Photo: WFP/George Fominyen

South Sudan

Food Security and Nutrition Monitoring Bulletin

Round 21

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Data collected in December 2017

This is an output from a collaborative activity of WFP, FAO, UNICEF, WHO, Government of South Sudan and NGO partners from the Food Security and Livelihood cluster in South Sudan.

Contents

Key Findings

- Overall, during the survey in December 2017, households in South Sudan have faced the worst food security in the immediate period after the harvest season. The level of food insecurity has increased in most states compared to the same time in the previous year (2016).

- Seventy percent of the households across the country are facing moderate to severe food insecurity. This is lower than the 76 percent during the lean season (July-August) of 2017, but higher than the 67 percent reported from the FSNMS survey conducted in December 2016. Eighty percent of the households recorded below acceptable food consumption, of which 55 percent had poor consumption and 25 percent had borderline consumption.

- Households continue to be affected by the overall macroeconomic crisis in the country. In December 2018, the exchange rate of one USD to SSP was 113 percent higher than the same time one year ago. During the same period the price of Sorghum increased by 265 percent in Konyokonyo market in Juba.

- Overall, high food prices were the number one shock reported by most households (53 percent), followed by insecurity and violence (45 percent). Other significant shocks included drought, dry spells or irregular rain (30 percent), reduced income (20 percent), crop pests and diseases (20 percent) and illness (19 percent).

- Due to food insecurity, some 89 percent of households were found to be adopting at least one food based coping strategy in the one-week period prior to the survey. More than half (54 percent) were adopting livelihood based coping strategies; with likely significant negative impacts on their livelihoods. The frequency of food based coping practices was significantly higher than the same period last year.

- Overall, global acute malnutrition (GAM) rate was 13.3 percent; similar in comparison to the same timeframe of the previous year, but lower than at the height of the lean season in 2017. Based on MUAC, prevalence of wasting among women aged 15 to 49 years was 20.2 percent.

- Almost one third (32 percent) of the households reported receiving food assistance in the three-month period prior to the survey. Among them, 72 percent had benefited from general food distribution, 17 percent from health/medicine support, 10 percent from nutrition support, 8 percent from food for assets, 11 percent from agricultural tools and 4 percent from cash support. Households receiving humanitarian assistance had significantly better food consumption levels compared to those not receiving.

Photo: WFP/Irum Jamshed

1. Food Security Overview

Overall, 70 percent of households in South Sudan were found to be food insecure in December 2017, according to the Consolidated Approach to Reporting Indicators of Food Security (CARI)[1] methodology. Among these households, 56 percent were moderately, and 14 percent severely, food insecure. This represents a slight improvement compared to the peak of the previous lean season (July – August 2017), when overall food insecurity stood at 76 percent (50 percent moderate and 26 percent severe). This improvement is mainly due to seasonality factors and the availability of harvest.

This is the highest level of food insecurity in the period immediately after the harvest, since FSNMS started in 2010. Particularly, a significant deterioration has been observed in food insecurity levels from 2015 to 2016 (from 49 percent to 68 percent), and then further deterioration in December 2017 (Figure 1). This alarmingly high level of food insecurity is due to the reduced harvest resulting from displacement and disruption of livelihoods.

Compared to the same period last year, further deterioration was observed in the greater Equatoria region, previously known as the bread basket of the country. The percentage of food insecure population increased from 71 percent to 79 percent in Central Equatoria, 74 percent to 76 percent in Western Equatoria, and 53 percent to 54 percent in Eastern Equatoria (Figure 2). Similarly, the situation has also significantly deteriorated in Unity (51 percent to 80 percent), Western Bahr el Ghazal (64 percent to 83 percent), and Upper Nile (74 percent to 84 percent). Conversely, food security improved in relatively stable states such as Warrap (from 65 percent to 55 percent) and Lakes (80 percent to 74 percent), while there was some improvement in Jonglei (73 percent to 69 percent) as compared to December 2016.

Figure 1: South Sudan Food insecurity trends

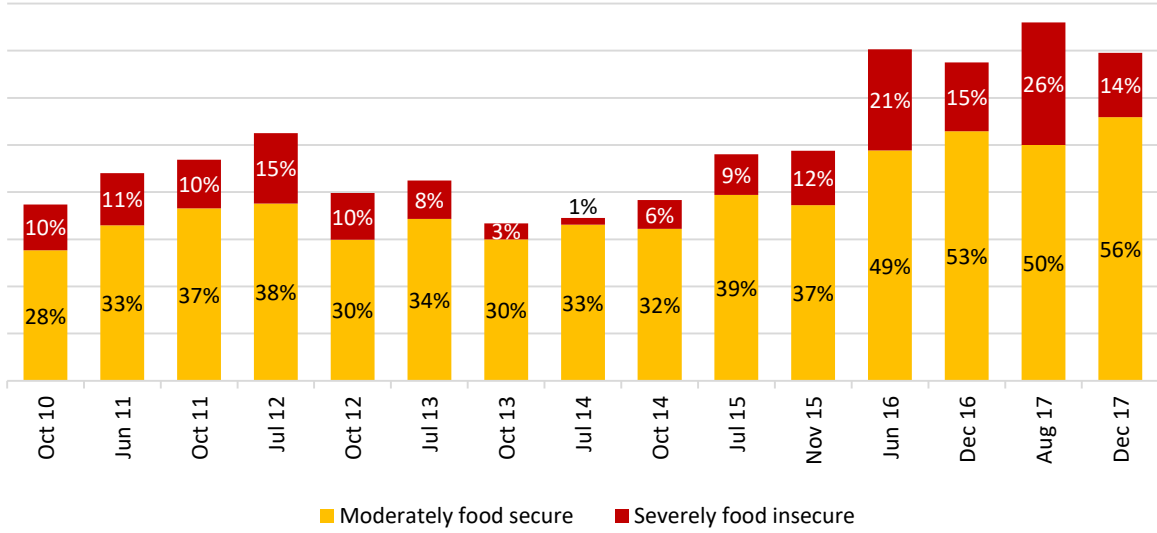
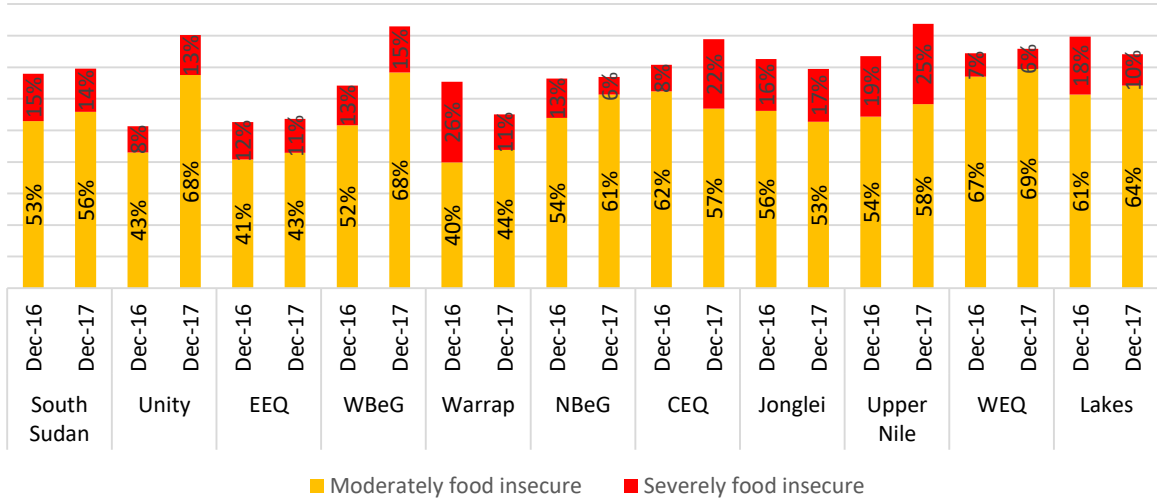


Figure 2: Food insecurity in December 2017 compared to December 2016



[1] WFP's Consolidated Approach for Reporting on Indicators of food security (CARI) methodology: the CARI culminates in a **food security console** which supports the reporting and combining of food security indicators in a systematic and transparent way. The **food security console** is the final output of the CARI. It combines a suite of **food security indicators** into a summary indicator –called the **Food Security Index** (FSI) - which represents the population's *overall food security status*. Central to the approach is an explicit classification of households into four descriptive groups based on the composite Food Security Index: food secure, marginally food secure, moderately food insecure, and severely food insecure.

Looking at the sub-national level in December 2017; very high levels of food insecurity were observed in Upper Nile (84 percent), Western Bahr el Ghazal (83 percent) and Central Equatoria (79 percent), which contributed significantly to the overall magnitude of food insecurity at national level.

Disrupted livelihoods due to the prevailing insecurity, the protracted economic crisis characterized by hyperinflation and depreciation of the South Sudanese pound (SSP), soaring food prices, a high cereal crop deficit and drought in parts of the country have contributed to this high level of food insecurity.

Summary of key food security indicators by county and states is presented in Annex III.

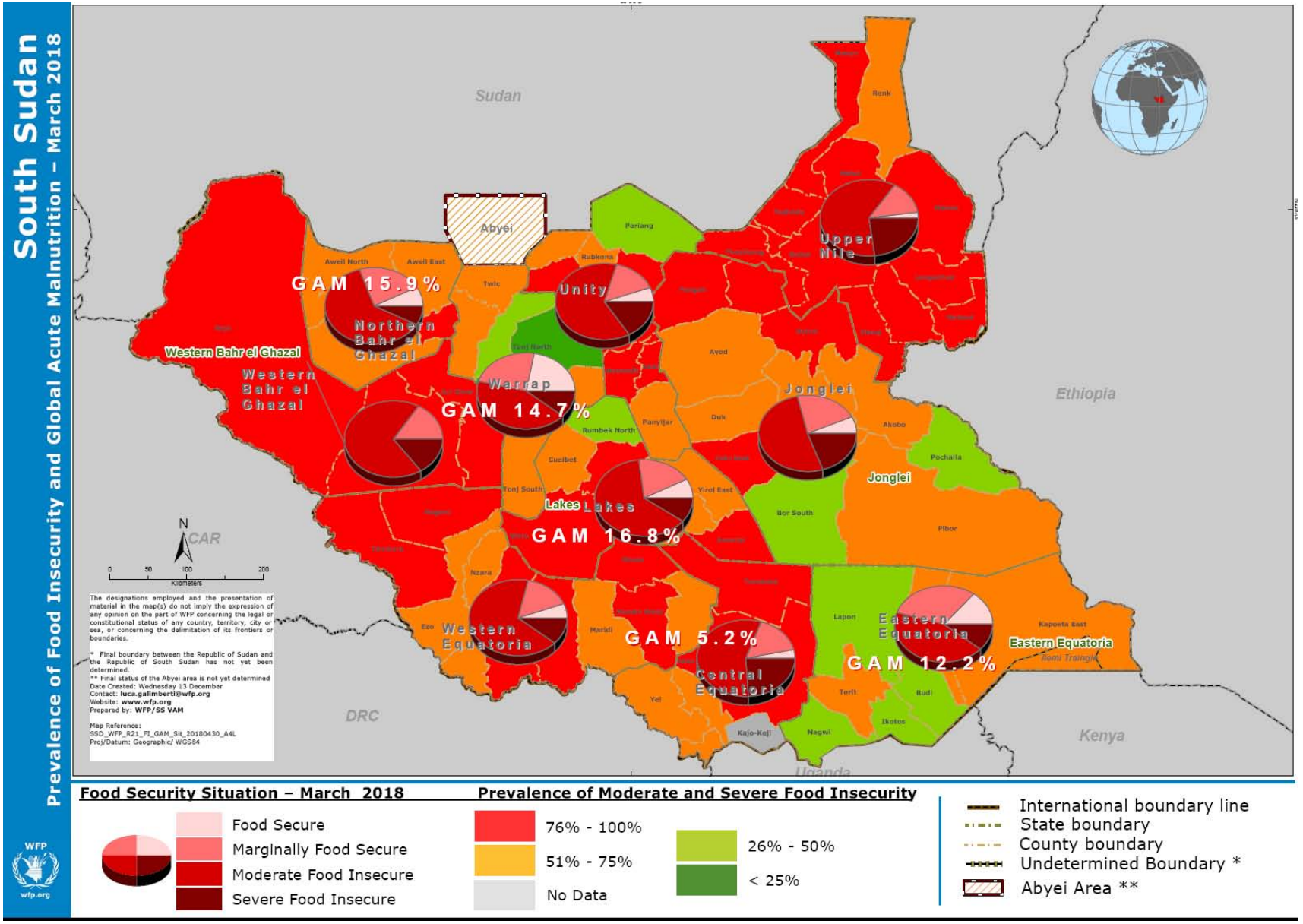


Figure 3: Map showing geographic distribution of food insecurity based on the CARI methodology, where counties have been classified based on the percentage of households with moderate to severe food insecurity. It also includes pie charts illustrating the proportion of households experiencing different levels of food insecurity in each state, and also shows the GAM rates for each state (details on GAM are provided in the nutrition section of this report).

2. Food consumption

The food consumption situation is very precarious in South Sudan with a remarkable decline in the acceptable consumption compared to the same period in 2015 and 2016. Considering the food consumption score[2], overall, only 17 percent of the households were found to have acceptable food consumption, while the majority (61 percent) were experiencing poor consumption and 22 percent were in the borderline consumption group.

Looking at the food consumption trends over the last two years during the same period, the proportion of households with poor consumption has increased from 27 percent in November 2015 to 44 percent in December 2016 to further alarming level of 55 percent in December 2017 (Figure 4). This shows an alarming trend of deteriorating food consumption in the country.

Looking at the sub-national level, the food consumption situation has worsened in most areas, compared to the same period last year. Almost all states have shown an increase of households with poor and border line consumption, with Jonglei as an exception. Although proportion of households with poor consumption in Jonglei has increased from 45 to 55 percent, that with borderline consumption has in fact decreased from 36 to 21 percent, resulting in the overall proportion of both poor and borderline consumption combined decreasing from 81 percent to 76 percent.

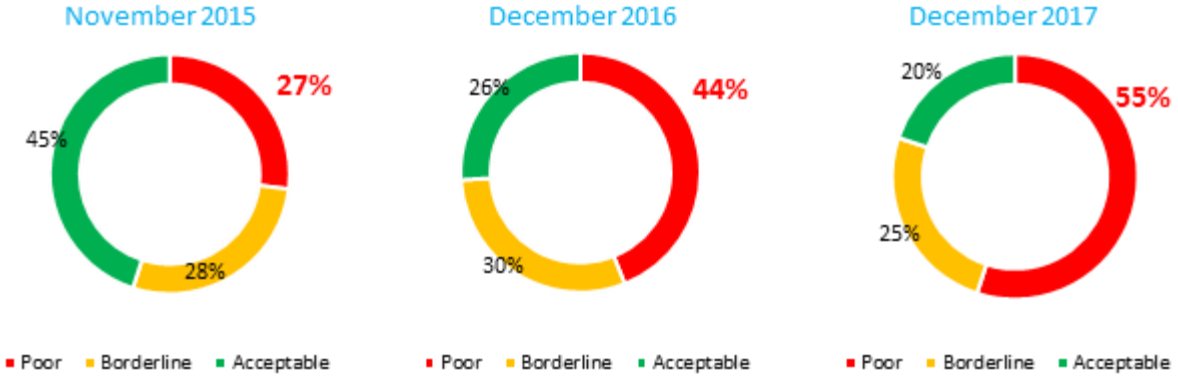
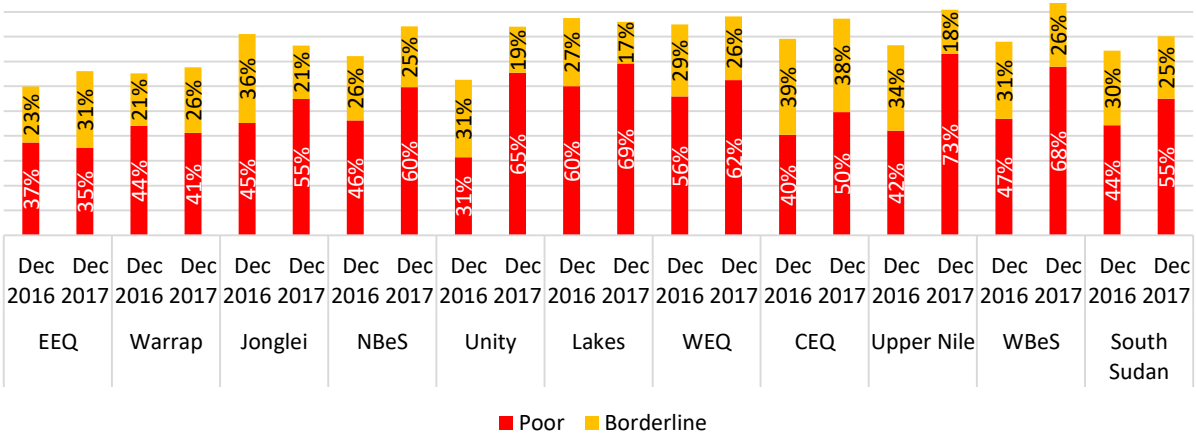


Figure 4: Food consumption groups: trends since 2015

Figure 5: Poor and borderline food consumption in Dec 2017 compared to Dec 2016



[2]Food Consumption Score (FCS) is an acceptable proxy indicator based on a seven-day recall of the food groups consumed within a household, the FCS measures food diversity (types of foods consumed), food frequency (the number of days each food group is consumed), and the relative nutritional importance of different food groups. Based on FCS standard thresholds, households are categorized into three groups: "poor" food consumption (FCS= 1-28), "borderline" food consumption (FCS = 28.1 – 42), and "acceptable" food consumption (FCS>42).

