted: 74
# of assessed settlements: 22
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Typical pre-shock livelihoods in Longochuk were centred around farming and livestock rearing. Households (HHs) were reliant on their own cultivated products, for both consumption and as an income source. Crops produced included maize, sorghum, cow peas and pumpkins. Income was also derived from the sale of livestock (goats and cattle) and fish, as well as from selling crops. Coping strategies during the lean season included livestock sales, salaried labour, foraging for wild foods and for the better off, reliance on savings.[1]

Hazards (Shocks)

- Fighting was reported in Mathiang and Guelguk on 2 May.
- Fighting in Guelguk, Mathiang, Mangok and Malou, which began around 2 June, led to thousands of civilians being displaced, to Malual, Udier, Chotbora and Pamach in Longochuk and to Pagak, Maiwut and Ethiopia. The proceeding insecurity in Pagak (see Maiwut County Profile) also led to people crossing the border into Ethiopia. The reported looting of humanitarian compounds followed.
- Aid workers were relocated (6-7 July), which suspended nutrition and education works and displaced nearly 6,000 HHs from both Longochuk and Maiwut.
- Fighting between armed actors occurred in settlements near Mathiang on 17 July: Thoc, Luakjak and other villages.[2]

Vulnerability (Resilience)

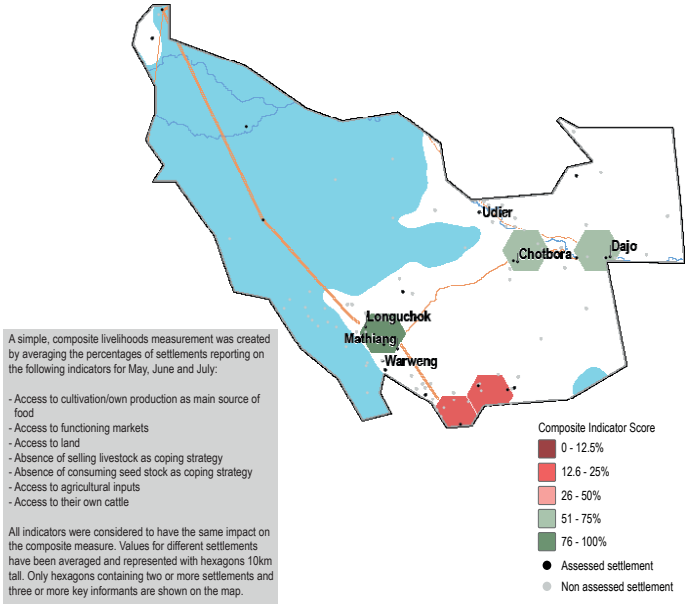
Insecurity and fighting limited sources of livelihoods and reduced potential income sources. Cultivation in assessed settlements was disrupted in July as access to land and agricultural inputs decreased (Figure 1). This disruption may be attributed to insecurity, as an increased proportion of assessed settlements that reported inadequate access to food reported it was not safe to access land and that fighting destroyed crops: 11% in May to 40% in July. Additionally, an increased proportion of assessed settlements reported agricultural tools had been looted. This, with the progression of the lean season and reduced harvest stocks, decreased crop sales as a way to generate income (Figure 1).

Instability also made the transportation of goods to Longochuk difficult. Vehicles transporting cargo to Longochuk along the primary supply routes required protection for the duration of the reporting period to increase the potential of safe passage.[3] This

Figure 1: Cultivation access and crop sales in assessed settlements

	May	June	July
Access to land	64%	87%	44%
Looting of cultivation tools	0%	15%	25%
Crop sales	42%	19%	0%

Map 1: Level of livelihood vulnerability



may have affected supply routes to Longochuk and contributed to the reported rise in some typical commodity prices. All assessed settlements in June and July reported the price of sorghum rose, while only a third of assessed settlements did in May.

Depleted harvested crops and reduced access to markets appear to have been partially offset by livestock rearing. Three quarters of assessed settlements reported that some members of the settlement owned cattle, higher than the Upper Nile State average of 59%. In the light of low levels of cultivated food stocks and high market prices, fishing and hunting were reportedly increasingly important livelihood sources in Longochuk; 56% of assessed settlements reported that some members of the community engaged in fishing and hunting in July, compared to 29% in June.

Coping Strategies

The proportion of assessed settlements that resorted to livelihood-based coping strategies increased during the reporting period, indicative of a decrease in access to livelihoods. Foraging for wild foods was a common livelihood coping strategy, practiced by 67% of assessed settlements without adequate access to food.

Coping strategies that reduce long-term livelihood sources were also increasingly used in assessed settlements that reported not having adequate access to food. All of them reported consuming seeds (from 29% in May), which may reduce future harvests. Furthermore, despite only 21% of assessed settlements without adequate access to food reporting livestock as a livelihood

Figure 2: Top two sources of food in assessed settlements

	May	June	July
Own production	55%	53 %	43%
Foraged food	27%	7%	57%

source, 86% of them reported selling livestock in July, compared to only 25% in May. This may be indicative of a number that is not high enough to count as livelihood source and that herd sizes have shrunk, especially in poorer HHs.

Food Security Overview

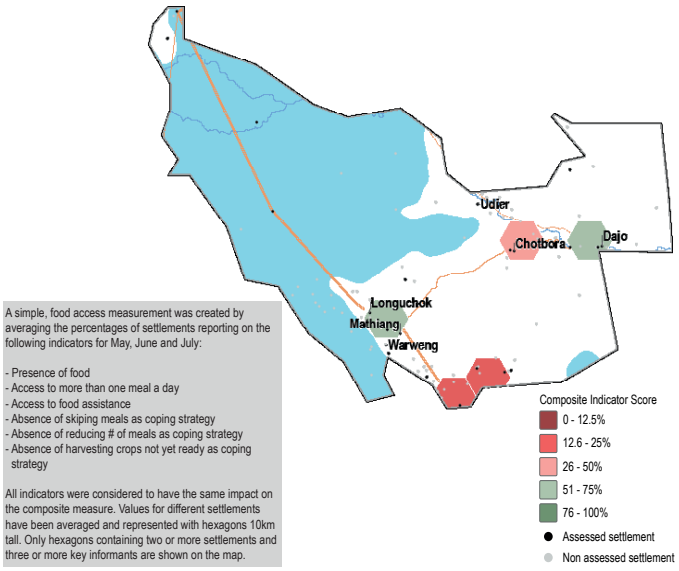
Food Availability and Access

The proportion of assessed settlements reporting adequate access to food dropped to 20% in July, compared to 42% in June. This decrease occurred as more HHs left Longochuk, as the proportion of assessed settlements that reported 50% of more of residents left increased from 82% in May to all in July. This indicates that even with a smaller population, food supplies were insufficient.

This decrease in adequate access to food came as assessed settlements reported consuming more foraged food and less cultivated food (Figure 2). Those with adequate access to food followed consumption patterns that mirrored the deepening of the lean season; as cereal and vegetable stocks decreased the consumption of meat and fish increased (Figure 3). However, as livestock rearing decreased so did the consumption of milk in these assessed settlements, from 50% in May down to none in July. This suggests that milking - which usually take place between June and December - has been disrupted.

The assessed settlements that reported inadequate access to food (80% by July) reported employing numerous food consumption-based coping strategies (Figure 4). Additionally, all assessed settlements without adequate access to food reported consuming two meals per day throughout the reporting period. The sharp increase in the proportion of assessed settlements without adequate access to food reporting limiting food intake as coping strategies further highlights decreasing food availability.

Map 2: Level of access to food



A simple, food access measurement was created by averaging the percentages of settlements reporting on the following indicators for May, June and July:

- Presence of food
- Access to more than one meal a day
- Access to food assistance
- Absence of skiping meals as coping strategy
- Absence of reducing # of meals as coping strategy
- Absence of harvesting crops not yet ready as coping strategy

All indicators were considered to have the same impact on the composite measure. Values for different settlements have been averaged and represented with hexagons 10km tall. Only hexagons containing two or more settlements and three or more key informants are shown on the map.

Figure 3: Food groups consumed by assessed settlements with adequate access to food[4]

	May	June	July
Main staples	75%	50 %	50%
Vegetables	100%	60%	0%
Meat [5]	0%	40%	100%
Fish	25%	60%	100%

Figure 4: Food consumption coping strategies in assessed settlements without adequate access to food[4]

	May	June	July
Limiting meal sizes	33%	58 %	100%
Reducing number of meals	50%	42%	83%
Spending days without eating	43%	42 %	83%

Finally, only 11% of assessed settlements reported having access to a borehole within a 30-minute walk. Without access to clean water to prepare food and unwholesome foods commonly consumed, stomach related problems and diarrhoea may increase, further reducing the nutritional intake for HHs.

Stability of Food Access

The decreasing proportion of assessed settlements that reported at least some members of the community engaged in cultivation was likely due to outbreak of fighting which led to displacement of small-scale farmers, destruction of crops and overall unsafe planting conditions. Although upcoming harvests in August will bring short term relief to HHs, reduced cultivation will likely result in lower-than average harvest yields, which will negatively affect future availability of food and sources of livelihoods (selling of surplus crops).

Additionally, if fighting continues to negatively affect livelihoods and humanitarian aid delivery, livelihood coping strategies may likely be eventually depleted, which could place further strain on the capacity to cover food consumption gaps.

Delivery of humanitarian assistance in Longochuk has been inhibited, partly due to fighting between armed actors. Rapid response missions (RRM) to Mathiang and Udier took place in February 2017, and according to the 90-days delivery cycle, the follow up mission should have been conducted by May. It was however not until mid-July that RRM was re-deployed to Udier, while delivery to Mathiang is still pending.

Endnotes
1. FEWS. South Sudan Livelihoods Zones and Descriptions. August 2013.
2. OCHA. South Sudan Flash Update on Upper Nile. July 2017.
3. UNHAS - South Sudan: Force Protection map as of June 2017.
4. Participants could choose multiple responses.
5. No consensus on consumption of meat reported for 9% of assessed settlements with adequate access to food.

Nasir County: Food Security and Livelihoods Profile

Upper Nile State, South Sudan, May-July 2017

# of KI interviews conducted: 98
# of assessed settlements: 37
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Pre-crisis the primary livelihood source in Nasir County was subsistence farming. Maize and sorghum were the main crops grown. Livestock rearing was a secondary livelihood source, practiced by most households (HHs). Wealthier HHs relied on their own production, whereas poorer HHs generated income through fishing, charcoal production and firewood collection. Income from these sources was used to purchase food in the markets. From November to April fishing supplemented incomes.[1]

Hazards (Shocks)

Insecurity has affected Nasir County since the start of the conflict in December 2013.

- The latest outbreak occurred in December 2016 and January 2017. Conflict in Nasir in early January has caused a wave of displacement of approximately 30,000 IDPs into Wanding in Ulang County and Jikmir in Nasir County.[2]
- Towards the end of June 2017 clashes were reported around Ketbek. In addition, movements of armed actors in July, reportedly resulted in small skirmishes in Nasir.[3]

Vulnerability (Resilience)

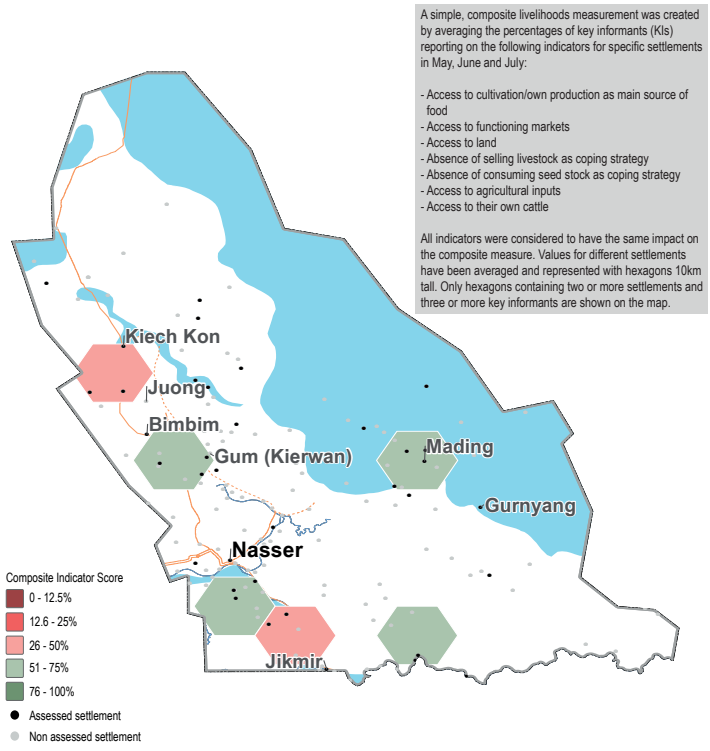
The proportion of assessed settlements reporting subsistence agriculture as a livelihood source remained high and stable across the May-July period (87% on average). However, a third of the settlements assessed reported that the destruction of crops during fighting was the primary reason for inadequate adequate access to food in July. Fighting also presumably decreased productivity in July as 21% of settlements reported that tools had been looted.

Meanwhile, the proportion of assessed settlements reporting that livestock rearing was a source of livelihood diminished from 87% in May to 33% in July, presumably partly due to the departure of pastoralists with their animals following the dry season.

In June and July 28% of assessed settlements reported fishing as a livelihood source. While fishing typically decreased during the rainy season as HHs are less equipped to fish in deep water, poorer HHs usually continue smaller scale fishing in ponds. A combination of lack of basic equipment and insecurity likely inhibited this source.

During the lean season, poor HHs typically relied on food purchased at markets using income from casual labour. However, the proportion of assessed settlements that reported community members engaged in casual labour remained low across May-July, with an average of 9%. In addition, access to food and non-food items was further offset by low access to a functioning market, reported by only 25% of assessed settlements.

Map 1: Level of livelihood vulnerability

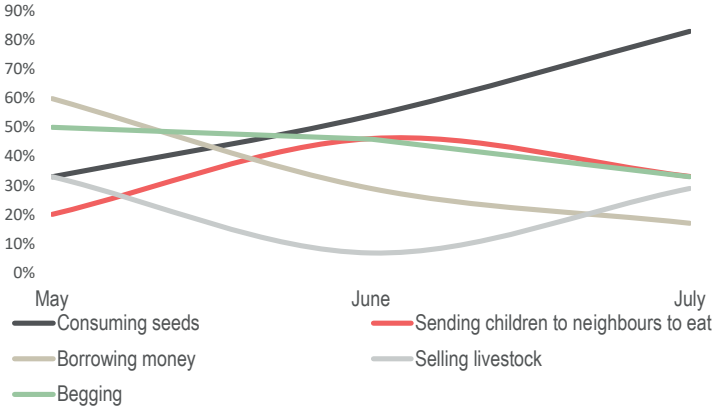


Coping Strategies

With a decreased access to major seasonal livelihoods and markets, the proportion of assessed settlements without adequate access to food reporting resorting to livelihood coping strategies increased (Figure 1). Across May to July 44% of assessed settlements without adequate access to food reported that family members were sent to beg in order to cope with reduced livelihood sources.

Assessed settlements also compensated disruptions of livelihoods by engaging in coping strategies that can negatively affect livelihoods in the long term (Figure 1). Increased seed consumption and the sale of livestock, while typical livelihood strategies during the lean season, reduce future livelihoods in order to meet immediate food consumption gaps.

Figure 1: Main livelihood coping strategies used in assessed settlements without adequate access to food [4]



Food Security Overview

Food Availability and Access

While the proportion of assessed settlements reporting adequate access to food decreased in Nasir County, from 63% in May to 46% in July, access challenges were not as severe as in neighbouring counties that saw heavy fighting in July, such as Maiwut and Longochuk. Assessed settlements predominately relied on their own production throughout the reporting period, whilst humanitarian assistance was the second most commonly reported food source (Figure 2). Low harvest reserves likely led to a reduction in the overall quantity of food available through the lean season, which is reflected in 15% of assessed settlements reporting they consumed only one meal a day, whilst 81% reported consuming two meals a day.[5] Foods consumed in assessed settlements with adequate access to food indicated good diet diversity and included main staples (79%), milk (74%), as well as fish (50%) and meat (48%).[6]

Inadequate access to food was reported by 53% of assessed settlements across May to July and led to the adoption of numerous food consumption coping strategies such as gathering wild foods, reported by 71% of these settlements (Figure 3). Strategies indicated show restricted food intake in assessed settlements, and that the food consumed likely had low nutritional value, placing stress on the health of the settlement residents.

Most (93%) assessed settlements had access to clean water.

Map 2: Level of access to food

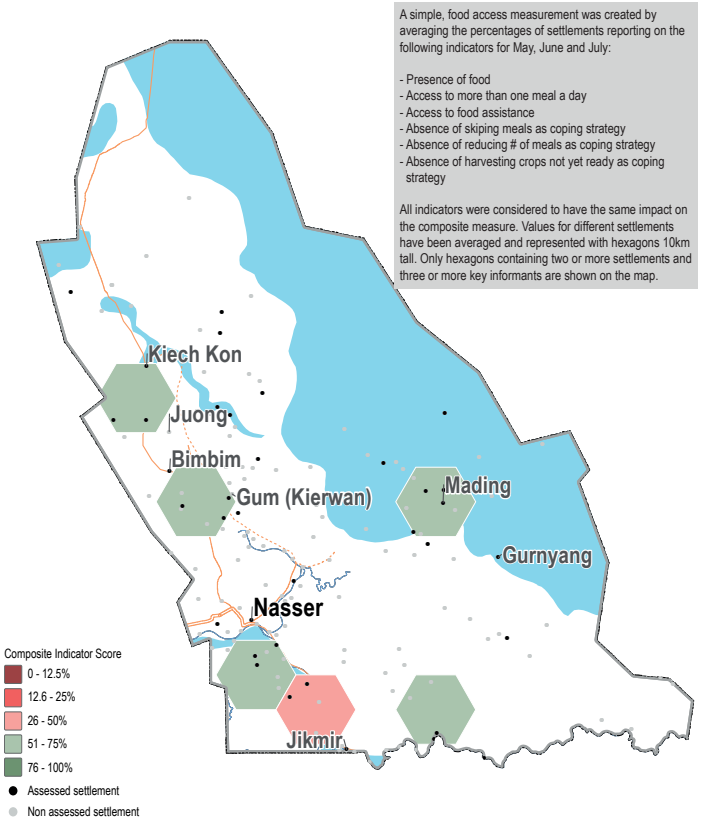


Figure 2: Primary sources of food in assessed settlements

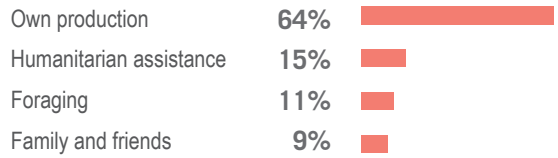
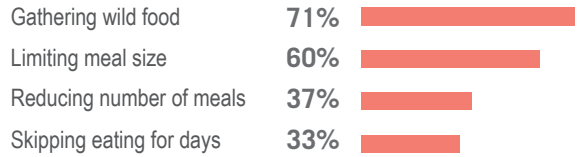


Figure 3: Main food consumption coping strategies in assessed settlements without adequate access to food [4]



However, only 26% of assessed settlements reported having access to a borehole within a 30-minute walk. Limited access to clean water increases the likelihood of water-borne diseases and corresponding poor nutritional uptake.