Such inadequate food consumption during the period immediately after the harvest indicates reduced impact of seasonality on food consumption as many households did not cultivate or abandoned crops at vegetative stage due to the conflict.

As per the Household Hunger Scale[3], which indicates household food deprivation, 55 percent of households faced moderate (50 percent) to severe hunger (5 percent) in December 2017, which is a slight improvement from the situation last year when 64 percent faced moderate (58 percent) to severe (6 percent) hunger.

Photo: WFP/Irum Jamshed

[3]The Household Hunger Scale (HHS) is a household food deprivation scale based on the idea that the experience of household food deprivation causes predictable reactions that can be captured by a survey and summarized in a scale. The HHS score ranges from 0 – 6 with a higher score indicating more severe hunger in the household. Standard thresholds then categorize these scores by little to no hunger/ slight (0-1 HHS), moderate hunger (2 – 3 HHS) and severe hunger (4 – 6 HHS) in the household.

3. Sources of food

Overall, more than half of the households (64 percent) across South Sudan reported own production as their main source of cereals and tubers consumed in the one-week period prior to the survey (Figure 6). 25 percent of households reported markets and seven percent reported food assistance as their main source. The proportion of households who reported own production as the main source of cereals and tubers was reported highest in Warrap at 90 percent, Western Equatoria at 87 percent and Norther Bahr el Ghazal at 69 percent, while it was lowest in Upper Nile at 28 percent, followed by Central Equatoria (52 percent).

Food assistance, which has increasingly become an important source of food for most households in South Sudan, was reported as the main source of food consumed in Unity at 33 percent, followed by Jonglei (22 percent).

Own production remains the major source for milk and dairy products (60% of households), fruit (60%), cereals (58%) and vegetables and leaves (51%). On the other hand, it does not represent the main source for the consumption of legumes and nuts (the main source for only 38% of households), meat, fish and eggs (21%) and oil and butter (9%).

Market was reported as the main source for cooking oil, fat and butter (63 percent), followed by meat, fish and eggs (60 percent), legumes and nuts (41 percent), vegetables and leaves (36 percent), milk and other dairy products (30 percent), cereals and tubers (25 percent) and fruits (21 percent), as can be seen in Figure 7. In the case of vegetables and leaves, in addition to own production and markets, gathering is also a significant source of food consumed by many households (Figure 8).

Figure 7: Market as the main source of household food consumed

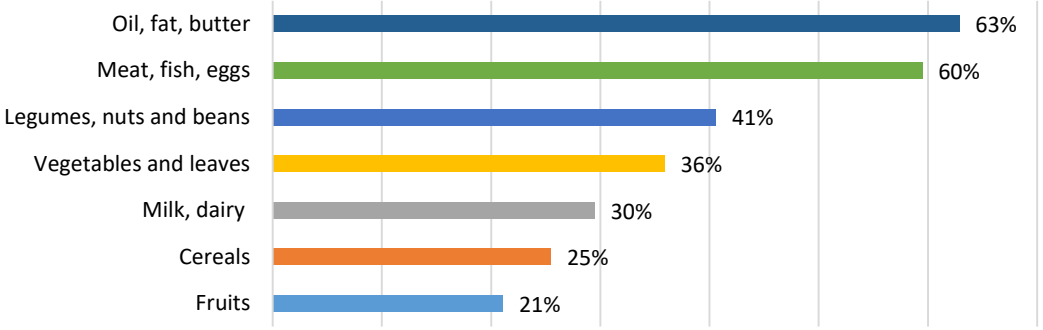


Figure 6: Sources of cereals and tubers consumed by households

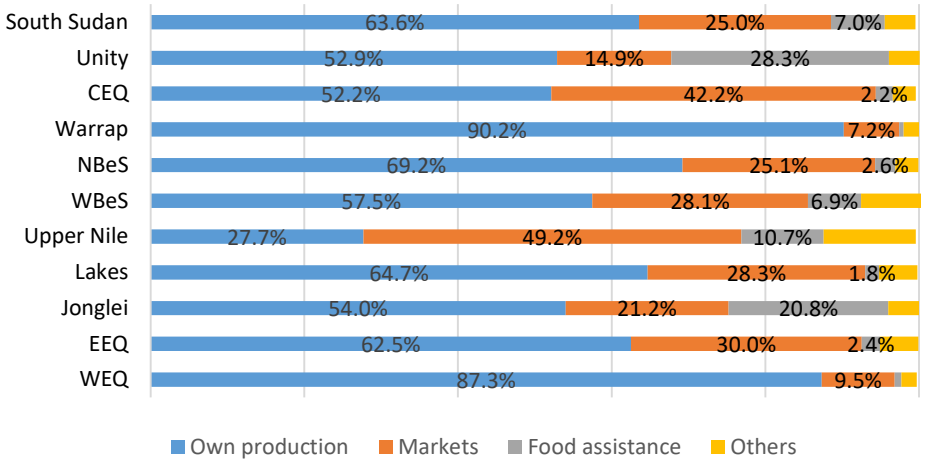
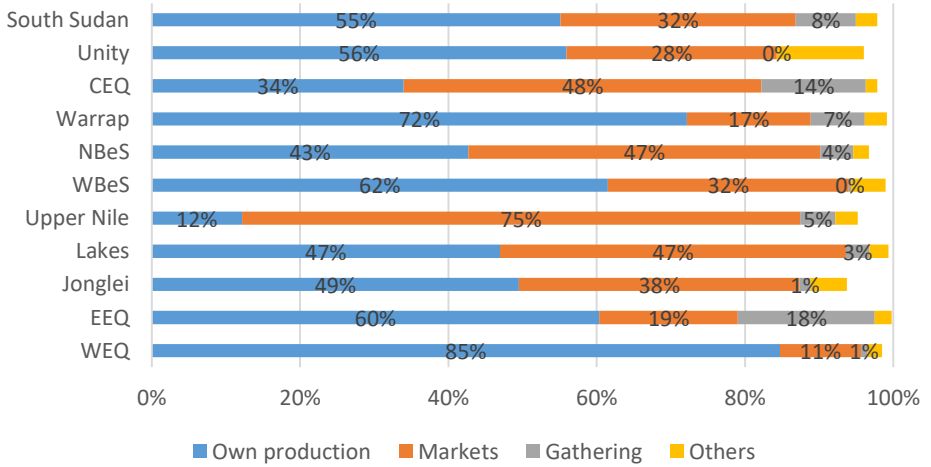


Figure 8: Sources of vegetables and leaves



4. Household profile

Overall, 57 percent of the households surveyed were headed by men while the remaining 43 percent were female-headed (Figure 9). Unity had the highest proportion of female-headed households (78 percent), followed by Jonglei (64 percent); while this proportion was lowest in Western Equatoria (25 percent), Central Equatoria (26 percent), Lakes (27 percent) and Warrap (28 percent). The average size of a household in South Sudan was found to be 7.1.

Some 11 percent of the households had at least one physically disabled member in the family and five percent had at least one mentally disabled member in the family. Nine percent of households reported at least one chronically ill member[4]. At sub-national level, Jonglei had the highest proportion (14 percent) of the households with at least one handicapped member, followed by Western Equatoria (13 percent) and Lakes (12 percent). Northern Bahr el Ghazal, Western Bahr el Ghazal, Central Equatoria, Eastern Equatoria, and Warrap have a relatively low proportion, ranging from five to seven percent. At county level, Pariang in Unity (34 percent) and Khorflus in Jonglei (32 percent) have the largest proportion of households with at least one disabled family member.

Similarly, Western Bahr el Ghazal has the highest proportion (12 percent) of households with at least one chronically ill member, followed by Jonglei (7 percent) and Lakes (7 percent). Northern Bahr el Ghazal, Warrap and Central Equatoria have a relatively lower proportion at 1 percent each. At county level, Mundri West in Western Equatoria (43 percent) and Old Fangak in Jonglei (42 percent) have the largest proportion of households with at least one chronically ill member.

Figure 9: Sex of the head of household

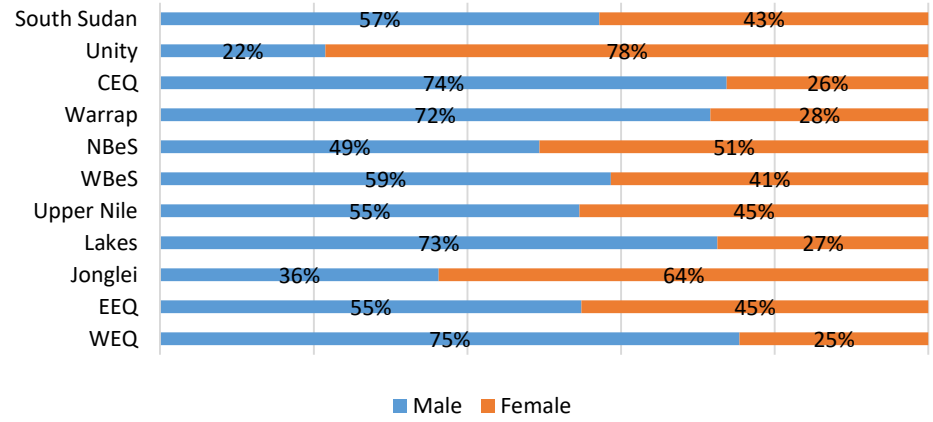


Table 1: Key household characteristics	
Average HH size	7.1
Head of the HH	Male (50 percent), Female (50 percent)
Age of the HH head	40 years (mean)
Education	Average number of years of education of head of household (1.1 years), mean highest education of any male member of household (2.2) and female member of household (1.0)
Housing status	Own house (93 percent), with host family or relative (5 percent), rented house (1 percent), others (1 percent),
Type of house	Tukul (90 percent), Rakooba (7 percent), Improvised/ plastic shelter (1 percent), Others (2 percent)
Residence status	Resident (93 percent), IDPs (6 percent), Returnees (1 percent)
Households hosting IDPs/refugees	Male (3 percent), Female (3 percent)
HH vulnerability	Household having at least one physical disable member 11 percent, Household having at least one mental disabled member 5 percent, Household having at least one Chronically ill member 9 percent, Household having at least one injured member 6 percent,

[4]A chronic disease is lasting for three months of more

Some 21 percent of households reported at least one member of the household who migrated out of their normal place of residence in the past one year. Upper Nile (41 percent), Central Equatoria (30 percent) and Unity (30 percent) had the highest proportion of households reporting such migration. Lainya in Central Equatoria (79 percent), Manyo (71 percent), Melut (70 percent) and Panykang (67 percent) in Upper Nile are the counties where highest proportion of households reported migration.

On average, 3.9 members reported migrating from their household; this proportion was highest in Lakes (5.5) and Upper Nile (4.3). Among the households who reported migration, 49 percent reported migrating to neighboring countries while 30 percent migrated to rural areas and 21 percent reported migrating to urban centers of the country.

Figure 10: HHs reporting at least one member migrating in the past one year

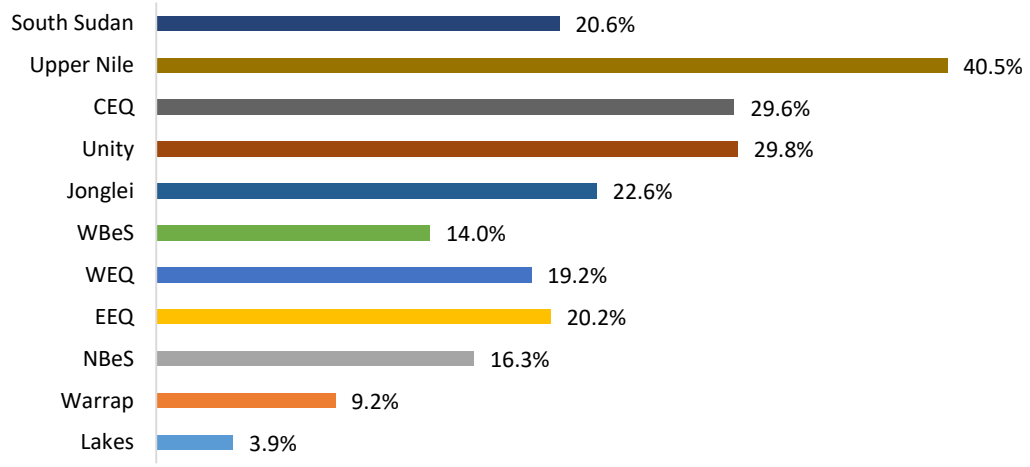


Photo: WFP/Krishna Pahari

5. Livelihoods and income

Overall, 66 percent of households reported agriculture as their primary source of income, followed by livestock (8 percent), petty trade (8 percent), food assistance (4 percent), and sale of firewood/ charcoal (4 percent); these vary largely depending on the various geographic areas and livelihood zones. Other sources of livelihood include casual labour (3 percent), gathering and hunting (3 percent), formal employment (3 percent) and others (2 percent). Lakes has the highest proportion of households (93 percent) with agriculture as the main livelihood, followed by Northern Bahr el Ghazal (88 percent), Western Equatoria (84 percent) and Warrap (84 percent). This proportion was lowest in Upper Nile (31 percent), followed by Unity (42 percent), Western Bahr el Ghazal (43 percent), and Jonglei (45 percent). On the other hand, Upper Nile had the highest proportion (17 percent) of households with livestock as the main source of income, followed by Jonglei and Unity (16 percent each). Based on the results of the focus group discussions, livestock remains the main livelihood source for most households in Kapoeta North (50 percent) and Kapoeta East (92 percent) of Eastern Equatoria state, Pibor (58 percent) of Jonglei state and Melut, Maiwut and Longochuk (all with 43 percent) in Upper Nile state.

The economic crisis and conflict have adversely affected the livelihoods of most households. Almost half of the households (45 percent) reported that their income has decreased compared to the same time last year. Another 37 percent reported no change, while only 12 percent reported an increase in income and six percent of respondents were not sure. The proportion reporting a decrease in their income was highest in Western Bahr el Ghazal (64 percent) followed by Upper Nile (61 percent), and Warrap (55 percent).

Figure 11: Livelihoods - main sources of income

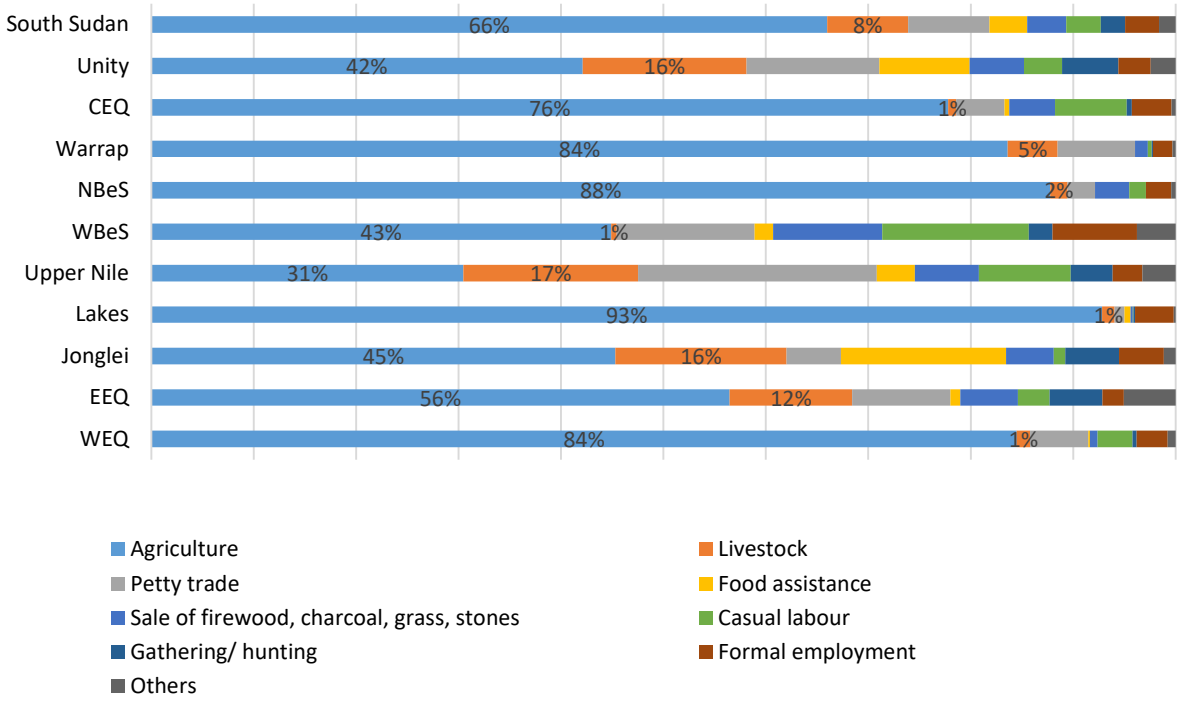
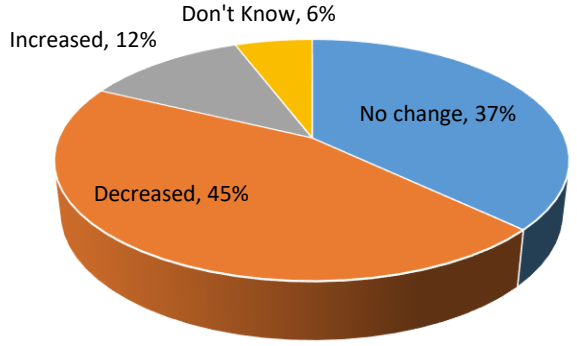


Figure 12: Current household income compared to last year



As reported by the households, the main reasons reported for this decrease (Figure 13) include: their income sources were completely destroyed (30 percent), income sources were partially destroyed (24 percent), and a change in market conditions (26 percent).

Figure 13: Reasons for decrease in income

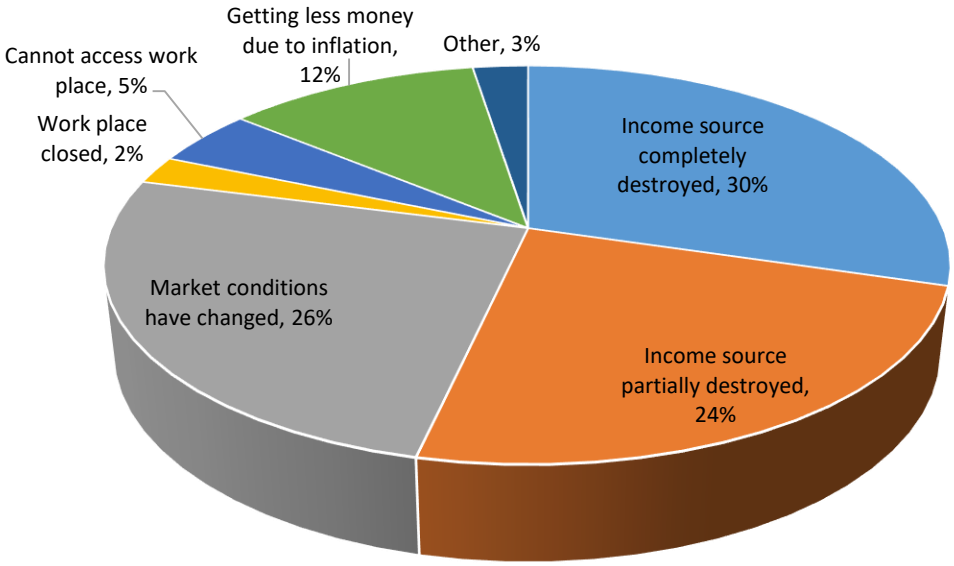


Photo: WFP/Irum Jamshed

6. Expenditure

One of every three households (32 percent) were found to have a high to very high share of expenditure on food[5], which is a clear indication of their vulnerability and inability to purchase basic non-food items and services. Among these, 24 percent of households had a very high share of expenditure on food and 8 percent had a high food expenditure share. These figures show a slightly improved situation as compared to December 2016 (32 percent very high and 9 percent high).

The elevated prevalence of high to very high levels of food expenditures were mainly observed in Upper Nile (53 percent), Central Equatoria (42 percent), Eastern Equatoria (38 percent) and Jonglei (36 percent) (Figure 1.4).

An average household reportedly spent SSP 6,294 in the one month period prior to the surve6[5]. Even though the survey was conducted immediately after the harvest season, overall, almost half (46 percent) of the monthly food expenditure of an average household was on food. More than half (52 percent) of monthly food expenditure was spent on cereals and tubers. Other food expenditure included salt and sugar (14 percent), eggs and meat (9 percent), oil (9 percent) and pulses (6 percent).

Figure 14: HHs with high to very high share in food expenditure

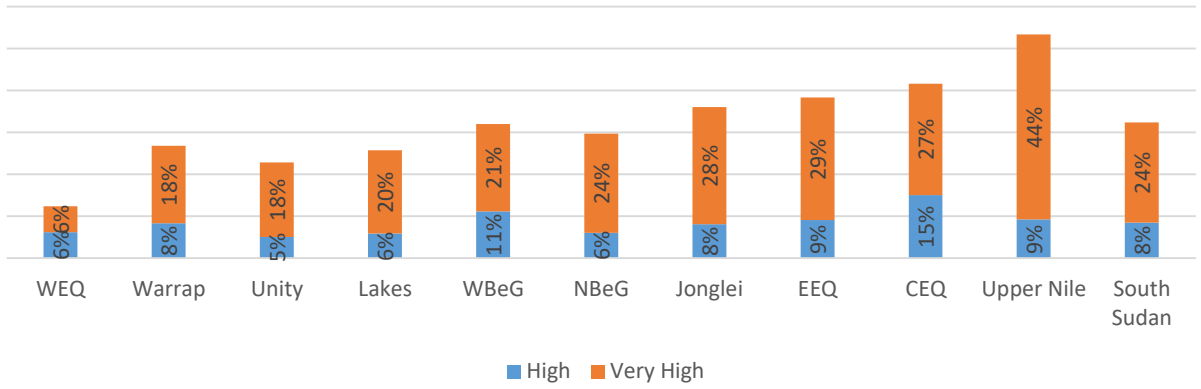
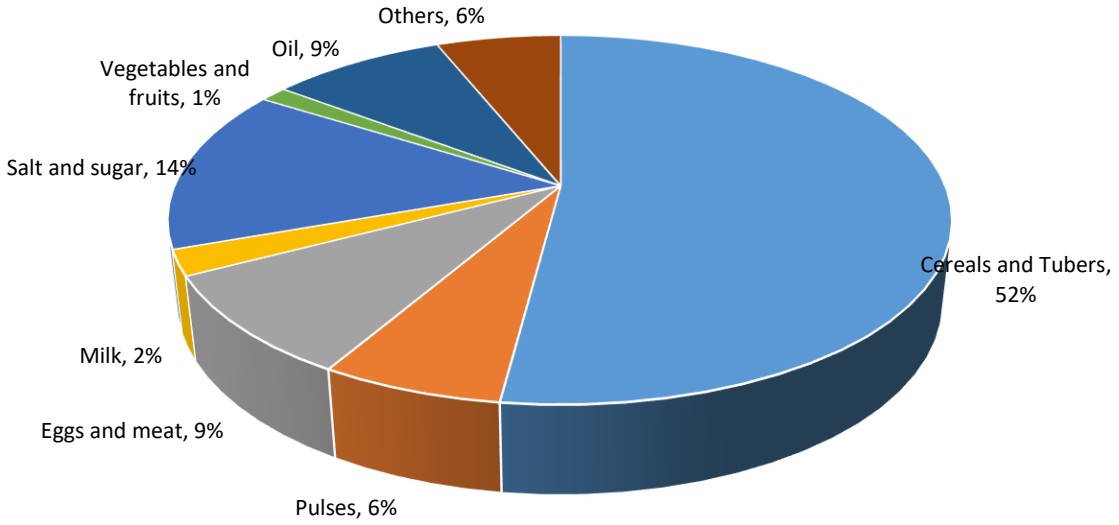


Figure 15: Household food expenditure



[5] Food expenditure share categories (food expenditure as a percentage of a total expenditure): low (below 50%) – medium (from 50 to 65%), high (from 65 to 75%) and very high (above 75%).
[6]This was equivalent to USD 33 considering the average exchange rate in parallel market of Juba (190 SSP per USD) in December 2017

7. Agriculture

Access to agricultural land is not a major concern for rural households in South Sudan: about 85 percent of the respondents reported having access to land for cultivation, and among them 74 percent reported having planted crops or were planning to cultivate in the 2017-18 season. Warrap, Northern Bahr Ghazal, Eastern Equatoria and Western Equatoria had the highest proportion (between 95 and 98 percent) of households owning agricultural land, while Upper Nile had the lowest (57 percent), followed by Jonglei (71 percent) (Figure 16). More than half of the respondents reported as subsistence farmers, with 55 percent of households reportedly cultivating one Feddan[7] or less.

About half (45 percent) of farmers relied on their own stock while others purchased (22 percent) seeds. Other sources include non-government organisations (NGOs) (12 percent), the Food and Agriculture Organisation (FAO) (7 percent), gifts (7 percent) and others (8 percent).

Although access to agricultural land is not a major issue in South Sudan, agricultural production is very minimal. As reported by the households, an average farming household in South Sudan currently can produce food (cereals) sufficient for their own consumption needs for only 2.9 months of the year. This self-sufficiency is highest in Western Equatoria at 4.8 months, while it is lowest in Central Equatoria at 1.3 months followed by Upper Nile and Lakes (Figure 17). These are states that experienced some of the worst violence and displacement during the cultivation season in 2017. While Central Equatoria and Upper Nile experienced political conflict, the violence in Lakes state was related to intercommunal conflicts associated with cattle raiding and reprisal attacks.

Figure 16: Households owning land for cultivation

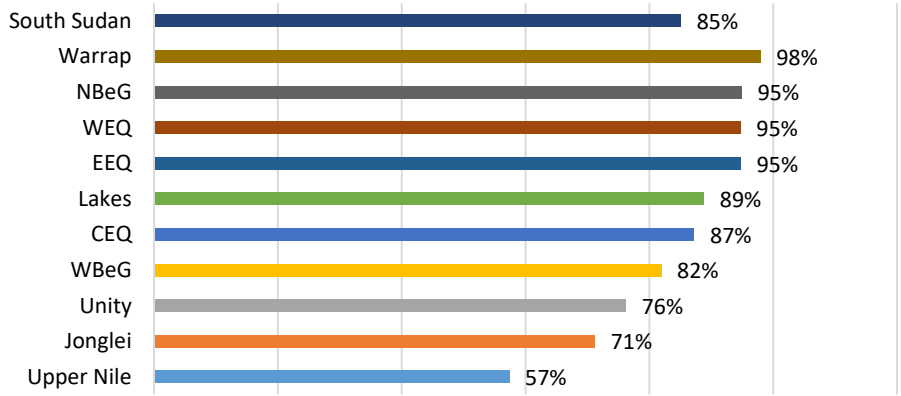
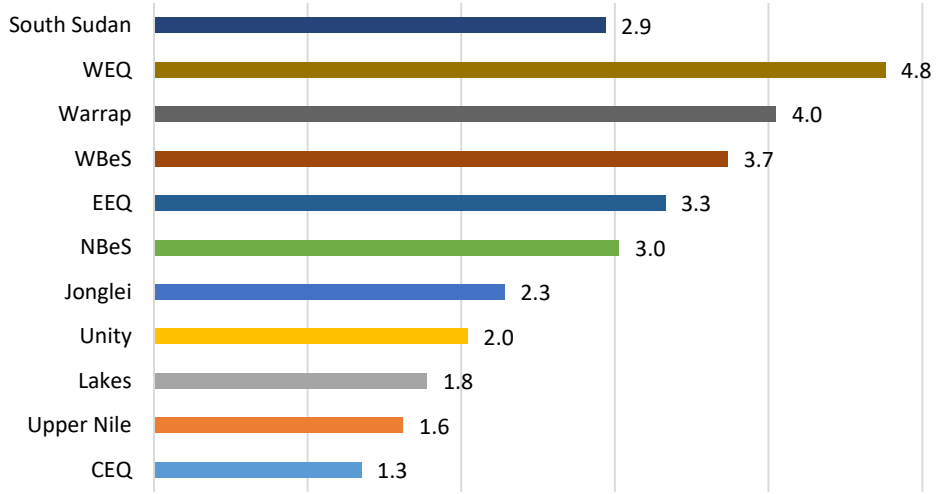


Figure 17: Food self sufficiency of farming households (months)



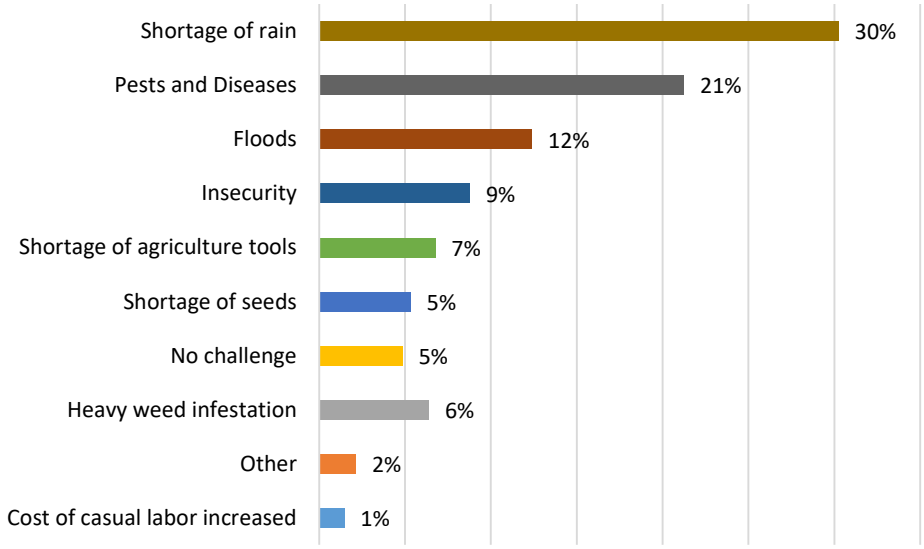
[7] Fedan is a measure of area used in South Sudan, 1 fedan = 0.42 hectare.

When asked about their intention regarding the use of their expected production, a large majority of the respondents (84 percent) said that they would use it solely for their own consumption, while 14 percent would partially consume and partially sell, and only 1 percent indicated they would consume and give out, and the remaining 1 percent indicated they would consume, sell and give out. It was observed that more than one in ten households, even in areas where production is insufficient for own consumption over the whole year, would sell some of their produce to be able to cover other needs, highlighting the need for these households to make extremely difficult choices. The only exception to this trend was seen in Western Equatoria, where 47 percent of households reported their intention to consume and sell part of their produce, most probably to meet other basic needs. This higher proportion of households willing to sell part of their produce is probably linked with the generally higher production levels in this area.

As for the main challenges during farming (Figure 18), shortage of rain was reported as the main challenge by 30 percent of households, followed by pests and diseases (21 percent), floods (12 percent), shortage of agricultural tools and seeds (12 percent), insecurity (9 percent), and heavy weed infestation (5 percent). Lakes had the largest proportion (52 percent) of households reporting shortage of rains as the main challenge, followed by Eastern Equatoria (40 percent) and Unity (34 percent). The Greater Equatoria region (Eastern Equatoria: 34 percent, Western Equatoria: 25 percent and Central Equatoria 22 percent) had relatively high proportions of households reporting crop pests and disease as the main challenge, followed by Jonglei (31 percent). Shortage of seeds and agricultural tools was most prominent in Warrap (23 percent), Western Bahr Ghazal (21 percent), and Jonglei (19 percent), while insecurity was most reported in Western Bahr Ghazal (34 percent) and Western Equatoria (20 percent) as the main challenge. Nearly half (48 percent) of the households who reported seed shortage as the main constraint said they consumed the seeds due to food shortage and about 24 percent cited conflict as the reason for the loss of seeds.

Photo: WFP/Irum Jamshed

Figure 18: Main challenges to Agriculture



8. Livestock

Livestock is an important contributor to household food security in rural areas of South Sudan. More than half of the households (54 percent) reported owning livestock, comparable to the proportion of households at the same time the previous year (December 2016).