Stability of Food Access

As the lean season ends, access to food should improve in Nasir. Animal produce (milk and meat) should become more available as grazing pastures recover. Additionally, fishing should increase from the end of October, as water levels decrease, meaning dietary diversity should improve as the year comes to an end.

Although July fighting led to moderate destruction of crops, reports that subsistence agriculture had been conducted in 87% of assessed settlements suggest that harvest outputs will likely sustain HHs in the medium term. Levels of adequate access to food should improve once maize and sorghum crops become available with the end of the lean season in August.

Reports indicate that weather in Nasir will likely remain typical for the duration of the rainy season.[7] However, with the possibility of flooding occurring, crops could be damaged. Failed crop cultivation, be it through natural disasters or insecurity, would likely worsen already low levels of access to food. As cultivation requires a level of long term security, future spill over from a potential intensification of fighting in Longochuk and Maiwut could lead to further destruction of crops or looting of harvests.[8]

To mitigate potential shortcomings, humanitarian assistance is anticipated to continue in Nasir.[9] A planned food distribution is due in Ngueny in August, which should increase the availability of food in this area while awaiting for the next harvests.[10]

Endnotes

1. FEWS. SOUTH SUDAN Livelihood Zones and Descriptions. August 2013.
2. Nile Hope. Rapid Need Assessment Report. Nasir County. January 2017.
3. REACH. SSD. Situation Overview: Upper Nile State. January-February 2017.
4. Participants could choose multiple responses.
5. 2% reported consuming less than one meal per day, 2% reported three meals per day.
6. No consensus on consumption of the following foods was reported in assessed settlements with adequate access to food: milk and meat (10%) and fish (8%).
7. FAO. South Sudan Crop Watch. March-July 2017.
8. OCHA. Upper Nile Flash Update. July 2017.
9. WFP. IRRM Mission Plan. August 2017.
10. Ibid.

Maiwut County: Food Security and Livelihoods Profile

Upper Nile State, South Sudan, May-July 2017

of KI interviews conducted: 68
# of assessed settlements: 22
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Typical pre-crisis livelihood sources in Maiwut were centred around subsistence farming, sorghum and maize, which was often practiced alongside livestock rearing. Households (HHs) were reliant on their own farming production, for both consumption and as an income source.[1] Income was also generated through the sale of livestock (goats and cattle), fish, as well as from selling crops. Pre-crisis coping strategies included livestock sales, salaried labour, foraging for wild foods, and for the better off, reliance on savings in order to purchase food from the market.[2]

Hazards (Shocks)

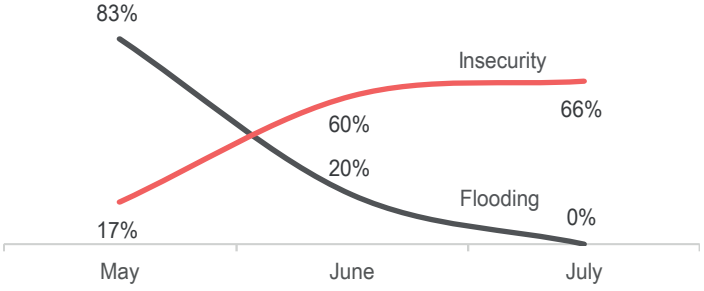
- Flooding in early May damaged crops (Figure 1).
- The fighting in early July between armed actors that took place in Mathiang, Longochuk, drove a reported 5,000 internally displaced households towards Pagak, Maiwut. Fighting that began July continued into August, and insecurity heightened in and around Pagak. Fighting damaged crops (Figure 1), caused upwards of 5,000 IDPs to flee across the border into Ethiopia, with an undetermined number crossing with livestock. Eighty-three percent of assessed settlements reported 50% or more members of the settlement had left. Additionally, 25 aid workers were relocated, disrupting humanitarian assistance. [3] [4]

Vulnerability (Resilience)

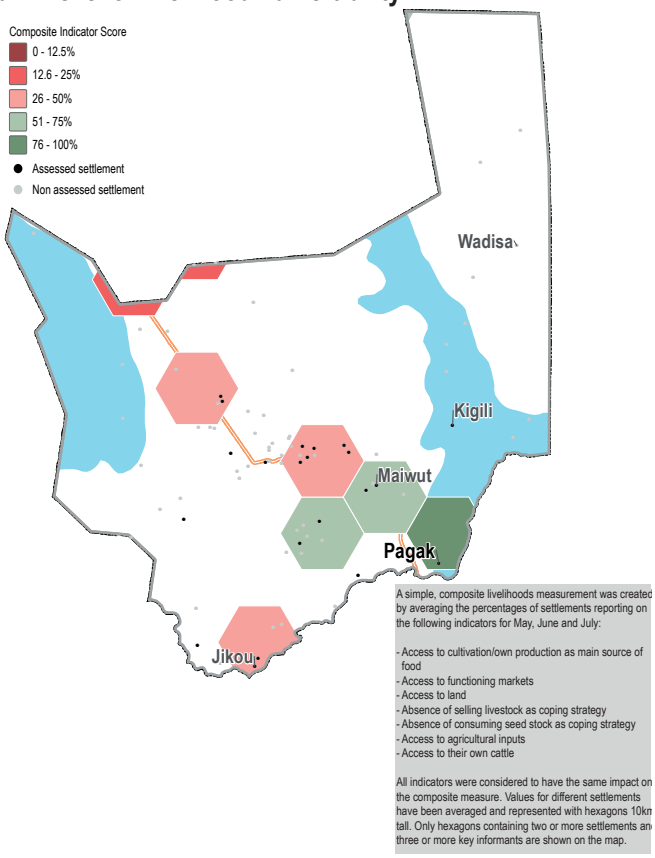
Flooding and insecurity were the two main reasons given by assessed settlements for inadequate access to food (Figure 1). During the reporting period fighting destroyed crops in assessed settlements and future potential crop yields were weakened by the combined impact of the drop in access to agricultural inputs (57% of assessed settlements in May to 13% in July) and increased looting of agricultural tools (not reported by any settlements in May to 29% in July). This led to a reduced proportion of assessed settlements reporting producing crops for subsistence, from all in May to 71% in July.

Access to a functioning market was reported by only 22% of assessed settlements due to insecurity, increased commodity prices and HHs' low purchasing power. Vehicles transporting cargo to Maiwut along the primary supply routes required protection for the duration of the reporting period to increase the potential of safe passage. Access difficulties for traders increased commodity prices, which rose in a large proportion of assessed settlements: oil in all, sugar in 91%, and sorghum in half.

Figure 1: Proportion of assessed settlements without adequate access to food reporting crops destroyed by flooding versus by insecurity



Map 1: Level of livelihood vulnerability



Livestock rearing and fishing, conversely, were in line with pre-crisis levels. All assessed settlements reported access to livestock, and 77% that some members of the community owned livestock. The utilisation of livestock as a livelihood source is in line with reports that people moved with their livestock, thus indicating that access remained despite insecurity. Moreover, by July all assessed settlements that reported inadequate access to food reported that some HHs sold livestock. A third of these assessed settlements fished in June and July, although fishing is not usually conducted in this period due to higher water levels.

Coping Strategies

Although many people reportedly left Maiwut, those who remained employed livelihood coping strategies, a further indication that livelihoods were strained by external shocks. The proportion of assessed settlements without adequate access to food that reported sending household members to beg rose from 22% in June to 33% in July. In addition, over the reporting period 75% reported consuming seeds.

The proportion of assessed settlements reporting access to

humanitarian assistance dropped from 43% in May to 25% in July, which may be due to the relocation of humanitarian workers and restricted access due to insecurity. Simultaneously reliance on others increased in assessed settlements as the reporting of remittances rose from 14% in May to 43% in July.

Food Security Overview

Food Availability and Access

Potentially due to May flooding, the proportion of assessed settlements reporting adequate access to food in May was 14%. This rose to 54% in June, but dropping to 25% in July due to insecurity. As the lean season continued and insecurity reduced agricultural outputs, foraging for wild foods became the main source of food in assessed settlements (Figure 2).

Although a limited percentage of assessed settlements reported adequate access to food, those who did reported a diverse diet. All assessed settlements with adequate access to food reported consuming main staples, while more than half also consumed vegetables (78%), milk and fish (56%), and meat (50%). [5]

A high proportion of assessed settlements with inadequate access to food reported food consumption coping strategies (Figure 3). None of these assessed settlements reported consuming three meals per day, and as the proportion citing consuming two decreased (all in May to 57% in July) those that reported consuming one grew from none in May to a third in July.

Map 2: Level of access to food

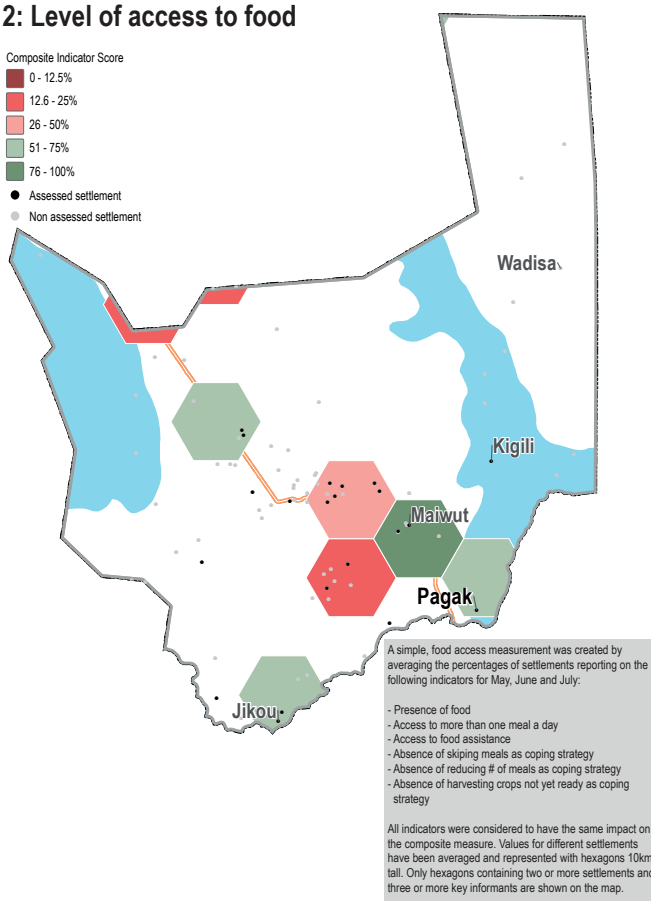


Figure 2: Primary sources of food in assessed settlements

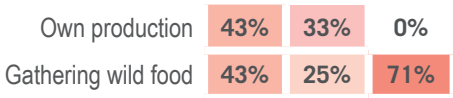
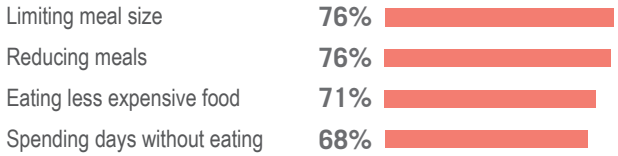


Figure 3: Main food consumption coping strategies in assessed settlements with inadequate access to food



Additionally, the food consumed was of a lower quality (Figure 2). Poor nutritional content, combined with smaller portions, will likely increase heath concerns.

Additionally, although the main health concern was malaria in assessed settlements (50%), malnutrition was reported by 27%. Finally, only 23% of assessed settlements cited having access to a borehole within a 30-minute walk. Without access to clean water to prepare food and unwholesome foods commonly consumed, stomach related problems and diarrhoea may increase, further reducing the nutritional intake for HHs.

Stability of Food Access

Overall insecurity has lead to inadequate access to food in Maiwut County. As groups continue to fight to gain control of Pagak instability is unlikely to subside in the near future,[6] meaning the harvest season in August will likely be disrupted in parts of Maiwut. On the other hand, the proportion of assessed settlements in July reporting to be engaging in subsistence agriculture remained high under the circumstances (75%), suggesting August harvests for sorghum and maize could bring short term relief in access to food. Crops that were not destroyed are expected to perform well as sufficient rainfall was reported, that led to a normal to above normal vegetation cover for the area up until July.[7]

An increase in assessed settlements selling livestock as a livelihood coping strategy, from half in May to all in July, suggests that the availability of dairy and meat will decrease. However, the animal produce from remaining animals will increase as grazing pastures improve following the rains.

With no humanitarian assistance planned to take place in August due to continued insecurity, it is likely that residents may continue to rely on current coping strategies, some of which undermine prospects for the resilience of livelihoods.[8]

Endnotes
1 FEWS. South Sudan Livelihood Zones and Descriptions. August 2013.
2. ACTED; FEG, Impact Initiatives. Household Economic Analysis – Livelihoods Profile Report South Sudan. September 2013.
3. OCHA. South Sudan. Flash Update on Upper Nile. 7 July 2017.
4. OCHA. South Sudan. Humanitarian Bulletin. 15 July 2017.
5. No consensus on consumption of the following foods was reported in assessed settlements with adequate access to food: vegetables, fish, milk (10%), meat (20%).
6. IOM. Conflict and Displacement Analysis, Weekly Brief, May 2017.
7. FAO. South Sudan Crop Watch. March-July 2017.
8. WFP. IRRM Mission Plan. August 2017.

Malakal County: Food Security and Livelihoods Profile

Upper Nile State, South Sudan, May-June 2017

of KI interviews conducted: 32
# of assessed settlements: 17
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Typical pre-crisis sources of livelihood in Malakal County, an agro-pastoralist area located in a semi-arid climate zone, were centred around small scale cultivation of sorghum and maize, often accompanied by the rearing of livestock.[1] As the White Nile flows through Malakal, fishing was also a central local livelihood source. During the lean season, HHs typically turned towards foraging for wild foods, small scale fishing and the cultivation of crops around the homestead. Incomes generated through selling firewood and charcoal were used to purchase food at the market.[2]

Hazards (Shocks)

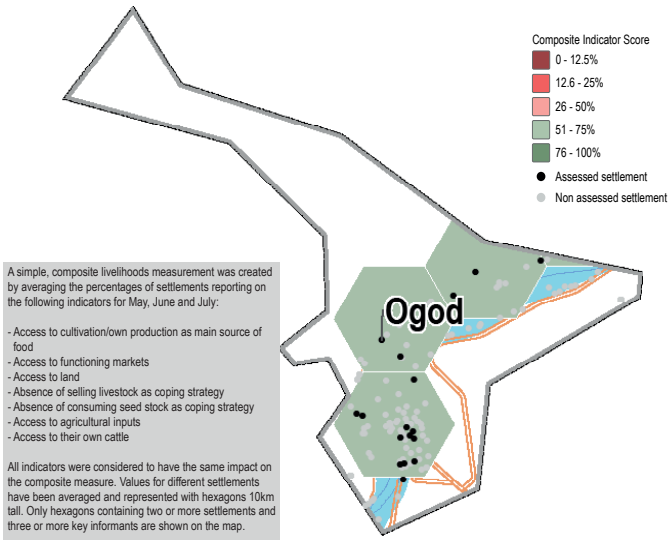
- Malakal County has been affected by fighting and high levels of insecurity since the current conflict started in 2013, causing mass displacement and a massive influx of displaced people toward the Malakal Protection of Civilians (PoC) site.[3]
- Widespread insecurity arose in the neighbouring counties of the western bank of the Nile through May and June. [4] Insecurity resulted in 95% of assessed settlements reporting shelters were damaged from fighting in May and June.

Vulnerability (Resilience)

Although continued insecurity and mass displacement affected livelihoods in Malakal in May, agricultural based livelihoods showed small signs of recovery in June (Figure 1). The increase in the proportion of assessed settlements where subsistence farming was reported as a source of livelihood may have been supported by the increase in access to land (20% in May to 38% in June). The looting of agricultural inputs may have limited this rise as the proportion of assessed settlements that reported agricultural inputs were with the owner decreased from 22% in May, to none in June.

An additional sign of the impact continued insecurity and displacement in Malakal has had on livelihood sources was the decreased reporting of livestock rearing. Continued insecurity and displacement in Malakal also led to a decrease in the proportion of assessed settlements reporting livestock rearing, both as a livelihood source (Figure 1) and in terms of ownership (56% in May to 33% in June). In addition, no assessed settlements with inadequate access to food reported livestock sales in either May or June, which suggests that HHs are no longer able to resort to this traditional pre-shock livelihood coping strategy.

Map 1: Level of livelihood vulnerability



Limited fishing, a lean season livelihood source, took place in June when it was only reported by 10% of assessed settlements. As HHs facing insecurity often resorted to moving to bushy areas away from the river, this low proportion suggests the impact of insecurity on livelihoods remained in assessed settlements along the Nile in June, and that fishing was sporadic.

During the lean season HHs would usually be more reliant on commodities purchased at the market with savings or income obtained through casual labour. However, no assessed settlement reported having access to casual labour during the period. Moreover, reported physical access to a functioning market decreased, from 90% in May to 56% in June, adding an additional constraint on HHs that relied on purchased commodities during the lean season. This decrease may be partially attributed to ongoing insecurity in neighbouring Fashoda, Manyo and Panyikang Counties, which restricted trading routes. Thus the proportion of markets that were functional may have decreased as fewer markets would have been able to restock after selling May commodities.

Coping Strategies

As access to sources of livelihood were low across the western bank of the Nile in early May, HHs turned toward livelihood coping strategies (Figure 2). Reliance on family and friends for food and money increased in assessed settlements that reported inadequate access to food, with the increase in borrowing food in line with the increased cultivation practices seen in Figure 1, meaning more HHs were in a position to potentially share food.