During the time of survey, the proportion of households owning livestock was highest in Lakes (74 percent), followed by Warrap (69 percent), while lowest in Central Equatoria (32 percent) followed by Western Bahr el Ghazal (40 percent) and Western Equatoria (43 percent) (Figure 19).

Among those rearing livestock, an average household in South Sudan owns 16.5 cattle, 9.4 sheep, 9.8 goats and 9.1 poultry birds. However, this distribution of wealth is not equal among the households as the overall average drops down to 5.8 cattle, 1.9 sheep, 3.5 goats and 2.9 poultry birds.
In terms of Tropical Livestock Units (LTU)[8], an average livestock rearing household would own 5.4 TLU of livestock. Eastern Equatorial was found to have the highest livestock ownership at 10.6 TLU, followed by Warrap at 10.4, while it was lowest in Western Equatoria (0.5), followed by Western Bahr Ghazal (0.9), where livestock keepers traditionally own smaller herds.

Overall, 38 percent of livestock owners reported having their livestock in good condition, 32 percent in moderate condition and others were worse off (generally thin with ribs or bones visible). Some 46 percent reported that this status of livestock body condition is not normal during this time of the year. The body condition was of particular concern in Western Bahr Ghazal, where only 14 percent had good, smooth appearance, 31 percent were in moderate condition, and 75 percent of respondents said that the current bad condition of their livestock is not normal at this time of year. This was followed by Eastern Equatoria, where only 21 percent had good, smooth appearance, 38 percent were in a moderate condition, and 68 percent of respondents said that their current livestock condition is not normal for this time of year. This could be attributed to the poor pasture condition resulting from shortage of rains reported by nearly half (49 percent) of the respondents. About two-thirds of the respondents in Eastern Equatoria reported limited pasture resources in December 2017.

Figure 19: Households owning livestock

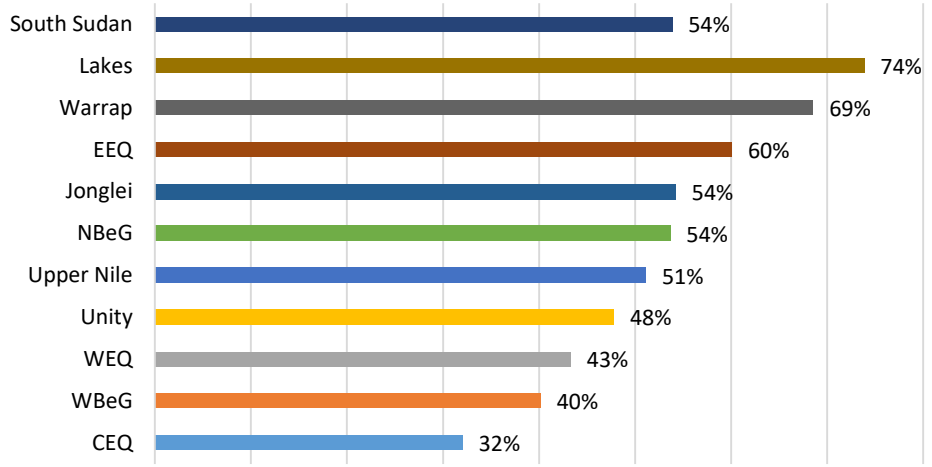
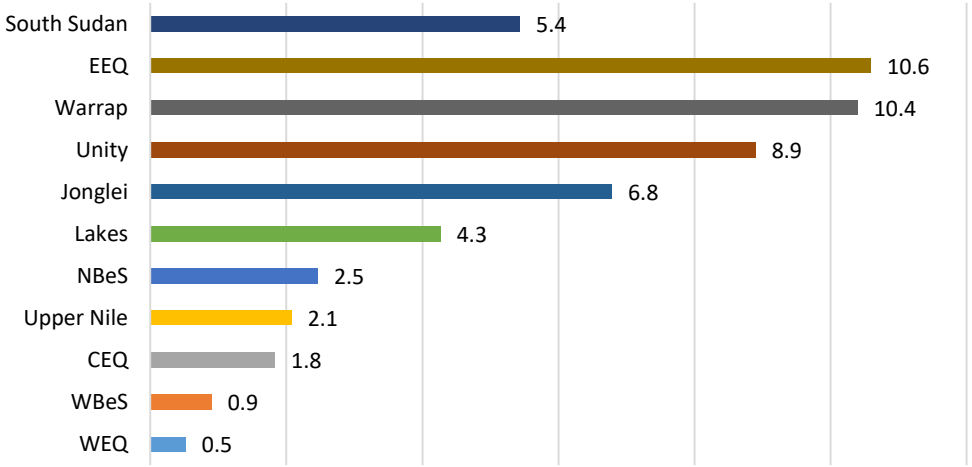


Figure 20: Average livestock ownership (TLU) of household keeping livestock



[8] Values for TLU are as follows: Camel=1, cattle=0.7, goat/sheep=0.1 and poultry=0.01. Source FAO (1987), Livestock Production in tropical Africa.

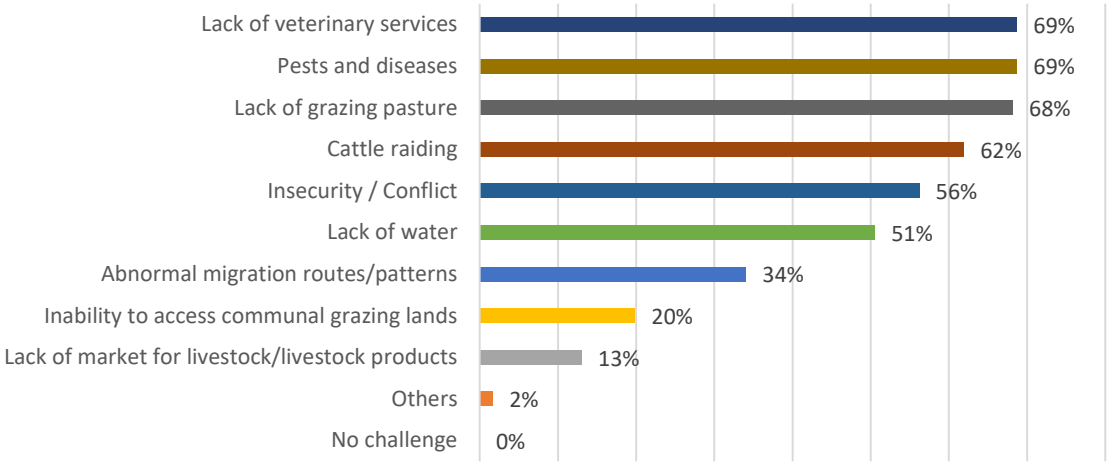
The households were asked the number of livestock they currently own compared to the same time last year. Thirty one percent of households reported a major decrease in their livestock number, while 31 percent reported a minor decrease and 21 percent reported no change. Only a few households (11 percent) reported some minor increase.
The reasons for such a decrease in livestock ownership includes disease outbreak (43 percent), armed groups and intercommunal raiding (29 percent), and other reasons such as flooding, drought, lost in immigration etc. that accounts for 28 percent.

From the focus group discussion, about 54 percent of respondents reported migration of livestock in December 2017. While normal seasonal migration starts around this time of the year across the country, most of the migration (58 percent) was abnormal and mainly triggered by the ongoing conflict. The abnormal migration was mainly reported in Unity (71 percent), Jonglei (68 percent), Warrap (67 percent), Eastern Equatoria (66 percent), Central Equatoria (57 percent) and Lakes (57 percent) states.

As reported by the participants in the focus group discussion, the main challenges in rearing livestock included lack of veterinary services (reported as a challenge by 69 percent of FGD participants), pests and diseases (69 percent), lack of grazing (68 percent), cattle raiding (62 percent), insecurity or conflict (56 percent) and lack of water for the livestock (52 percent) (Figure 21).

Photo: WFP/Krishna Pahari

Figure 21: Main challenges in rearing livestock



9. Markets and household food access

As outlined in the section under sources of food, the market was reported as the main source of cooking oil, fat and butter (63 percent), followed by meat, fish and eggs (60 percent), legumes and nuts (41 percent), vegetables and leaves (36 percent), milk and other dairy products (30 percent), cereals and tubers (25 percent) and fruits (21 percent) consumed by the households.

During FSNMS Round 21, market related data were collected through focus group discussions (FGD) from each village in which the assessment was conducted. The key areas covered includes physical access to the nearest market, travel time to reach markets by season, months with low availability of commodities, transfer modality preferences and other related issues.

There could be different factors that prevent households to access a functional market. Figure 22 depicts the proportion of communities with physical access as a challenge to reach the nearest market by season. Overall, 46 percent of communities reported having no access to markets during the rainy season, while this proportion was 13 percent during the dry season. The problem is more prominent in communities in Western Bahr el Ghazal, Jonglei, Unity and Warrap states, where more than 50 percent of the communities face challenges to market access. The only exception to this was Central Equatoria, where access to the nearest market was not reported as a challenge. Most respondents mentioned insecurity as the main challenge to access the market in Jonglei, Unity and Western Bahr el Ghazal. On the other hand, communities in Upper Nile, Jonglei and Eastern Equatoria need to travel for more than 10 hours on average to reach the nearest market center. The travel time during the rainy season was reported longer due to the difficulty to cross water bodies and to walk along the muddy roads. The least time required to reach the nearest market was in NBeG, WBeG and WEQ, with less than four hours travel time.

FGD participants rated the availability of staple food in the market that households visit to buy food. Overall, 52 percent of participants reported having below normal availability of food in the market, while 23 percent reported normal availability, 18 percent reported above-normal availability, and 7 percent said they were not sure. The highest proportion of participants in Western Equatoria, Eastern Equatoria, Jonglei, Lakes, Northern Bahr el Ghazal and Unity rated availability of staple food as below normal.

Figure 22: Communities with physical access challenges to market by season

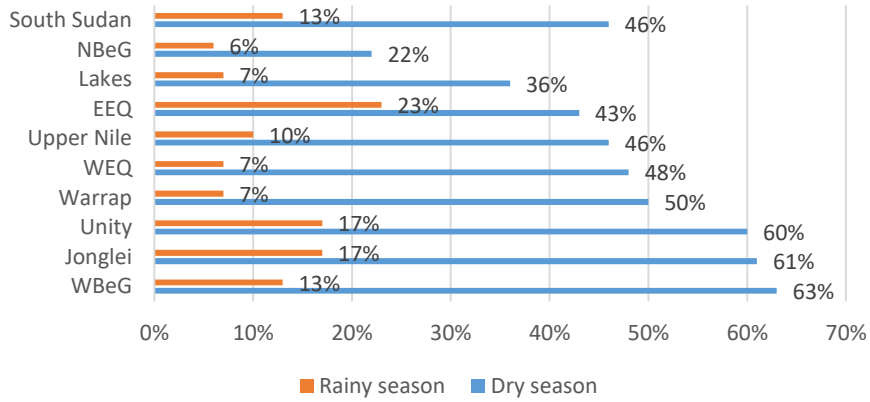


Photo: WFP/Irum Jamshed

In Central Equatoria, Upper Nile and Western Bahr el Ghazal, the availability was rated as normal and above normal by most participants. The below normal availability of staple foods in the market was seen in many states, including the traditional food basket states of the country, Western and Eastern Equatoria. High dependency on imports for staple foods, hyperinflation, depreciation of the local currency, insecurity and other such factors have contributed to the reported below normal availability of staples in the market. May through September were identified as the months when availability of staples were scarce across all states. The exception was in Unity where the scarcity was rated equally across all months.

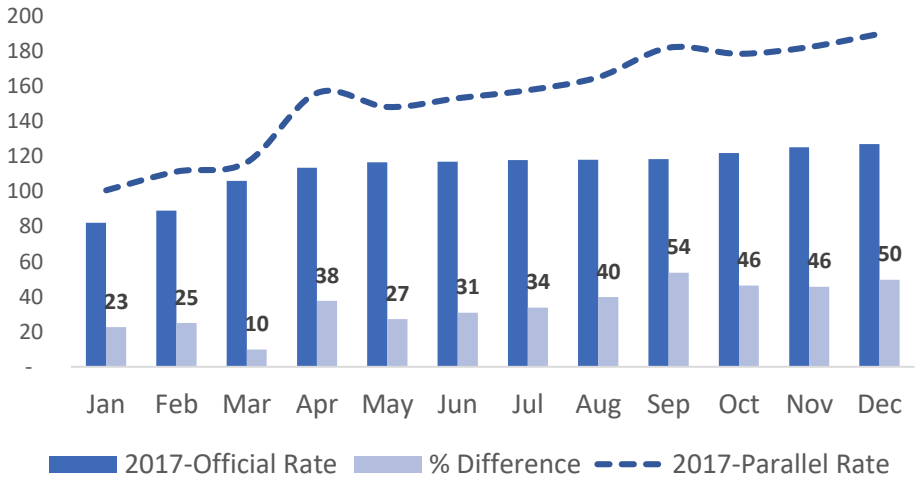
FGD participants were also asked their preferred mode of transfer, if humanitarian assistance was introduced in their locality. The highest proportion of respondents in eight states would like food as the most preferred mode of transfer, ranging from 52 percent in Warrap to 100 percent in CEQ (Table 2). About 51 percent of participants in Upper Nile preferred combined transfer (cash and food) and the remaining 49 percent would prefer in-kind assistance. In Western Equatoria, 35 percent of the community prefer a combination of cash and food, while 24 percent would like cash support. About a quarter of respondents in Western Equatoria were indifferent to either of the transfer options. The two main reasons indicated for food preference was that 1) food is better for nutrition and 2) food assistance helps meet the food shortage in the households. Furthermore, high food prices and the ease of control for household needs were the other two mentioned reasons. On the contrary, flexibility of cash for different purposes beyond food was the main reason mentioned by communities in Western Equatoria.

Juba market serves as distribution hub for food commodities. It also serves as a financial center to set currency exchange rates in other locations. The economic crisis has curtailed the flow of hard currency from oil revenues, aggravating the availability of foreign currency at official rates. In December 2017, the average exchange rate of US Dollar to SSP stood at SSP 190 and SSP 127 in the parallel and official markets respectively. Compared to one year ago (December 2016), the parallel market exchange rate has more than doubled (an increase of 113 percent). Generally, due to the unavailability of hard currency from banks at an official rate, the divergence between the two rates has continued to grow in 2017 (Figure 23). Given the high dependency on imports, continued depreciation of local currency and supply constraints have contributed to the increasing price of staple foods across markets. For example, the price of Sorghum in Konyokonyo market in Juba increased by 265 percent during the one year period from December 2016 to December 2017.

Table 2: Preference on transfer modality for assistance

	Food	Cash	Food and cash	Voucher	No preference
WEQ	15%	24%	35%	0%	26%
EEQ	72%	4%	20%	4%	0%
Jonglei	59%	1%	30%	5%	6%
Lakes	88%	0%	9%	0%	3%
Upper Nile	49%	0%	51%	0%	0%
WBeG	63%	0%	25%	13%	0%
NBeG	59%	0%	41%	0%	0%
Warrap	52%	10%	36%	2%	0%
CEQ	100%	0%	0%	0%	0%
Unity	77%	4%	17%	1%	0%

Figure 23: Currency exchange rates (SSP/US $): official and parallel



10. Health Services

FSNMS round 21 aimed to explore community perception on access to healthcare services, assessed through focus group discussions. These results provide an indication of how communities perceive access to healthcare services and their views on health challenges faced at the local level.

Overall, 73 percent of responders reported that health facilities are open in their communities, although they indicated that only 54 percent of these facilities have the capacity to deliver services, with the highest percentage of communities in Upper Nile (68 percent) reporting non-functional healthcare services due to a lack of capacity. Only about half of the communities in Jonglei (48 percent) and Western Bahr el Ghazal (50 percent) reported that health facilities are open in their locations.

Although the provision of services was not assessed through a facility-based evaluation and therefore a technical classification of the level of health service delivery is not provided, findings reveal that almost 60% of the communities across the country report access to primary health care units (PHCU) in their community, followed by 36 percent with access to primary health care centers (PHCC) and less than 4 percent to hospitals in their community.

The distance from the community to the nearest health facility reveals communities' views on physical barriers to health care utilization. This determinant on access to healthcare has been assessed using self-reported estimates on distance expressed in kilometers (km) and hours. Overall, the estimated mean distance to the nearest health facility is 9.3 km, with the longest distance reported by communities in Jonglei (19.7 km), Eastern Equatoria (11.9 km) and Northern Bahr el Ghazal (11.3 km), suggesting that services are not within reasonable physical reach in these areas. The shortest distance was reported in Central Equatoria (1.3 km) and Western Bahr el Ghazal (1.5 km). In terms of hours, in general the mean distance is nearly 6 hours, with the highest distance reported in Eastern Equatoria (12.7 hours) and Unity (6.4 hours).