Figure 1: Top three reported sources of livelihood in assessed settlements, June 2017[5]

	May	June
Livestock rearing	50%	0%
Crop sales	11%	20%
Subsistence farming	10%	33%

Figure 2: Top three livelihood coping strategies in assessed settlements without adequate access to food[5]

	May	June
Borrowing money	50%	0%
Borrowing food	20%	50%
Gathering wild food	0%	33%

Food Security Overview

Food Availability and Access

An average of 74% of assessed settlements reported adequate access to food over the reporting period. This proportion was high compared to other counties across Upper Nile State over the same period. Humanitarian assistance was the most often reported main source of food by assessed settlements (43%), followed by purchased food (21%) and own production (14%). The increase in subsistence farming saw an increase from May to June in the proportion assessed settlements that reported consuming their own produce as their main source of food (Figure 3).

For HHs that reported adequate access to food, dietary diversity appeared to improve along with the availability of various food groups in June (Figure 4). This increase mirrored the slight recovery of certain livelihood sources. It could also be attributed to the fact that assessed settlements were located near the River Nile, meaning that they had possible access to fish whenever security situation permitted. However, that in July fishing was reported by 83% of assessed settlements as a food source and by 10% as an income source indicated that the amount of fish caught may not have been sufficient to sell, rather only to consume.

Assessed settlements that reported inadequate access to food resorted to consumption coping strategies. Sixty-seven percent of assessed settlements reported gathering wild food, borrowing money (20%), and limiting meal portion size (20%) while 20% reported spending days without eating. All assessed settlements without adequate access to food reported HHs ate one meal a day.

Finally, only 9% of assessed settlements reported having access to a borehole within a 30-minute walk. Without access to clean water to prepare food and unwholesome foods commonly consumed, stomach related problems and diarrhoea may increase.

Map 2: Level of access to food

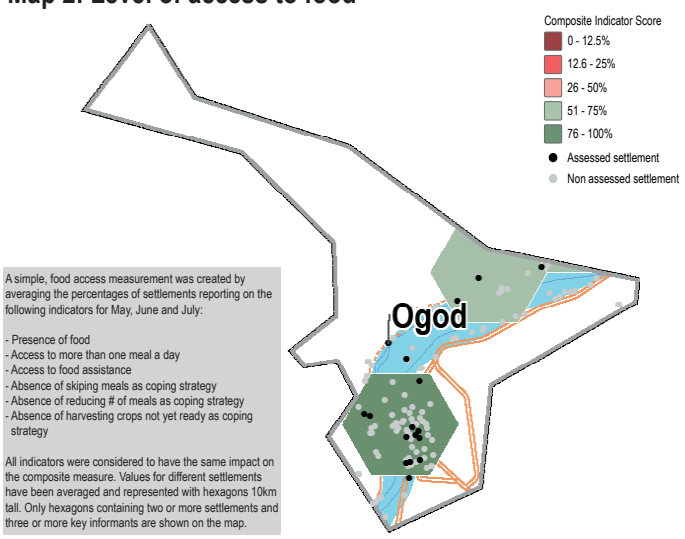


Figure 3: Top three sources of food in assessed settlements

	May	June
Humanitarian assistance	50%	33%
Purchased	25%	17%
Own production	0%	33%

Figure 4: Food groups consumed by assessed settlements with adequate access to food[5 6]

	May	June
Main staples	88%	83%
Fish	67%	80%
Meat	33%	50%
Dairy products	14%	33%

Stability of Food Access

While the proportion of assessed settlements that reported agriculture was taking place remains relatively low, it improved from May to June. Additionally, the arrival of new sorghum crops in August will likely improve adequate access to food in the short term. Moreover, HHs that were able to sow crops may have a successful harvest once the lean season comes to an end as seasonal rainfall has been reported as above average and climatic conditions have been favourable for good harvests.[7]

However, insecurity is predicted to remain in the western bank. This may lead to access difficulties for livelihoods like agriculture and fishing that require people to access areas impacted by insecurity (rivers and fields) and may continue to be vulnerable to external shocks. As more armed movements are expected to take place across the western bank once the dry season starts around October, it is unlikely that Malakal will see a prolonged period of calm over the next few months and HHs may face worsening access to food.[8]

In addition to the projected continuation of conflict, no food distributions are planned in the near future in Malakal County although service provision will continue to take place at the Malakal PoC site.[9] If insecurity continues to disrupt HHs typical sources of livelihood, over time localized distributions in Malakal PoC site could increasingly become a displacement pull factor for neighbouring settlements.

Endnotes
1. FEWS. South Sudan Livelihoods Zones and Descriptions. August 2013.
2. Ibid.
3. REACH. SSD. Situation Overview: Upper Nile State, April-May 2017.
4. Ibid.
5. Participants could choose multiple responses.
6. No consensus on consumption of the following foods was reported in assessed settlements with adequate access to food: fish (21%), meat (14%), dairy products (9%).
7. FAO. South Sudan Crop Watch. March-July 2017.
8. IOM. Conflict and Displacement Analysis, Weekly Brief. July 2017.
9. WFP. IRRM Mission Plan. August 2017.

Manyo County: Food Security and Livelihoods Profile Profile

Upper Nile State, South Sudan, May-July 2017

of KI interviews conducted: 34
# of assessed settlements: 8
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Pre-crisis livelihood sources in Manyo County, an agro-pastoralist area, were based on small scale cultivation of sorghum and maize, often coupled with the rearing of livestock. Manyo is located in a semi-arid climate zone, which largely limits cultivation possibilities to drought resistant crops. The Nile River runs parallel to Manyo's western border which allowed for fishing.[1]

During the lean season, some households (HHs) typically generated additional income through casual labour on farms to afford staples such as sorghum from the market.[2]

Hazards (Shocks)

- Fighting has been recurrent over the reporting period in Manyo and in neighbouring counties, with spikes of conflict in Kaka in May in the south of Manyo followed by violence in Kuek, Kola and Ghabat in the north in June.[3] Insecurity caused displacement toward Sudan and neighbouring counties. Seventy-nine percent of assessed settlements in Manyo reported that shelters had been partially or totally destroyed over the months of May, June and July, indicating that insecurity was present throughout the reporting period.

Vulnerability (Resilience)

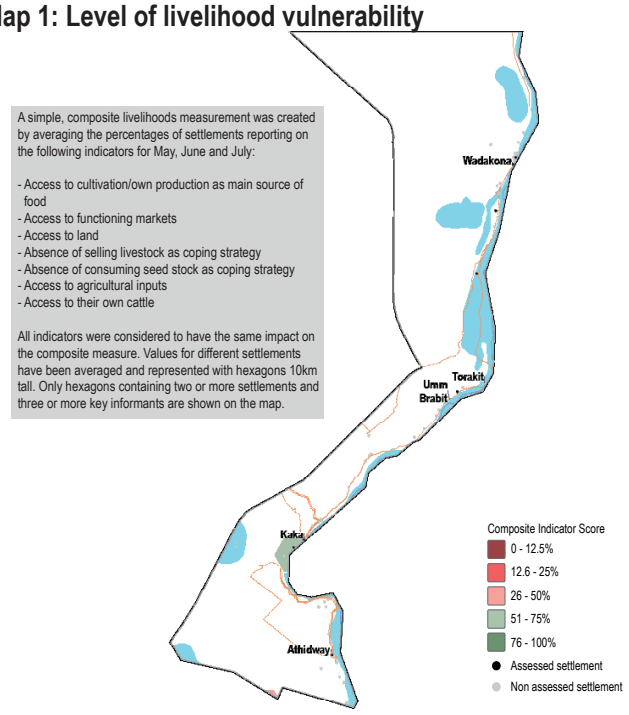
Conflict which occurred from May to July negatively affected the stability of typical pre-crisis livelihoods sources. Despite fluctuating availability of land, from 50% in May to 73% in June, to 33% in July, no assessed settlement reported subsistence agriculture in May. While subsistence agriculture in assessed settlements increased (Figure 1), overall levels remained low.

Assessed settlements that reported livestock rearing as a livelihood source decreased. This decrease occurred as more assessed settlements that reported not having access to food increasingly reported selling livestock as a coping strategy (none in May, 75% in June to 33% in July). This spike in June may be due to the fighting that took place.

Decreased reported physical access to a functioning market in assessed settlements (all in May to 67% in July) may have been hindered by insecurity. Insecurity also potentially hampered restocking accessible markets as supply routes from Sudan pass through border areas that saw clashes. Prior to 2013, Manyo normally saw an increased reliance on casual labour when traditional livelihoods were unstable. However, the proportion of settlements reporting casual labour decreased (a third in May to none in June and July), indicating that those who had physical access to a functional market had fewer opportunities to generate income to buy commodities.

Fishing was the only livelihood source that appeared not to be impacted by shocks. The proportion of assessed settlements reporting fishing as a livelihood source remained stable and relatively high in June and July, despite insecurity (Figure 1).

Map 1: Level of livelihood vulnerability



Coping Strategies

As available harvest reserves diminished through the lean season and other livelihood sources became unreliable, households started to rely more heavily on coping strategies that are typically adopted during times of livelihood stress. By July, a third of assessed settlements reported that HHs were relying mainly on wild foods, as opposed to none in May, which further suggests that reserves from the previous harvest were depleted.

Indicative that HHs were in a similar position, no assessed settlements that reported inadequate access to food reported begging, or borrowing food or money from neighbours or friends as a coping strategy.