Other factors influencing healthcare utilization were assessed, such as, issues which have affected health facilities over the past month. There are perceptions that health facilities experience critical gaps like shortages of essential supplies, namely medicines (reported by 73 percent of communities) and equipment, as reported by 54 percent of communities.

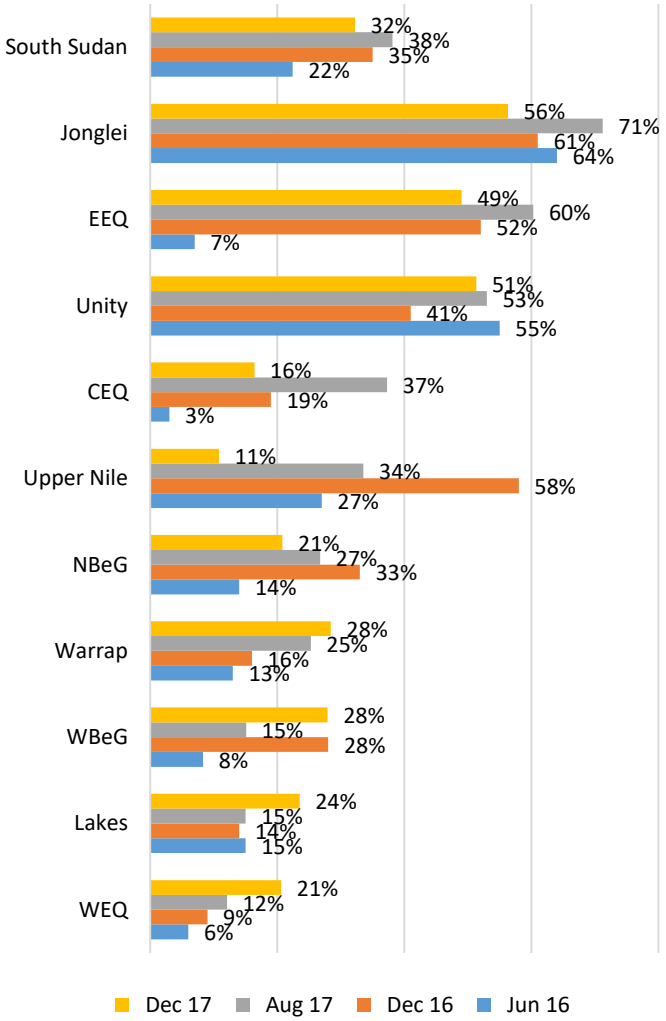
In order to portray health seeking behaviors as well as health challenges and needs, communities' perception was assessed around the increase or decrease in seeking care by community members, compared to last year. Overall, 55 percent of communities have reported an increase in healthcare seeking attitudes, 28 percent reported a perceived decrease and 17 percent of communities perceived a similar trend as last year. This finding does not show the actual number of consultations, treatments or admissions to health facilities; it is however an indication of the community views around their needs to seek for care and attitude, as compared to last year.

Concerning major diseases experienced among people living in the community during December and January, although not based on diagnosis, communities have expressed their main concerns with malaria perceived as the leading local concern, as reported by 96 percent of responders, followed by diarrhea (72 percent), fever (65 percent), acute respiratory infection (50 percent), and worm infestation (35 percent).

11. Assistance received

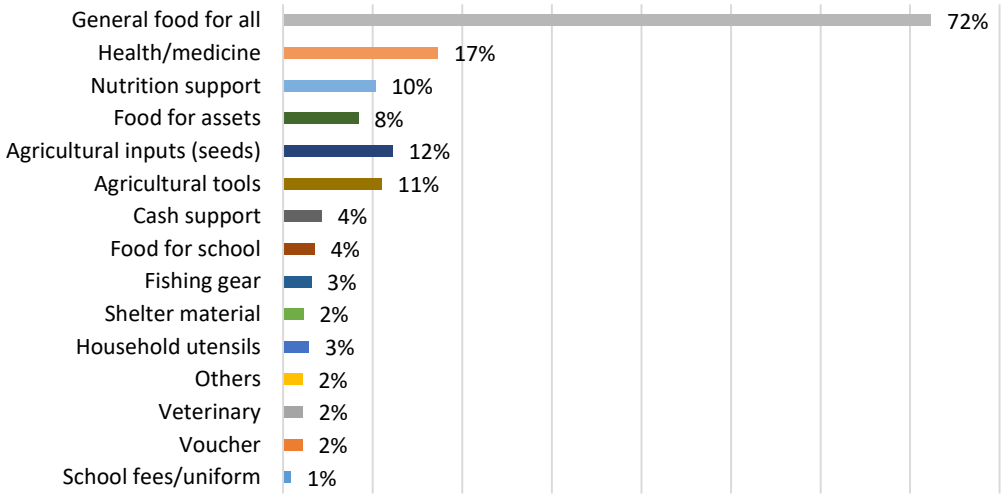
About one third (32 percent) of households reported receiving humanitarian assistance in the past three months prior to the survey (Figure 24). This proportion is slightly less than the 35 percent reported during the same time last year in December 2017. Jonglei had the highest proportion (56 percent) of the respondent households who received assistance, followed by Unity (51 percent) and Eastern Equitoria (49 percent). On the other hand, Upper Nile had the lowest proportion (11 percent), followed by Central Equatoria (16 percent).

Figure 24: Households who received assistance



Among those who received assistance, some 72 percent benefited from general food distribution (GFD), 8 percent from food for assets; additionally, people benefited from school meals (4 percent), nutrition support (10 percent), health amenities (17 percent) and agricultural inputs such as seeds (12 percent) and agricultural tools (11 percent) (Figure 25).

Figure 25: Type of assistance received



Among those who reported receiving some assistance in the past three months, 10 percent of households reported receiving food assistance within the last one week before the survey, 19 percent received it two to three weeks prior, 26 percent received it three to four weeks prior, while the remaining 45 percent had received it more than a month before. On average, a household received 50 Kg of cereals, 10 Kg of pulses and 3 liters of cooking oil in the last distribution cycle. One in every four households (25 percent) indicated they shared their food assistance with relatives and neighbors.

Humanitarian assistance has become an important source of livelihood to a large portion of the population in South Sudan. Specifically, food assistance contributes significantly to stabilizing the food security situation, and thus its continuity is crucial.

The high level of humanitarian assistance in Unity and Jonglei was a direct response to the dire food security situation in these states following the IPC analysis of February 2017 that indicated existence of Famine in counties of Unity state and the subsequent update in June 2017. IPC analysis conducted in September 2017 found slight improvement in the food security situation primarily due to large scale humanitarian assistance and, to a lesser extent, harvests and improved seasonal access to fish and livestock products. The recent IPC analysis released in February 2018 found that humanitarian assistance has prevented a worsening food security situation in 17 counties across the country.

Photo: WFP/Lara Atanasijevic

Overall, households receiving humanitarian assistance were found to be better off in terms of food consumption than those who did not receive assistance (Table 3). Households receiving humanitarian assistance are less likely (46 percent as compared to 59 percent for those not receiving assistance) to have a poor food consumption score and more likely (28 percent compared to 16 percent) to have an acceptable food consumption score than those who did not receive assistance.

Table 3: Humanitarian and household food consumption

Has any of the household members received any form of assistance in the past 3 months?					
Yes			No		
Food consumption group			Food consumption group		
Poor	Borderline	Acceptable	Poor	Borderline	Acceptable
46%	25%	28%	59%	25%	16%

12. Gender and protection dimension of food collection and utilization

This analysis revealed that it was mostly females who went to receive food from the distribution point. 85 percent of households reported food collected by female less than 60 years of age, while 2 percent had it collected by females older than 60. Males less than 60 years of age collected food in 11 percent of cases, while males older than 60 collected food in 2 percent of households (Figure 26).

Some 79 percent of respondents indicated that in the past three months, it was mainly the woman in the household who made decisions on the utilization of the food received, while it was decided by men in 10 percent of cases and by both in 11 percent (Figure 27). Western Equatoria had the lowest proportion (32 percent) of households with women deciding on the utilization of the food, while this proportion was highest in Lakes (89 percent), followed by Unity (86 percent).

Accessing food assistance in a safe way remains a challenge in various areas. More than one-third (35 percent) of respondents indicated that they had safety concerns in the process when they went to collect food assistance (Figure 28). Such concerns were highest in Jonglei at 55 percent, followed by Unity (54 percent), while they were lowest in Central Equatoria (7 percent) and Northern Bahr Ghazal (11 percent).

Figure 26: Who went to collect food from the distribution point?

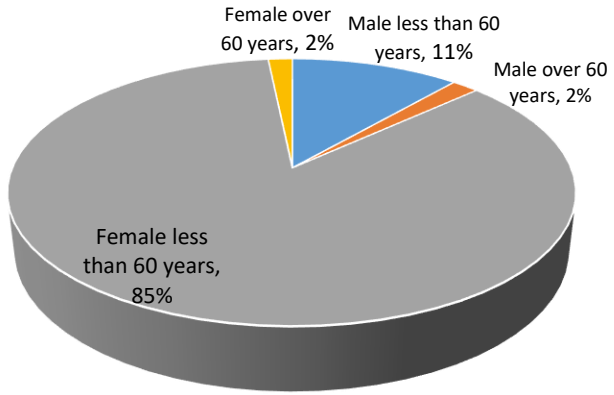


Figure 27: HH decision on the use of food received

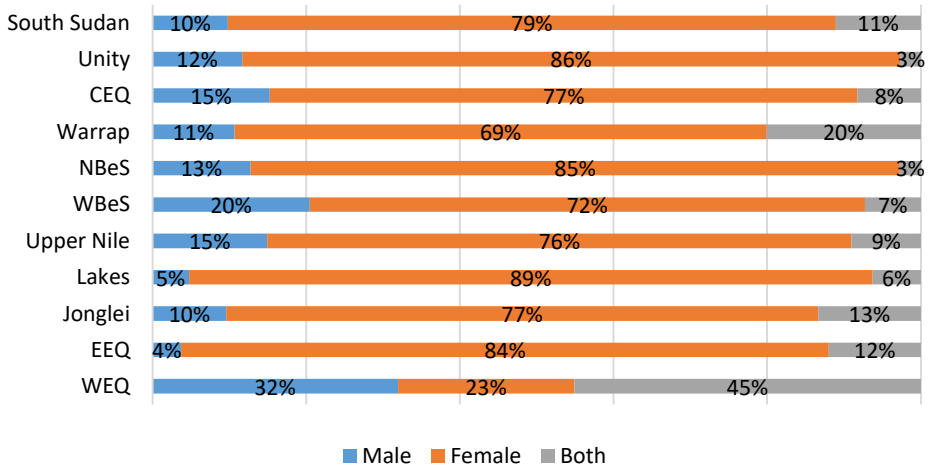
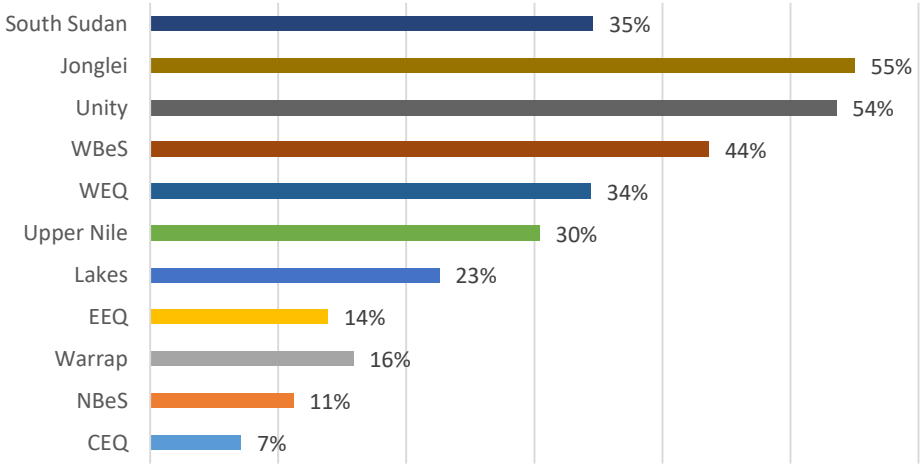


Figure 28: Safety concern in the process of receiving food



13. Household shocks and coping

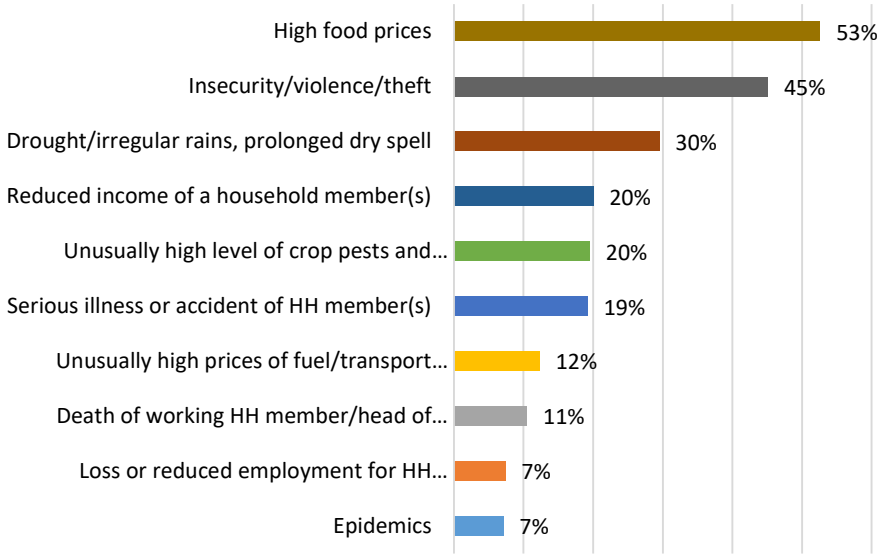
High food prices (reported by 53 percent) and insecurity and violence (45 percent) were the most prominent household-level shocks in the past six months prior to the survey (Figure 29). This was followed by: drought, dry spell or irregular rains (30 percent), reduced income (20 percent), loss of employment (7 percent), illness (19 percent) and epidemics (7 percent), high fuel/transport costs and other non-food prices (12 percent), and death of a working household member (11 percent).

Some geographic variation was noted in the household shocks. Households reporting high food prices as the main shock were most prevalent in Warrap (73 percent), Eastern Equatoria and Lakes (65 percent each) while those with insecurity as the main shock were mostly in Lakes (67 percent), Western Equatoria (65 percent) and Western Bahr Ghazal (61 percent). The proportion of households reporting drought or dry spell as a shock was highest in Lakes (67 percent), followed by Eastern Equatoria (49 percent) and Northern Bahr Ghazal (40 percent). Those reporting crop pests and disease as a shock were highest in Eastern Equatoria (36 percent), followed by Lakes (33 percent).

The precarious food security situation in the face of such shocks, led households across the former states to resort to a number of coping strategies. Some 89 percent of households were found to be adopting at least one food-based coping strategy in the one-week period prior to the survey. Common strategies included limiting or reducing portion size at meals (76 percent), relying on less preferred or less expensive food (71 percent), reducing the number of meals eaten in a day (70 percent), and borrowing food or relying on help from friends/relatives (41 percent).

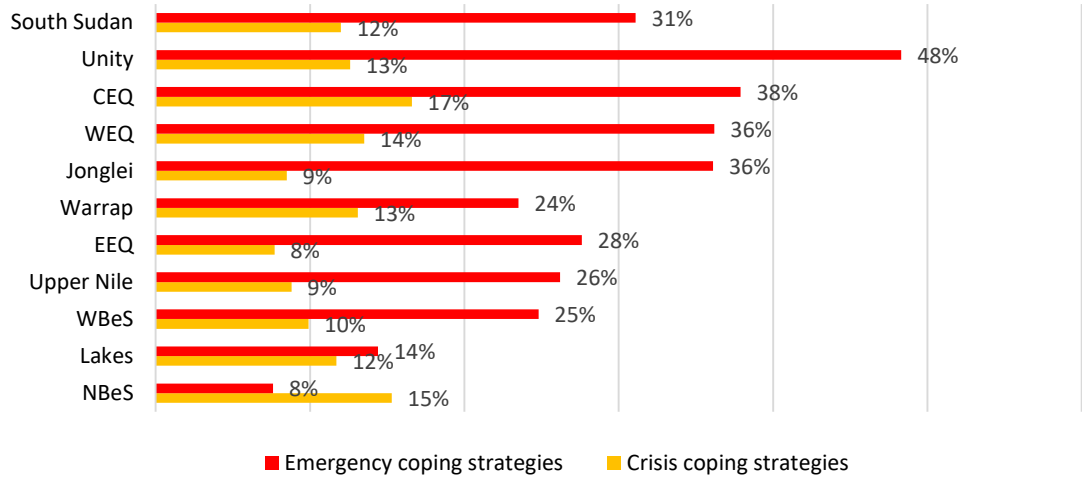
Photo: WFP/Krishna Pahari

Figure 29: Household shocks



Overall, 54 percent of households were resorting to livelihood-based coping strategies. Among them, 31 percent had to resort to emergency coping strategies while 12 percent were resorting to crisis coping strategies and 10 percent were practicing stress coping strategies[9] (Figure 30). Unity (48 percent with emergency coping strategies and 13 percent with crisis coping strategies) and Central Equatoria (38 percent emergency coping and 17 percent crisis coping) had the highest proportion of households with worrying levels of livelihood coping, while the situation was relatively better for Northern Bahr el Ghazal (8 percent with emergency coping and 15 percent with crisis coping) and Lakes (14 percent with emergency and 12 percent with crisis coping).