The reliance on humanitarian assistance in assessed settlements decreased from May to July (Figure 2). As no humanitarian assistance has been distributed from May to July, HHs relied on previously distributed stock. Decreasing access to humanitarian assistance coupled with depleted harvests and difficult access to major seasonal livelihoods may explain the turn towards livelihood

Figure 1: Top three sources of livelihood in assessed settlements[4]

	May	June	July
Fishing and hunting[5]	N/A	57%	50%
Livestock rearing	50%	33%	0%
Subsistence farming	0%	33%	33%

Figure 2: Top three primary sources of food in assessed settlements

	May	June	July
Humanitarian assistance	67%	25%	0%
Purchased	33%	50%	33%
Foraged food	0%	25%	33%

coping strategies (foraging for food, fishing and hunting) that are not as heavily reliant on other people (remittances or begging), humanitarian assistance or agriculture.

Food Security Overview

Food Availability and Access

From May to July, the proportion of assessed settlements reporting adequate access to food dropped from 67% to none (Figure 3), suggesting that the combined effect of conflict and the depletion of crop reserves impeded access to food in spite of the resumption of fishing and agriculture.

While cultivation moderately improved over the period, this source of livelihood will not be immediately conducive to food outputs, rather become relevant after the end of the lean season. Accordingly, none of the assessed settlements reported that cultivation was their primary source of food, which further confirms that reserves from the previous harvests had been depleted.

The diminishing proportion of assessed settlements carrying out casual labour, paired with a decrease in market access may have contributed to the reduced proportion of assessed settlements purchasing food (Figure 2). As fighting took place in June and armed actors remained present in July, the inability to restock markets might have helped increase commodity prices.

HHs in the assessed settlements that reported inadequate access to food increasingly adopted severe food consumption coping strategies. These strategies indicated that the quantity of food available became increasingly restricted over the period. As Figure 4 shows, these included limiting consumption by adults so that children can eat. Additionally, all assessed settlements without adequate access to food reported eating one meal a day in July, from all eating two meals a day in May.

Map 2: Level of access to food

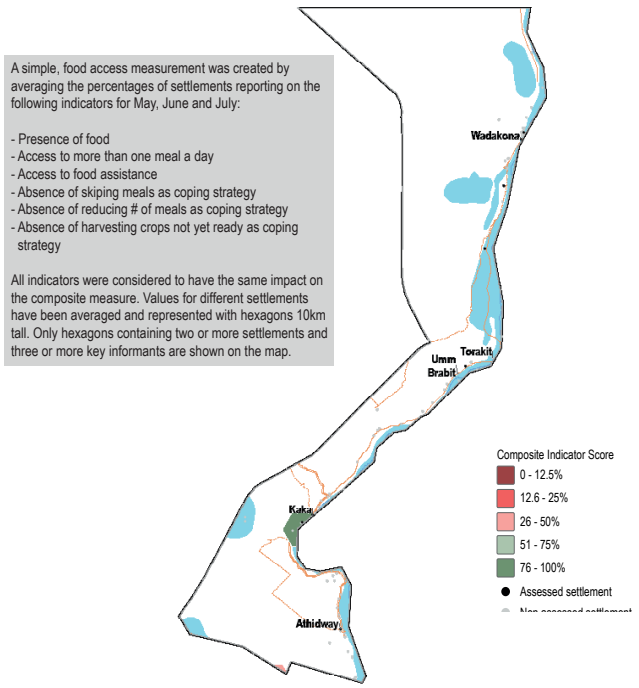


Figure 3: Percentage of assessed settlements reporting adequate access to food

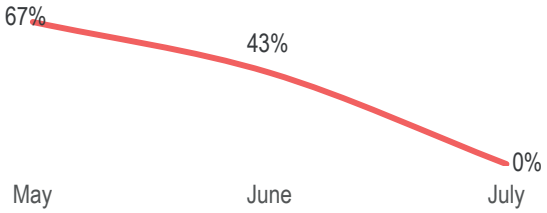


Figure 4: Food consumption coping strategies in assessed settlements without adequate access to food[4]

	May	June	July
Limiting meal size	0%	75%	100%
Reducing number of meals	0%	75%	100%
Spending days without eating	0%	75%	67%
Only children eat	0%	75%	67%

Finally, only 17% of assessed settlements reported having access to a borehole within a 30-minute walk. Without access to clean water to prepare food and unwholesome foods commonly consumed, stomach related problems and diarrhoea may increase.

Stability of Food Access

Subsistence agriculture began to recover from shocks in June and July but it remained reported at very low levels, which will likely prevent HHs from accumulating a surplus once the harvest comes. Still, the current level of access to food may improve in the short term with the end of the lean season as sorghum crops become available in August. This is provided that the Fall Army Worm said to be affecting Manyo farmers does not destroy crops on a large scale and that local settlements feels safe enough to return to the fields.[6]

However, Manyo is expected to continue to be affected by multiple skirmishes as the beginning of the dry season is likely to bring new waves of violence and displacement, especially around Kaka and near the Northern border with Sudan.[7] Continued insecurity may weaken HHs' ability to carry out livelihood sources and cause further challenges accessing food.

The food distribution that reportedly took place prior to May had a large impact in maintaining high levels of reported adequate access to food in spite of large shocks. As of 8 August, no further integrated rapid response mechanisms have been announced in the northwestern part of Upper Nile and the supply chain breaks caused by insecurity may mean that people have to rely on small scale fishing and a short supply of locally grown crops.[8]

Endnotes
1. FEWS. South Sudan Livelihoods Zones and Descriptions. August 2013.
2. Ibid.
3. REACH. SSD. Situation Overview: Upper Nile State. April-June 2017.
4. Participants could choose multiple responses.
5. Data was not collected on fishing and hunting as a livelihood source in May.
6. World Vision International. Army Worm Infestation of crops. August 2017.
7. IOM. Conflict and Displacement Analysis. Weekly Brief. May 2017.
8. WFP. IRRM Mission Plan. August 2017.

Panyikang County: Food Security and Livelihoods

Upper Nile State, South Sudan, May-June 2017

of KI interviews conducted: 31
# of assessed settlements: 14
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Traditionally, Panyikang County was an agro-pastoralist area where the primary livelihood sources were small scale cultivation of maize and sorghum and, to a lesser extent, the rearing of livestock. Panyikang is located in a semi-arid climate zone, which largely limits the possibilities of cultivation of drought resistant crops. Panyikang is bordered by the White Nile to the East and to the North, which made fishing central to households' (HHs) traditional livelihoods.[1] During the lean season, HHs typically conducted small scale fishing, planted crops around the homestead and foraged for wild foods to supplement food sources.[2]

Hazards (Shocks)

- May 2017 was marked by heavy fighting which began in April in and around Tonga in Panyikang County.[3] Reflective of this, 88% of assessed settlements reported that some shelters were damaged or destroyed.

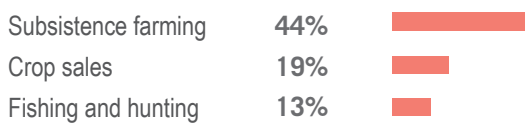
Vulnerability (Resilience)

The spike in conflict in May heavily disrupted traditional livelihood sources in assessed settlements. As security improved in June, seasonal livelihoods showed signs of recovery. Fighting led to a limited ability to cultivate. Only 25% of assessed settlements reported physical access to land while fighting was ongoing in May, yet the figure increased to 75% in June as fighting subsided. Accordingly, the proportion of assessed settlements reporting subsistence agriculture as a source of livelihoods increased from 25% in May to 63% in June.

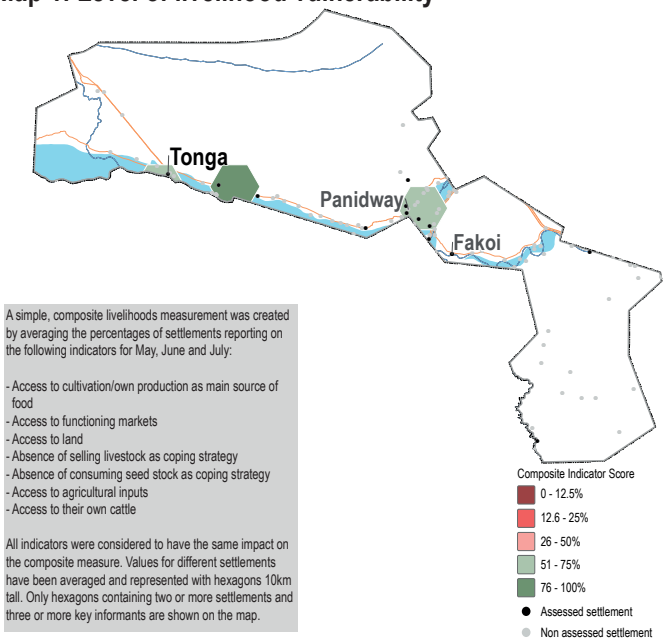
Only 13% of assessed settlements reported fishing as a source of livelihood in June. While fishing normally diminishes during the rainy season as the White Nile swells from rainfall, HHs usually continue smaller scale fishing in ponds and swamps. As such, this figure potentially suggests that fishing was still inhibited by insecurity in June.

While access to land, cattle and agricultural inputs either remained stable or increased from May to June, it came after months of insecurity. While bartering livestock used to be a coping strategy to access food in times of stress, possession of livestock has largely decreased over recent years due to conflict and cattle raids.[4] Although 44% assessed settlements reporting owning livestock, no assessed settlement reported livestock as a livelihood source. Additionally, no assessed settlements with inadequate food access reported selling livestock. These factors

Figure 1: Top three sources of livelihood in assessed settlements [5]



Map 1: Level of livelihood vulnerability



indicate although there was a livestock presence in Panyikang, those with livestock are likely the minority in assessed settlements. Additionally, those with livestock did not perceive the number to be significant enough to count as a livelihood.

During the lean season HHs typically compensate for reduced access to food by purchasing food items at the market with income gained from casual labour. However, no assessed settlements reported that casual labour was taking place. Disruption in market supply in May further reduced access to market products with only 13% of assessed settlements reporting access to a functioning market. While this rose substantially to 63% in June, the low purchasing power of HHs led to a low proportion of assessed settlements relying primarily on market bought commodities in May-June (17%).

Coping Strategies

Reduced access to livelihood sources, that no humanitarian assistance took place in May-June, as well as the progression of the lean season, contributed to the further depletion of food stocks and resulting in HHs adopting livelihood coping strategies (Figure 2). In June, all assessed settlements without adequate access to food reported that HHs coped by borrowing food from friends or relatives, suggesting that settlements relied heavily on kinship to overcome difficulties in accessing livelihood sources. Additionally, to supplement disrupted livelihood sources and access to market, assessed settlements increasingly relied on foraging for wild foods as a main source of food.

Figure 2: Top three livelihood coping strategies in assessed settlements without adequate access to food [5]

Food Security Overview

Food Availability and Access

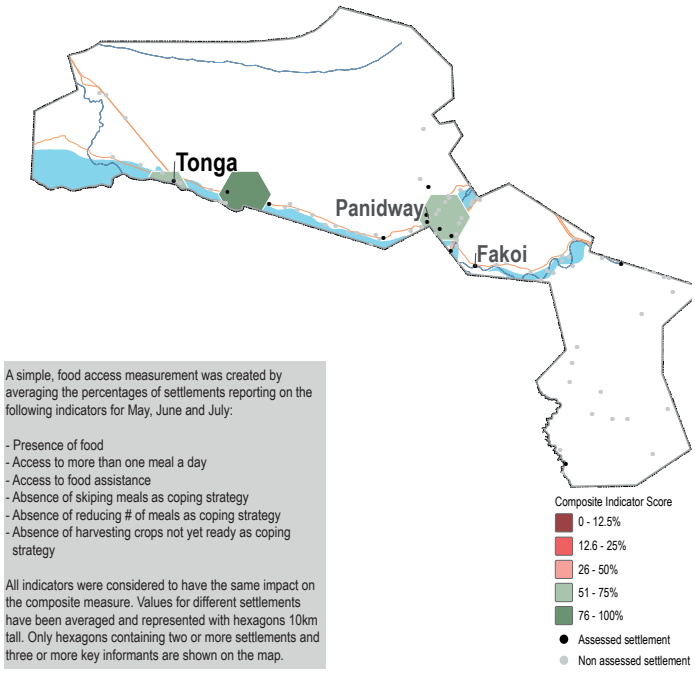
From May to June, the proportion of assessed settlements reporting adequate access to food increased from 25% to 63%, reflecting early recovery of livelihoods and markets from the effects of active conflict during May in parts of Panyikang. Subsistence farming and foraging for wild foods were the most common sources of food, reported by 33% of assessed settlements with adequate access to food, followed by purchased food (17%).

However, settlements that reported inadequate access to food increasingly reported food consumption coping strategies. Reported strategies typically indicate moderate stress in food access such as limiting meal size and buying less expensive food (Figure 3). Furthermore, those settlements also reportedly turned to strategies that indicate severe limitations in food access such as reducing the number of meals consumed per day and spending a day without eating (Figure 3), suggesting that the settlements that had not recovered from the May shocks were facing decreasing levels of access to food.

In assessed settlements that reported adequate access to food, the available diet is also reported to be diversified. Among those settlements, the consumption of main staples was reported by 71%, as was the consumption of vegetables, milk and meat by 43%. Moreover, all assessed settlements that had adequate access to food reported that fish was regularly eaten.

Between May and June, only 7% of assessed settlements reported access to clean water within 30 minutes walking distance. Limited access to clean water increases the likelihood of water-borne diseases and corresponding poor nutritional uptake.

Map 2: Level of access to food

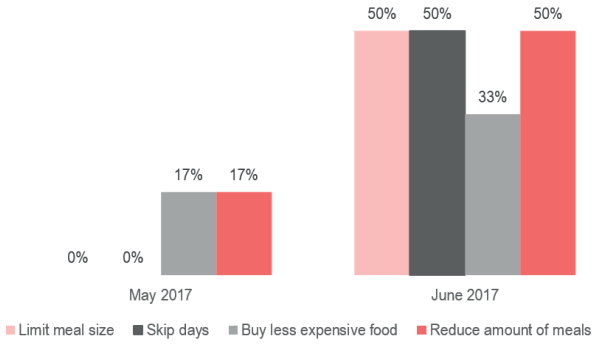


A simple, food access measurement was created by averaging the percentages of settlements reporting on the following indicators for May, June and July:

- Presence of food
- Access to more than one meal a day
- Access to food assistance
- Absence of skiping meals as coping strategy
- Absence of reducing # of meals as coping strategy
- Absence of harvesting crops not yet ready as coping strategy

All indicators were considered to have the same impact on the composite measure. Values for different settlements have been averaged and represented with hexagons 10km tall. Only hexagons containing two or more settlements and three or more key informants are shown on the map.

Figure 3: Food consumption coping strategies reported in assessed settlements without adequate access to food [5]



Stability of Food Access

In the short term, levels of adequate access to food should improve with the end of the lean season as sorghum crops become available in August, especially in the light of reports of sufficient rainfall in the area.[6] Reported access to land increased from 25% in May to 75% in June and all assessed settlements reported physical access to cattle, which creates a strong foundation for agricultural and livestock activities to resume.

Yet as of June 2017 none of the assessed settlements of Panyikang reported that the tools stolen or looted as a result of conflict had been retrieved by their owners and therefore HHs may be unable to make good use of available resources. Additionally, there is no indication that insecurity will stop during the cultivation season and the reported presence of the fall army worm is likely to reduce quantities of crops available.[7]

With the end of the rainy season around November, fishing could resume in the Nile, ensuring a better supply of nutritious food in the markets. However, given that fishing activities remained lower than the seasonal average in spite of the end of ongoing fighting in June, continued insecurity along the Nile could further inhibit fishing activities in Panyikang for the months to come.

As of August, no large scale distributions of humanitarian assistance are planned for the foreseeable future.[9] This may lead HHs to increasingly rely on upcoming harvests. While the resumption of some seasonal livelihoods will indeed improve food access in the short term, the situation should be closely monitored to ensure that adequate access to food is available.

Endnotes

1. FEWS South Sudan. Livelihood Zones and Descriptions. 2013.
2. RuCAPD. Rapid Need Assessment for Panyikang County. 2016.
3. REACH South Sudan. Situation Overview: Upper Nile State. April-May 2017.
4. Nile Hope, DCA & LWF. Joint FSL Assessment. April 2016.
5. Participants could choose multiple responses.
6. WFP. South Sudan. Monthly Market Price Monitoring. July 2017.
7. FAO. South Sudan Crop Watch. March-July 2017.
8. Ibid
9. WFP. IRRM Mission Plan. 14 August 2017.

Ulang County: Food Security and Livelihoods Profile

Upper Nile State, South Sudan, May-July 2017

of KI interviews conducted: 51
# of assessed settlements: 29
# of FGDs conducted: 0

Livelihoods Overview

Typical Livelihoods

Pre-crisis livelihoods in Ulang County were subsistence agriculture, with maize and sorghum the main crops grown, and livestock rearing. Livestock rearing was practiced by most households (HHs). Wealthier HHs relied on their own production, whereas poorer HHs generated income through fishing, charcoal production and firewood collection. Income was used to purchase food in the markets. From November to April those located near the Sobat River fished to supplement incomes.[1]

Hazards (Shocks)

- Natural resource access drives fighting between communities in the lean season, as others come to graze and cattle raid. In April 2016, this led to looting, property and crop destruction.[2]
- In early 2017 fighting between armed actors in Ulang and Nasir drove IDP movements towards Wanding, Nasir.[3]
- Flooding from the Sobat River took place in May.

Vulnerability (Resilience)

Between May and July, agriculture as a livelihood source appeared to recover following May flooding as well as from the fighting and displacement that took place in early 2017. By July, subsistence farming was reported by all assessed settlements (Figure 1). However, this occurred as the proportion of assessed settlements that reported selling crops as a livelihood source decreased (43% in May to none in July), indicating that crops available were only enough to feed HHs and did not provide a surplus to be sold at markets.