Figure 30: Households adopting emergency and crisis coping strategies



The high level of food insecurity and shocks has been reflected in the severity of household coping mechanisms. While the food-based coping strategies can be seen as an indicator of their current severe food insecurity and deteriorating nutrition status, the livelihood based coping strategies, particularly the emergency and crisis strategies practiced by households are likely to erode their resilience and thus have possible long-term consequences.

Photo: WFP/Irum Jamshed

[9]Examples of stress coping strategies include sending households members to eat elsewhere or selling more animals than usual; crisis coping strategies include more distress practices such as withdrawing children from school, selling productive assets or reducing essential non-food costs; while emergency strategies use extreme practices such as migration of entire household, engaging in risky income generating activities or begging.

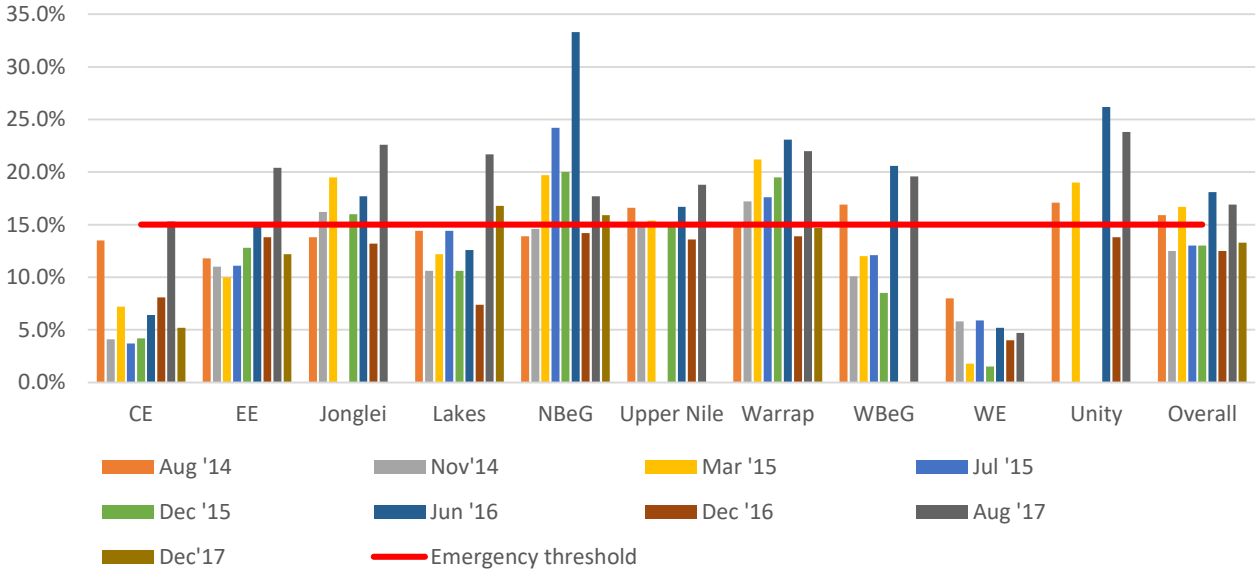
14. Nutrition

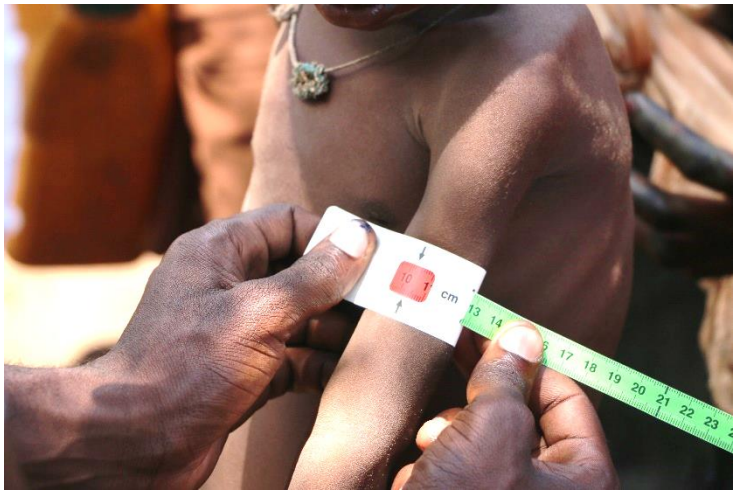
Acute malnutrition

Anthropometric measurements (weight, height, MUAC, and presence of oedema) were collected from all 7,650 children 6-59 months from all households that were included in the sample. Data from 5 former states, namely Western Bahr El Ghazel, Western Equatoria, Jonglei, Unity and Upper Nile had data quality issues and were excluded in the analysis. The standard deviation of the excluded states ranged from 1.2-1.7 in Western Baher El Ghazel , Western Equatoria Upper Nile, Jonglei and Unity states. Data from the remaining 5 states were analyzed at state level and the responses were weighted to factor in the county level sampling. Thus a total of 3,424 children between the ages of 6-59 months were analyzed in the five states with good quality data: Eastern Equatoria State (EES), Central Equatoria State (CES), Lakes, Northern Baher El Ghazal (NBS) and Warrap. The prevalence of acute malnutrition in Lakes, Central Equatoria, Eastern Equatoria, Northern Bahr el Ghazal and Warrap States is 16.8% (14,5-19.5), 5.2% (3.3-8.1), 12.2% (10.2 - 14.6), 15.9% (13.2 - 19.0) and 14.7% (12.3 - 17.5), respectively. The weighted prevalence of acute malnutrition in the combined 5 states was 13.3% (12.2 - 14.4) and 2.8% (2.3 - 3.4) for GAM and SAM respectively.

Prevalence of acute malnutrition has relatively reduced as compared to the lean period. In comparison to the same season in December 2017, significant deterioration was observed in lakes from 10.6% to 16.8%. On the other hand, improvement was noted in NBeG and Warrap from 20.0% to 15.9% and 19.5% to 14.7%. There is no significant difference in prevalence of acute malnutrition nationally in same season in 2015, 2016 and 2017 with GAM rates of 13.0%, 12.5% and 13.3% respectively albeit the latter representing only 5 out of the 10 states. The finding of the combined prevalence is in line with observation noted in the previous years during the same season (Figure 31).

Figure 31: Trend of Global Acute Malnutrition by State





Data on the trends of acute malnutrition by state are provided in Annex 1.

Infant and young child feeding practices

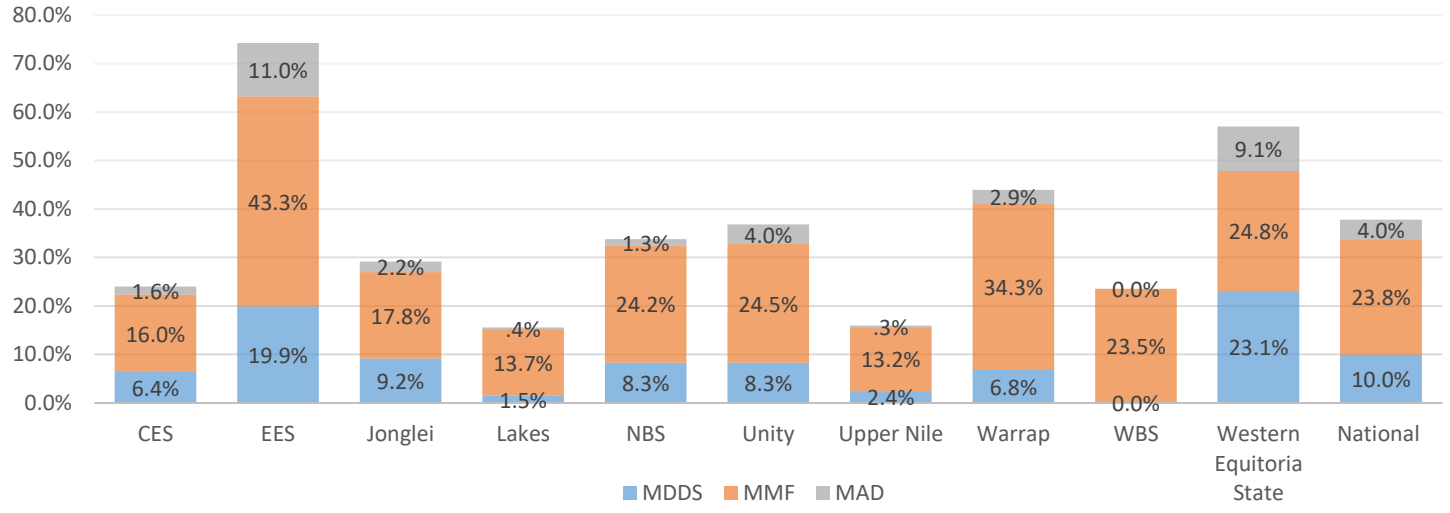
Infant and young child feeding practices directly affect the nutritional status of children under two years of age and, ultimately, impact child survival. From six months onwards, when breast milk alone is no longer sufficient to meet all nutritional requirements, infants enter a particularly vulnerable period of complementary feeding during which they make a gradual transition to eating family foods. The incidence of malnutrition rises sharply during the period from 6 to 18 months of age in most countries, and the deficits acquired at this age are difficult to compensate for later in childhood. Therefore, improving infant and young child feeding practices in children 0 - 23.9 months of age is critical to improved nutrition, health and development of children.

Data on infant feeding practices particularly complementary feeding practices was collected for children 6-23 months using a standard 24 hour recall method. The assessment used three WHO recommended IYCF indicators to assess the key complementary feeding practices such as minimum dietary diversity, minimum meal frequency, and minimum acceptable diet among children aged 6 to 23.9 months. The caregivers were asked what the children received in the 24-hours preceding the survey. A total of 2,628 children age 6 to 23 months were assessed, out of which the analysis was done on 2,626. Findings of dietary diversity, meal frequency, and minimum acceptable diet is shown in Figure 32.

Minimum dietary diversity

The complementary feeding practices in South Sudan remains very poor. As compared to the lean season the minimum dietary diversity (MDD) had increased from 5.3% in July up to 10% in December. This implies that only 10% of the children 6-23 months surveyed consume at least four out of the recommended seven food groups[10] daily. MDD is an indicator of the quality of a child's diet, it represents the range of nutrients consumed. Despite the slight improvement, which can be attributed to the harvest season, the MDD is still very low. The lowest prevalence was recorded in Lakes, WBeG, Upper Nile and Central Equatoria ranging from 0% to 6.4%. . Relatively higher diversification was observed in Western Equatoria and Eastern Equatoria with 23.1% and 19.9%, respectively.

Figure 32: Status of complementary feeding of children 6 to 23 months in South Sudan (FSNMS Dec 2017)



[10]The seven food groups are: Grains, roots and tubers; Legumes and nuts; Dairy products (milk, yogurt, cheese); Flesh foods (meat, fish, poultry and liver/organ meats); Eggs; Vitamin-A rich fruits and vegetables; and Other fruits and vegetables

Minimum meal frequency (MMF)

Similarly, slight improvement of the minimum meal frequency was noted as compared to the lean season. Minimum meal frequency (MMF) is a measurement of the energy quantity of a child's diet, an indicator of the total energy intake, not inclusive of breastmilk. During the reporting period it has showed to improve slightly from 18% to 23.8% children receiving solid, semi-solid or soft foods, the minimum number of times or more during the previous day of the survey. This could be attributed to the seasonal variation with expected availability of harvest during the period of the assessments. The prevalence across States is similar with MDD, low rates are seen in Lakes, Upper Nile, Central Equatoria and Jonglei, less than 20%. The highest MMF was reported in EES with 43.3%.

Minimum acceptable diet (MAD)

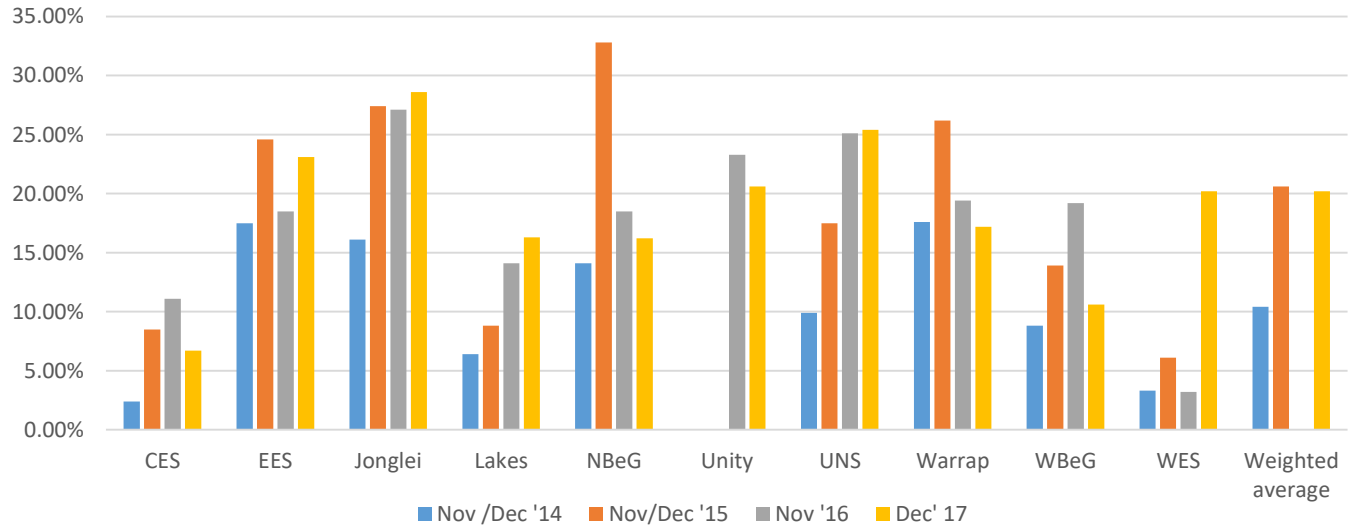
The Minimum Acceptable Diet (MAD) is the composite indicator of quality (MDD) and quantity (MMF) of complimentary feeding. During this round of FSNMS it is showing a disturbing situation with only 4.0%, while an improvement from July 2017 (1.6%). This indicators states that only 4 out of every 100 children from 6-23 months are receiving a minimum acceptable diet (apart from breast milk). The lowest MAD in was recorded in Western Bahr el Ghazal at 0.0%, while the highest acceptable diet was recorded in Eastern Equatoria at 11%.

Women nutrition

Nutritional status of a total of 3,490 women aged 15 to 49 years was assessed using Mid-Upper Arm Circumference (MUAC). Wasting based on MUAC (<230mm) was prevalent in 20.2 % of the women, a slight reduction from the 28.5% reported in July FSNMS. The highest prevalence of wasting was reported in Jonglei followed by Eastern Equatoria with 28.6% and 23.1% respectively. The lowest prevalence was reported in Central Equatoria and Western Bahr el Ghazal with 6.7% and 10.6% respectively. Looking into the prevalence of wasting based on the physiological condition of women; pregnant and lactating women had higher wasting of 31.2% while only pregnant or lactating women had a prevalence of 24.4% and 19.4 % respectively. Women who were not pregnant and lactating has prevalence of 19.3%.

Data on the trends of wasting among women of reproductive age by State are provided in Annex 2.

Figure 32: Trend of wasting among women of reproductive age (ages 15 to 49 years)

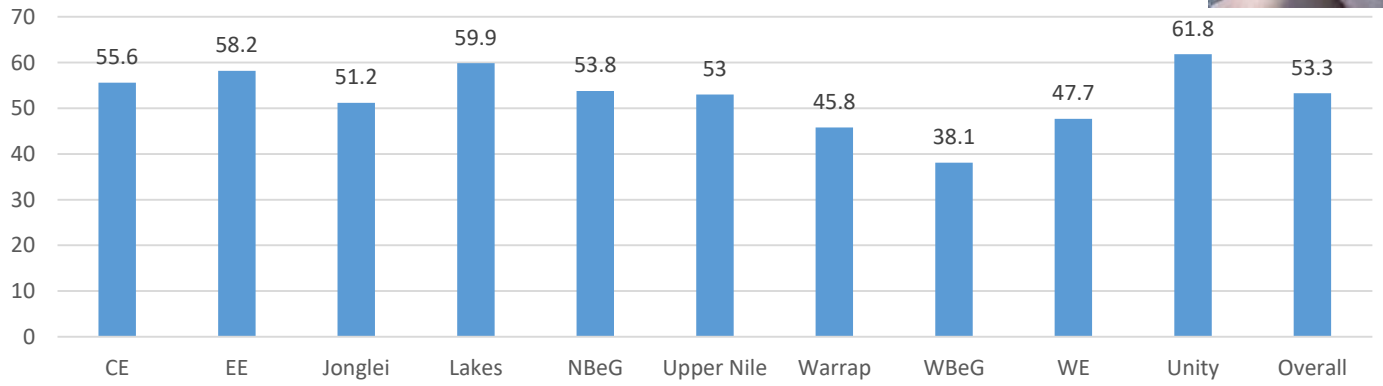


Retrospective morbidity

A total of 8,459 children 6 to 59 months age were assessed regarding their recent prevalence of illness and disease. The result shows that about 53.3 percent of children reportedly suffered from one or more illness in the two weeks prior to the assessment. The highest prevalence of illness was reported in Unity with 61.8%, while the lowest prevalence of illness in the two weeks preceding the survey was reported in WBeG with 38.1%. Diarrhea, fever and cough were the major illness reported by respondents. The prevalence of illness is comparable to what was reported in July 2017 despite the seasonal difference. A lower morbidity was expected during the December 2017 due to the dry season. However, outbreaks of diarrhea and cholera as well as malaria occurred all round 2017.

Photo: WFP/Irum Jamshed

Figure 33: Child morbidity in children 6 to 59 months



15. Outlook

The results presented above from the analysis of data from FSNMS indicate a continued and very serious humanitarian situation in South Sudan in terms of food security and nutrition as the lean season approaches. In summary, following are the main reasons for this:

- The food security and nutrition situation is already severe, with food insecurity at its highest in the post-harvest period since FSNMS started reporting in 2010.The situation in the post-harvest season in 2017 was only slightly better than that during the height of the lean season. Projection of this trend shows that the food insecurity level during the lean season will reach the highest ever recorded.

- Agricultural production in the recent harvest season was not optimal and far from adequate to meet the needs of the population, with estimates indicating a cereal crop deficit of almost half a million metric tons in 2018.

- There is no sign of improvement in the macroeconomic situation. The depreciation of the South Sudanese pound, hyperinflation, and the trend of soaring food prices is likely to continue while there is no likelihood of a commensurate increase in household income.

- Conflict and insecurity continues to affect many parts of the country, disrupting livelihoods, markets and mobility, and there is no sign of any improvement in this situation.

- Humanitarian access for supporting vulnerable populations remains a challenge particularly in areas where people are most in need.

Photo: WFP/Krishna Pahari

In conclusion, the outlook points towards a very grave food insecurity and nutrition situation in South Sudan until the height of the lean season in 2018, with a high likelihood of the worst situation since independence. A very serious humanitarian crisis is likely to occur unless immediate and serious steps are taken to support such vulnerable populations.

16. Methodological Note

The twenty first round of the FSNMS survey was conducted mostly in December 2017 and extended until January 2018 in a few areas. It involved surveys of households across the country with a sampling plan provided by the National Bureau of Statistics in order to obtain statistically representative results on food security by each county. While the previous rounds of FSNMS provided only state-wide results, since FSNMS round 20, the sampling plan was revised in FSNMS 20 in order to provide county wide results needed for the IPC analysis. The sampling size was designed by considering 95 percent confidence interval, a margin of error of 10 percent, percentage of population in phase 3 and above as the prevalence rate of food insecurity, and a minimum sample size requirement of 75 households per county. Furthermore, in round 21, seven enumeration areas (EA) were selected in each county and 15 households were selected per enumeration area, and thus final sampling plan was made with 105 households per county. The sampling of enumeration areas was provide by the National Bureau of Statistics.

The survey instrument consisted of food security as well as a nutrition module including anthropometry of children under five. Training of enumerators was provided in 27 locations across the country. The trainings were provided by WFP, FAO and UNICEF.

Electronic tablets were used for data collection in the field and uploading into the server. In areas where it was not possible to use tablets for security reasons, the survey was conducted in a hard copy questionnaire and the data entered through the tablet later.

There were considerable constraints in the field survey, in various areas due to prevailing insecurity. Partner organizations from the food security and livelihood cluster provided enumerators, and this was particularly valuable in covering some of the areas which were otherwise difficult to access.

Despite our efforts, situation in Kajokeji and Morobo counties in Central Equatoria was found very challenging for the survey. Also, the actual number of households surveyed was less than the planned number in some other counties. These include Yei (31 households only), Panuikang (54 households), Rumberk centre (73), Wau (83), Twic east (84), Duk (84), Jur river (88), Renk (90) and Manyo (90). Overall, a total of 7,611 households were covered by the survey, which is 93 percent of the planned sample size of 8,190.

In addition, focus group discussions were conducted to capture key information on the community including livelihoods, markets and health services, in each of the village where the household survey was conducted. Thus a total of 562 FGDs were completed during this survey.

Even though most of the survey was completed in December 2017, due to logistic and access challenges, some of the clusters were surveyed in the beginning of January 2018.

Annex

Annex 1: Prevalence of Acute malnutrition (WFH and MUAC) by States, FSNMS round 21 (Dec 2017)

	Emergency threshold	Aug '14	Nov'14	Mar '15	Jul '15	Dec '15	Jun '16	Dec '16	Aug '17	Dec'17
CE	15.0%	13.5%	4.1%	7.2%	3.7%	4.2%	6.4%	8.1%	15.3%	5.2%
EE	15.0%	11.8%	11.0%	10.0%	11.1%	12.8%	15.2%	13.8%	20.4%	12.2%
Jonglei	15.0%	13.8%	16.2%	19.5%		16.0%	17.7%	13.2%	22.6%	
Lakes	15.0%	14.4%	10.6%	12.2%	14.4%	10.6%	12.6%	7.4%	21.7%	16.8%
NBeG	15.0%	13.9%	14.6%	19.7%	24.2%	20.0%	33.3%	14.2%	17.7%	15.9%
Upper Nile	15.0%	16.6%	15.2%	15.4%		15.1%	16.7%	13.6%	18.8%	
Warrap	15.0%	14.8%	17.2%	21.2%	17.6%	19.5%	23.1%	13.9%	22.0%	14.7%
WBeG	15.0%	16.9%	10.1%	12.0%	12.1%	8.5%	20.6%		19.6%	
WE	15.0%	8.0%	5.8%	1.8%	5.9%	1.5%	5.2%	4.0%	4.7%	
Unity	15.0%	17.1%		19.0%			26.2%	13.8%	23.8%	
Overall	15.0%	15.9%	12.5%	16.7%	13.0%	13.0%	18.1%	12.5%	16.9%	13.3%

Annex

Annex 2: Trend of wasting among women of reproductive age (ages 15 to 49 years

	Emergency threshold	Aug '14	Nov'14	Mar '15	Jul '15	Dec '15	Jun '16	Dec '16	Aug '17	Dec'17
CE	15.0%	13.5%	4.1%	7.2%	3.7%	4.2%	6.4%	8.1%	15.3%	5.2%
EE	15.0%	11.8%	11.0%	10.0%	11.1%	12.8%	15.2%	13.8%	20.4%	12.2%
Jonglei	15.0%	13.8%	16.2%	19.5%		16.0%	17.7%	13.2%	22.6%	
Lakes	15.0%	14.4%	10.6%	12.2%	14.4%	10.6%	12.6%	7.4%	21.7%	16.8%
NBeG	15.0%	13.9%	14.6%	19.7%	24.2%	20.0%	33.3%	14.2%	17.7%	15.9%
Upper Nile	15.0%	16.6%	15.2%	15.4%		15.1%	16.7%	13.6%	18.8%	
Warrap	15.0%	14.8%	17.2%	21.2%	17.6%	19.5%	23.1%	13.9%	22.0%	14.7%
WBeG	15.0%	16.9%	10.1%	12.0%	12.1%	8.5%	20.6%		19.6%	
WE	15.0%	8.0%	5.8%	1.8%	5.9%	1.5%	5.2%	4.0%	4.7%	
Unity	15.0%	17.1%		19.0%			26.2%	13.8%	23.8%	
Overall	15.0%	15.9%	12.5%	16.7%	13.0%	13.0%	18.1%	12.5%	16.9%	13.3%

Annex III – Statistical summary: key food security indicators by county

County	Food Security Console				Food Consumption Group			Household Dietary Diversity Score			Household Hunger Scale				Mean monthly expenditure on food (% of total)	HHs with high to very high share on food expenditure		Livelihood Coping Strategies			
	Food secure	Marginally food secure	Moderately food insecure	Severely food insecure	Poor	Borderline	Acceptable	Low	Medium	High	None	Slight	Moderate	Severe		High	Very High	HH not adopting coping strategies	Stress coping strategies	Crisis coping strategies	Emergency coping strategies
South Sudan	**8.6%**	**21.9%**	**55.9%**	**13.7%**	**55.0%**	**25.1%**	**19.9%**	**43.5%**	**20.7%**	**35.9%**	**36.8%**	**8.9%**	**49.5%**	**4.7%**	**46.2%**	**8.5%**	**23.9%**	**48.2%**	**11.7%**	**11.4%**	**28.7%**
Western Equatoria	**7.3%**	**16.8%**	**69.5%**	**6.4%**	**62.5%**	**25.7%**	**11.8%**	**23.4%**	**23.3%**	**53.2%**	**64.6%**	**9.9%**	**23.0%**	**2.5%**	**31%**	**6.2%**	**6.2%**	**44.1%**	**11.3%**	**11.8%**	**32.7%**
Tambura	1.0%	7.8%	89.3%	1.9%	90.3%	7.8%	1.9%	44.7%	37.9%	17.5%	68.0%	17.5%	14.6%	0.0%	35%	4.0%	11.1%	71.8%	2.9%	11.7%	13.6%
Nagero	0.0%	3.8%	88.5%	7.7%	89.4%	9.6%	1.0%	57.6%	26.3%	16.2%	36.5%	24.0%	34.6%	4.8%	40%	5.9%	14.7%	58.7%	2.9%	17.3%	21.2%
Nzara	1.9%	23.1%	75.0%	0.0%	65.4%	31.7%	2.9%	15.4%	8.7%	76.0%	76.9%	6.7%	15.4%	1.0%	19%	2.9%	1.0%	40.4%	26.9%	9.6%	23.1%
Ezo	24.5%	11.3%	62.3%	1.9%	49.1%	22.6%	28.3%	24.5%	29.2%	46.2%	80.2%	18.9%	0.9%	0.0%	25%	2.9%	0.0%	44.3%	13.2%	17.9%	24.5%
Yambio	6.1%	14.9%	74.6%	4.4%	66.7%	22.8%	10.5%	13.2%	4.4%	82.5%	50.9%	3.5%	37.7%	7.9%	21%	3.8%	1.9%	29.8%	12.3%	11.4%	46.5%
Ibba	4.1%	17.5%	74.2%	4.1%	79.4%	15.5%	5.2%	32.0%	34.0%	34.0%	76.3%	2.1%	16.5%	5.2%	31%	9.4%	6.2%	73.2%	4.1%	10.3%	12.4%
Maridi	2.9%	32.4%	55.2%	9.5%	52.4%	39.0%	8.6%	6.7%	23.8%	69.5%	82.9%	8.6%	8.6%	0.0%	35%	7.6%	3.8%	45.7%	13.3%	1.0%	40.0%
Mvolo	5.9%	11.9%	53.5%	28.7%	49.5%	35.6%	14.9%	23.8%	44.6%	31.7%	55.4%	6.9%	37.6%	0.0%	54%	17.2%	21.2%	22.8%	4.0%	9.9%	63.4%
Mundri West	2.0%	8.0%	66.0%	24.0%	50.0%	42.0%	8.0%	43.0%	27.0%	30.0%	6.0%	11.0%	83.0%	0.0%	55%	16.5%	21.6%	19.0%	2.0%	38.0%	41.0%
Mundri East	4.6%	31.2%	46.8%	17.4%	21.1%	51.4%	27.5%	13.8%	18.3%	67.9%	18.3%	5.5%	70.6%	5.5%	42%	11.0%	15.6%	10.1%	7.3%	9.2%	73.4%
Eastern Equatoria	**13.8%**	**32.6%**	**42.9%**	**10.8%**	**35.3%**	**30.8%**	**33.9%**	**25.7%**	**26.5%**	**47.8%**	**54.1%**	**7.1%**	**37.7%**	**1.0%**	**51%**	**9.1%**	**29.2%**	**53.8%**	**12.9%**	**7.1%**	**26.3%**
Torit	13.7%	31.4%	51.0%	3.9%	39.2%	40.2%	20.6%	0.0%	31.4%	68.6%	87.3%	3.9%	8.8%	0.0%	42%	6.1%	17.2%	72.5%	9.8%	11.8%	5.9%
Lopa/Lafon	31.4%	40.0%	27.6%	1.0%	26.7%	28.6%	44.8%	15.5%	28.2%	56.3%	88.6%	0.0%	11.4%	0.0%	24%	3.0%	6.0%	75.2%	5.7%	11.4%	7.6%
Kapoeta North	1.0%	40.8%	46.6%	11.7%	34.0%	12.6%	53.4%	27.8%	21.1%	51.1%	29.1%	1.9%	68.0%	1.0%	61%	22.0%	28.0%	29.1%	1.9%	1.9%	67.0%
Kapoeta East	10.4%	18.9%	37.7%	33.0%	39.6%	25.5%	34.9%	58.5%	30.2%	11.3%	7.5%	11.3%	80.2%	0.9%	81%	11.7%	71.4%	36.8%	8.5%	5.7%	49.1%
Kapoeta South	2.8%	27.1%	45.8%	24.3%	29.9%	14.0%	56.1%	10.3%	22.4%	67.3%	18.7%	11.2%	63.6%	6.5%	72%	8.4%	58.9%	3.7%	6.5%	16.8%	72.9%
Budi	13.3%	41.0%	42.9%	2.9%	38.1%	36.2%	25.7%	28.6%	29.5%	41.9%	40.0%	19.0%	40.0%	1.0%	42%	5.8%	22.3%	76.2%	7.6%	5.7%	10.5%
Ikotos	20.2%	29.8%	48.1%	1.9%	37.5%	36.5%	26.0%	26.9%	27.9%	45.2%	94.2%	1.9%	3.8%	0.0%	52%	6.7%	26.9%	93.3%	4.8%	1.0%	1.0%
Magwi	13.9%	37.0%	48.1%	0.9%	33.3%	45.4%	21.3%	11.1%	19.4%	69.4%	78.7%	6.5%	13.9%	0.9%	39%	8.3%	10.2%	39.8%	46.3%	7.4%	6.5%
Jonglei	**5.9%**	**24.6%**	**52.7%**	**16.7%**	**54.9%**	**21.5%**	**23.6%**	**47.0%**	**17.5%**	**35.5%**	**21.1%**	**9.5%**	**56.6%**	**12.8%**	**47%**	**8.1%**	**27.9%**	**42.4%**	**10.7%**	**8.1%**	**38.7%**
Old Fangak	0.0%	1.9%	51.4%	46.7%	88.6%	10.5%	1.0%	29.9%	24.7%	45.5%	2.9%	1.0%	95.2%	1.0%	43%	3.7%	25.9%	1.0%	5.7%	37.1%	56.2%
Khorflus	1.0%	19.4%	48.0%	31.6%	68.4%	16.3%	15.3%	71.1%	16.5%	12.4%	40.8%	4.1%	54.1%	1.0%	49%	2.6%	34.2%	26.5%	17.3%	8.2%	48.0%
Ayod	3.8%	26.7%	50.5%	19.0%	61.0%	28.6%	10.5%	59.6%	24.0%	16.3%	18.1%	10.5%	47.6%	23.8%	47%	3.5%	36.8%	61.0%	8.6%	8.6%	21.9%
Duk	10.7%	19.0%	50.0%	20.2%	51.2%	34.5%	14.3%	61.9%	21.4%	16.7%	6.0%	1.2%	75.0%	17.9%	56%	3.8%	44.3%	54.8%	21.4%	2.4%	21.4%
Uror	4.9%	27.2%	62.1%	5.8%	53.4%	28.2%	18.4%	59.4%	16.8%	23.8%	12.6%	25.2%	32.0%	30.1%	41%	5.2%	22.7%	50.5%	2.9%	7.8%	38.8%
Nyirol	0.0%	7.6%	78.1%	14.3%	84.8%	14.3%	1.0%	82.1%	10.5%	7.4%	44.8%	1.0%	28.6%	25.7%	51%	12.2%	31.7%	46.7%	37.1%	3.8%	12.4%
Akobo	20.0%	25.5%	50.9%	3.6%	54.5%	21.8%	23.6%	47.3%	36.4%	16.4%	1.8%	1.8%	94.5%	1.8%	33%	11.3%	7.5%	90.9%	1.8%	3.6%	3.6%
Pochala	15.2%	44.8%	38.1%	1.9%	35.2%	29.5%	35.2%	27.6%	9.5%	62.9%	47.6%	49.5%	2.9%	0.0%	48%	8.7%	24.3%	55.2%	42.9%	1.0%	1.0%
Pibor	7.3%	20.2%	59.6%	12.8%	56.0%	12.8%	31.2%	61.6%	10.1%	28.3%	2.8%	1.8%	81.7%	13.8%	44%	8.4%	26.5%	42.2%	9.2%	3.7%	45.0%
Twic east	3.6%	9.5%	47.6%	39.3%	76.2%	20.2%	3.6%	45.2%	38.1%	16.7%	48.8%	2.4%	48.8%	0.0%	43%	0.0%	41.7%	45.2%	0.0%	1.2%	53.6%
Bor South	1.9%	48.6%	37.1%	12.4%	13.3%	21.0%	65.7%	1.0%	1.0%	98.1%	27.6%	5.7%	60.0%	6.7%	62%	15.2%	33.3%	6.7%	1.0%	11.4%	81.0%
Lakes	**6.0%**	**19.8%**	**64.2%**	**10.0%**	**69.2%**	**16.7%**	**14.0%**	**61.5%**	**19.4%**	**19.2%**	**10.0%**	**5.7%**	**76.6%**	**7.8%**	**42%**	**5.8%**	**19.9%**	**58.0%**	**14.8%**	**11.5%**	**15.8%**
Cuebit	4.0%	22.2%	55.6%	18.2%	60.6%	16.2%	23.2%	57.6%	21.2%	21.2%	4.0%	0.0%	93.9%	2.0%	60%	1.1%	40.4%	33.3%	27.3%	14.1%	25.3%
Rumbek North	21.1%	38.9%	35.6%	4.4%	48.9%	20.0%	31.1%	88.8%	6.7%	4.5%	10.0%	8.9%	78.9%	2.2%	32%	4.8%	20.5%	61.1%	26.7%	10.0%	2.2%
Rumbek centre	0.0%	12.3%	82.2%	5.5%	80.8%	13.7%	5.5%	59.7%	22.2%	18.1%	8.2%	2.7%	86.3%	2.7%	40%	11.0%	12.3%	63.0%	15.1%	5.5%	16.4%
Wulu	1.0%	8.6%	86.7%	3.8%	89.5%	8.6%	1.9%	65.7%	16.7%	17.6%	55.2%	7.6%	36.2%	1.0%	33%	2.9%	17.3%	46.7%	24.8%	14.3%	14.3%
Rumbek East	9.5%	17.1%	73.3%	0.0%	73.3%	14.3%	12.4%	53.9%	25.5%	20.6%	1.0%	5.7%	91.4%	1.9%	29%	5.7%	2.9%	92.4%	1.0%	2.9%	3.8%
Yirol West	6.7%	27.6%	50.5%	15.2%	58.1%	26.7%	15.2%	55.2%	19.0%	25.7%	7.6%	8.6%	68.6%	15.2%	42%	7.2%	18.6%	55.2%	3.8%	17.1%	23.8%
Yirol East	10.5%	21.9%	52.4%	15.2%	61.0%	21.0%	18.1%	58.1%	16.2%	25.7%	1.9%	6.7%	75.2%	16.2%	41%	6.3%	22.1%	58.1%	6.7%	24.8%	10.5%
Awerial	0.0%	10.5%	79.0%	10.5%	91.4%	7.6%	1.0%	83.8%	13.3%	2.9%	20.0%	12.4%	42.9%	24.8%	44%	10.0%	23.3%	49.5%	29.5%	2.9%	18.1%