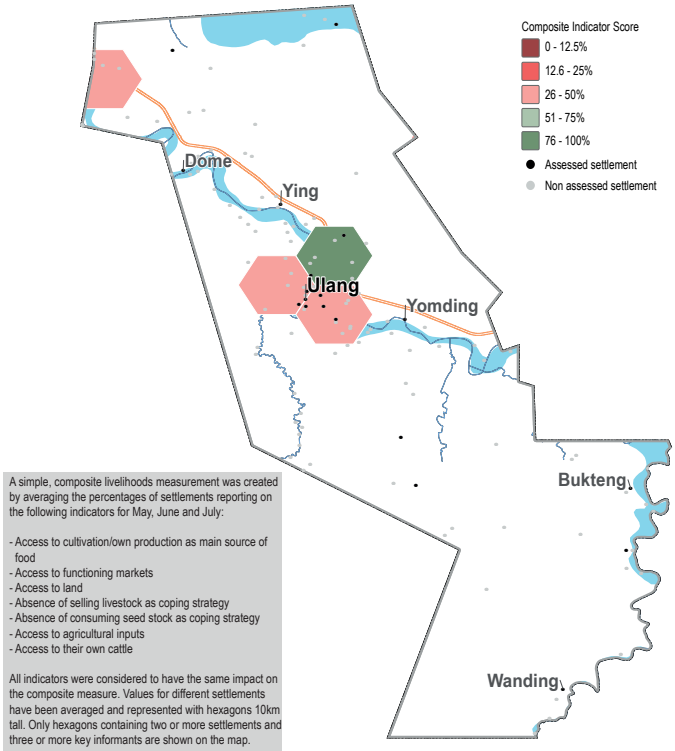
The proportion of assessed settlements reporting that fishing took place increased (Figure 1). Fishing typically occurred in swamps or ponds if water levels were high during the rainy season, and as such the low proportion of assessed settlements reporting fishing in June may have been attributable to flooding reported in May.

Insecurity and poor road conditions due to rainfall appeared to also play a role in cutting off a large proportion of assessed settlements from nearby markets. Physical access to a functioning market was reported by 11% of assessed settlements. Additionally, the drop in assessed settlements that reported carrying out casual labour (43% in May to none in June and July) may have led to less HHs being in the position to utilise what markets were accessible as no assessed settlement reporting relying on purchased food over the reporting period.

Figure 1: Top three sources of livelihood in assessed settlements[4]

	May	June	July
Own production	83%	73%	100%
Remittances	29%	20%	40%
Fishing and hunting[5]	N/A	10%	56%

Map 1: Level of livelihood vulnerability



A simple, composite livelihoods measurement was created by averaging the percentages of settlements reporting on the following indicators for May, June and July:

- Access to cultivation/own production as main source of food
- Access to functioning markets
- Access to land
- Absence of selling livestock as coping strategy
- Absence of consuming seed stock as coping strategy
- Access to agricultural inputs
- Access to their own cattle

All indicators were considered to have the same impact on the composite measure. Values for different settlements have been averaged and represented with hexagons 10km tall. Only hexagons containing two or more settlements and three or more key informants are shown on the map.

Coping Strategies

While the proportion of assessed settlements practicing subsistence agriculture increased (Figure 1), more assessed settlements that reported not having adequate access to food resorted to livelihood coping strategies as the reserves from the previous harvests were depleted. The proportion of assessed settlements without adequate to food reporting gathering wild foods as a livelihood coping strategy increased from 25% in May to 75% in July. This was in line with the proportion of assessed settlements that reported foraged food as a main food source (Figure 2).

A typical coping strategy used to deal with declining harvest reserves was purchasing food at the market while awaiting for the August harvests. In line with this strategy, during the reporting period residents in assessed settlements increasingly turned to relatives and friends for financial support (Figure 1).

Humanitarian assistance was conducted in June and July, however it was not a widespread coping strategy as by July no assessed settlement reported humanitarian assistance as a food source (Figure 2). Assessed settlements without adequate access to food employed typical coping strategies by increasingly selling livestock to compensate for the shortcomings of seasonal livelihoods during the lean season (25% in May to 75% in July).

Figure 2: Top three primary sources of food in assessed settlements

	May	June	July
Own production	67%	60%	75%
Foraged	17%	20%	25%
Humanitarian assistance	17%	10%	0%

Food Security Overview

Food Availability and Access

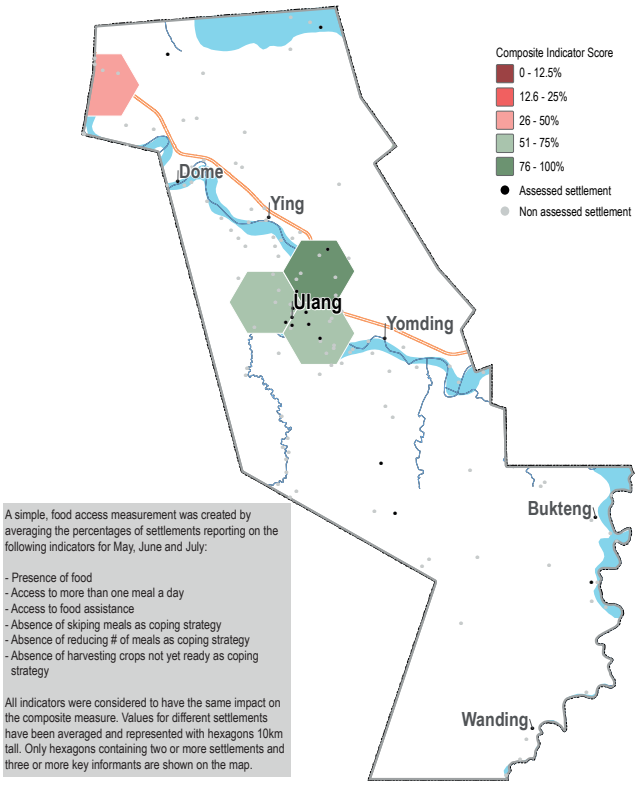
Reported adequate access to food has increased from 43% in May to 60% in July as the depletion of reserves from previous harvests was offset by improved access to main livelihood sources such as cultivation and livestock. The primary source of food remained food cultivated in assessed settlements (Figure 2). Flooding in May reportedly cut off HHs from both their livelihood and food sources, and created poor road conditions. The effects of flooding were mainly felt in June, when adequate access to food dropped to 20%, before improving in July.

The diet consumed by assessed settlements with adequate access to food during the reporting period was in line with the seasonal change. The greater presence of milk, fish and meat in the diets of assessed settlements came as the main staples from previous harvests were less commonly consumed (Figure 3).

Despite the increase in assessed settlements reporting access to food, consumption coping strategies were still commonly used by assessed settlements without adequate access to food (Figure 4). These strategies were primarily based around restricting consumption sizes and supplemented by the collection of wild foods. These strategies likely placed stress on the health of settlement residents by restricted food intake, and as the food consumed had low nutritional value.

Finally, 40% of assessed settlements reported having access to a borehole within a 30-minute walk, the highest in Upper Nile State.

Map 2: Level of access to food



A simple, food access measurement was created by averaging the percentages of settlements reporting on the following indicators for May, June and July:

- Presence of food
- Access to more than one meal a day
- Access to food assistance
- Absence of skiping meals as coping strategy
- Absence of reducing # of meals as coping strategy
- Absence of harvesting crops not yet ready as coping strategy

All indicators were considered to have the same impact on the composite measure. Values for different settlements have been averaged and represented with hexagons 10km tall. Only hexagons containing two or more settlements and three or more key informants are shown on the map.

Figure 3: Food consumed in assessed settlements that reported adequate access to food[4 6]

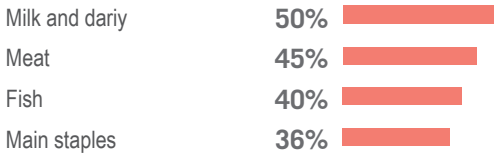
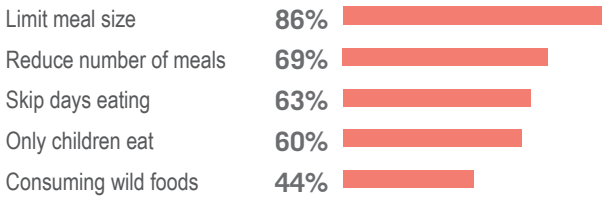


Figure 4: Food consumption coping strategies in assessed settlements without adequate access to food[4]



However, this does mean that 60% of assessed settlements reported that they were not able to access clean drinking water. Without access to clean water to prepare food and unwholesome foods commonly consumed, stomach related problems and diarrhoea may increase, reducing the nutritional intake for HHs.

Stability of Food Access

Exceptionally high proportions of assessed settlements reporting ongoing agriculture and livestock rearing suggest that access to food should improve with the upcoming harvests starting in August provided that current cultivation are sustained and not interrupted by a rise in insecurity or flooding.

Ulang has one rainy season and is served by the Sobat River, but if rainfall is excessive it may threaten livelihoods and further disrupt market supply routes. However, rainfall has been normal so far and is not expected to reach flood inducing levels again.[7]

Fishing is expected to resume fully in the swampy areas toward the end of the rainy season in September and fishing directly in the Sobat River will increase again once the river water level diminishes around November. This will provide access to an additional livelihood source as well as a source of nutritive food for the dry season.

The proportion of assessed settlements reporting humanitarian assistance as a primary source of food decreased from 17% in May to none in July. Anticipated distribution is due in August in Ying and Dome and should increase the availability of food in this area while waiting for harvests.[8]

Endnotes

1. FEWS. South Sudan Livelihood Zones and Descriptions. August 2013.
2. SSUDA. Ulang County Rapid Needs Assessment Report. November 2016.
3. REACH. Situation Overview: Displacement in Upper Nile State. South Sudan, January-February 2017.
4. Participants could choose multiple responses.
5. Data was not collected on fishing and hunting as a livelihood source in May.
6. No consensus on consumption of the following foods was reported in assessed settlements with adequate access to food: fish and milk (9%).
7. NFI Cluster. South Sudan Shelter NFI Cluster Ulang Assessment. June 2017.
8. WFP. IRRM Mission Plan. August 2017.