County	Food Security Console				Food Consumption Group			Household Dietary Diversity Score			Household Hunger Scale				Mean monthly expenditure on food (% of total)	HHs with high to very high share on food expenditure		Livelihood Coping Strategies			
	Food secure	Marginally food secure	Moderately food insecure	Severely food insecure	Poor	Borderline	Acceptable	Low	Medium	High	None	Slight	Moderate	Severe		High	Very High	HH not adopting coping strategies	Stress coping strategies	Crisis coping strategies	Emergency coping strategies
Upper Nile	**2.0%**	**14.3%**	**58.3%**	**25.5%**	**73.1%**	**17.7%**	**9.2%**	**64.6%**	**11.6%**	**23.7%**	**8.7%**	**2.3%**	**79.7%**	**9.3%**	**61%**	**9.2%**	**44.2%**	**47.9%**	**10.1%**	**9.3%**	**32.6%**
Renk	13.3%	31.1%	48.9%	6.7%	33.3%	31.1%	35.6%	9.2%	9.2%	81.6%	16.7%	6.7%	74.4%	2.2%	55%	13.3%	13.3%	43.3%	8.9%	28.9%	18.9%
Manyo	0.0%	3.3%	81.1%	15.6%	78.9%	16.7%	4.4%	17.0%	17.0%	65.9%	24.4%	1.1%	71.1%	3.3%	83%	12.4%	78.7%	70.0%	6.7%	12.2%	11.1%
Fashoda	1.0%	6.7%	60.0%	32.4%	79.0%	15.2%	5.7%	38.8%	11.2%	50.0%	18.1%	3.8%	71.4%	6.7%	82%	5.9%	77.2%	58.1%	7.6%	21.9%	12.4%
Melut	0.0%	13.5%	31.7%	54.8%	73.1%	7.7%	19.2%	38.0%	17.4%	44.6%	6.7%	4.8%	87.5%	1.0%	71%	6.8%	58.3%	7.7%	4.8%	6.7%	80.8%
Maban	0.9%	13.2%	81.1%	4.7%	72.6%	20.8%	6.6%	41.6%	24.8%	33.7%	18.9%	4.7%	70.8%	5.7%	66%	13.5%	44.9%	76.4%	15.1%	2.8%	5.7%
Maiwut	0.0%	13.2%	75.5%	11.3%	96.2%	1.9%	1.9%	93.2%	5.7%	1.1%	1.9%	0.0%	80.2%	17.9%	57%	7.4%	47.1%	76.4%	17.0%	1.9%	4.7%
Luakpiny/Nasir	0.0%	15.2%	50.5%	34.3%	69.5%	23.8%	6.7%	85.7%	9.5%	4.8%	1.0%	1.9%	91.4%	5.7%	55%	6.7%	42.7%	37.1%	7.6%	1.9%	53.3%
Longochuk	1.9%	18.1%	65.7%	14.3%	86.7%	10.5%	2.9%	96.3%	3.7%	0.0%	2.9%	1.0%	68.6%	27.6%	48%	8.3%	31.9%	68.6%	12.4%	0.0%	19.0%
Ulang	0.0%	8.6%	42.9%	48.6%	78.1%	18.1%	3.8%	88.9%	8.1%	3.0%	4.8%	1.0%	69.5%	24.8%	68%	6.5%	55.4%	20.0%	12.4%	10.5%	57.1%
Baliet	0.9%	14.0%	76.6%	8.4%	85.0%	12.1%	2.8%	74.0%	14.0%	12.0%	19.6%	0.9%	75.7%	3.7%	55%	7.1%	47.1%	84.1%	13.1%	0.0%	2.8%
Malakal	1.9%	5.7%	89.5%	2.9%	83.8%	9.5%	6.7%	71.3%	9.2%	19.5%	24.8%	0.0%	74.3%	1.0%	70%	16.7%	44.0%	84.8%	8.6%	0.0%	6.7%
Panykang	1.9%	5.6%	44.4%	48.1%	77.8%	14.8%	7.4%	64.8%	18.5%	16.7%	1.9%	0.0%	96.3%	1.9%	50%	12.5%	27.5%	5.6%	5.6%	35.2%	53.7%
Western Bahr el Ghazal	**1.2%**	**15.8%**	**68.3%**	**14.7%**	**67.9%**	**25.6%**	**6.5%**	**50.4%**	**25.6%**	**24.0%**	**51.0%**	**12.3%**	**34.6%**	**2.2%**	**46%**	**11.2%**	**20.8%**	**44.6%**	**12.0%**	**15.8%**	**27.6%**
Raga	0.0%	12.1%	76.9%	11.0%	86.8%	12.1%	1.1%	72.1%	15.1%	12.8%	1.1%	15.4%	75.8%	7.7%	55%	7.3%	36.6%	73.6%	4.4%	2.2%	19.8%
Jur River	1.1%	15.9%	68.2%	14.8%	63.6%	28.4%	8.0%	45.5%	31.8%	22.7%	72.7%	13.6%	13.6%	0.0%	41%	11.6%	17.4%	29.5%	17.0%	22.7%	30.7%
Wau	2.4%	18.1%	62.7%	16.9%	67.5%	26.5%	6.0%	50.6%	14.5%	34.9%	21.7%	6.0%	67.5%	4.8%	52%	12.2%	20.7%	68.7%	2.4%	4.8%	24.1%
Northern Bahr el Ghaza	**6.9%**	**26.2%**	**61.3%**	**5.6%**	**59.6%**	**24.5%**	**15.8%**	**46.1%**	**22.3%**	**31.6%**	**46.7%**	**13.5%**	**37.0%**	**2.9%**	**46%**	**6.0%**	**23.7%**	**59.3%**	**20.4%**	**13.8%**	**6.5%**
Aweil North	6.9%	27.5%	61.8%	3.9%	57.8%	21.6%	20.6%	42.2%	27.5%	30.4%	51.0%	2.9%	43.1%	2.9%	66%	5.1%	53.1%	92.2%	1.0%	6.9%	0.0%
Aweil East	7.6%	28.6%	60.0%	3.8%	57.1%	28.6%	14.3%	49.5%	23.8%	26.7%	59.0%	21.0%	19.0%	1.0%	35%	2.9%	11.4%	42.9%	41.0%	11.4%	4.8%
Aweil South	4.7%	18.9%	71.7%	4.7%	73.6%	18.9%	7.5%	53.5%	15.2%	31.3%	41.5%	8.5%	36.8%	13.2%	54%	11.8%	33.3%	84.0%	3.8%	6.6%	5.7%
Aweil West	5.7%	26.4%	56.6%	11.3%	58.5%	20.8%	20.8%	36.2%	21.0%	42.9%	8.5%	12.3%	77.4%	1.9%	48%	10.5%	17.1%	46.2%	3.8%	31.1%	18.9%
Aweil Centre	8.6%	19.0%	62.9%	9.5%	61.0%	24.8%	14.3%	46.7%	12.4%	41.0%	51.4%	5.7%	41.9%	1.0%	49%	9.7%	23.3%	63.8%	7.6%	20.0%	8.6%
Warrap	**21.7%**	**23.2%**	**43.8%**	**11.3%**	**41.2%**	**26.4%**	**32.4%**	**53.3%**	**18.3%**	**28.4%**	**58.4%**	**7.7%**	**32.6%**	**1.3%**	**42%**	**8.3%**	**18.4%**	**57.3%**	**7.6%**	**12.2%**	**23.0%**
Twic	14.3%	20.4%	51.0%	14.3%	44.9%	23.5%	31.6%	55.1%	18.4%	26.5%	77.6%	0.0%	22.4%	0.0%	46%	8.2%	25.5%	56.1%	1.0%	13.3%	29.6%
Gogrial West	8.7%	17.5%	51.5%	22.3%	58.3%	31.1%	10.7%	73.7%	16.2%	10.1%	58.3%	4.9%	36.9%	0.0%	51%	12.6%	27.2%	45.6%	10.7%	14.6%	29.1%
Gogrial East	39.4%	20.2%	33.7%	6.7%	38.5%	17.3%	44.2%	44.2%	18.3%	37.5%	64.4%	7.7%	19.2%	8.7%	42%	4.8%	15.4%	81.7%	0.0%	8.7%	9.6%
Tonj North	47.6%	30.5%	21.0%	1.0%	23.8%	21.0%	55.2%	35.2%	21.0%	43.8%	79.0%	0.0%	21.0%	0.0%	28%	6.7%	4.8%	94.3%	0.0%	3.8%	1.9%
Tonj East	10.5%	24.8%	56.2%	8.6%	40.0%	32.4%	27.6%	55.2%	18.1%	26.7%	21.9%	21.9%	54.3%	1.9%	37%	6.7%	14.3%	29.5%	17.1%	16.2%	37.1%
Tonj south	10.5%	34.3%	50.5%	4.8%	24.8%	38.1%	37.1%	40.0%	19.0%	41.0%	1.0%	36.2%	62.9%	0.0%	41%	6.7%	15.2%	11.4%	32.4%	21.9%	34.3%
Central Equatoria	**4.2%**	**16.9%**	**56.9%**	**22.0%**	**49.7%**	**37.6%**	**12.7%**	**23.3%**	**25.9%**	**50.8%**	**27.2%**	**15.4%**	**57.2%**	**0.2%**	**55%**	**15.0%**	**26.6%**	**34.8%**	**10.6%**	**18.2%**	**36.4%**
Terekeka	0.0%	5.7%	63.8%	30.5%	66.7%	28.6%	4.8%	46.2%	33.7%	20.2%	23.8%	29.5%	46.7%	0.0%	64%	12.9%	47.3%	41.0%	0.0%	1.0%	58.1%
Juba	0.0%	8.5%	58.5%	33.0%	54.7%	38.7%	6.6%	5.7%	18.9%	75.5%	34.9%	8.5%	55.7%	0.9%	54%	12.3%	31.1%	34.0%	1.9%	6.6%	57.5%
Lainya	3.8%	22.1%	49.0%	25.0%	53.8%	37.5%	8.7%	30.8%	31.7%	37.5%	21.2%	7.7%	71.2%	0.0%	51%	13.0%	23.0%	32.7%	17.3%	23.1%	26.9%
Yei	6.5%	28.6%	58.4%	6.5%	35.1%	50.6%	14.3%	18.2%	18.2%	63.6%	31.2%	10.4%	58.4%	0.0%	52%	11.7%	14.3%	35.1%	23.4%	31.2%	10.4%
Morobo	16.7%	30.0%	46.7%	6.7%	26.7%	33.3%	40.0%	13.3%	30.0%	56.7%	20.0%	16.7%	63.3%	0.0%	54%	30.0%	6.7%	26.7%	20.0%	46.7%	6.7%
Unity	**5.1%**	**14.7%**	**67.5%**	**12.7%**	**65.4%**	**18.6%**	**15.9%**	**54.6%**	**17.7%**	**27.8%**	**21.7%**	**5.4%**	**69.1%**	**3.8%**	**35%**	**5.0%**	**17.8%**	**27.8%**	**5.6%**	**10.9%**	**55.7%**
Pariang	11.4%	40.0%	39.0%	9.5%	17.1%	31.4%	51.4%	23.8%	23.8%	52.4%	7.6%	3.8%	82.9%	5.7%	41%	5.7%	18.1%	11.4%	10.5%	25.7%	52.4%
Abiemnhom	11.4%	20.0%	64.8%	3.8%	58.1%	24.8%	17.1%	23.2%	28.3%	48.5%	23.8%	6.7%	64.8%	4.8%	28%	2.9%	1.0%	40.0%	16.2%	10.5%	33.3%
Mayom	0.0%	1.8%	97.3%	0.9%	74.5%	23.6%	1.8%	30.2%	22.1%	47.7%	2.7%	0.9%	94.5%	1.8%	11%	0.0%	0.9%	0.0%	0.0%	0.9%	99.1%
Rubkona	4.7%	30.8%	57.0%	7.5%	59.8%	22.4%	17.8%	45.8%	12.1%	42.1%	11.2%	24.3%	64.5%	0.0%	43%	6.7%	27.0%	63.6%	5.6%	10.3%	20.6%
Guit	3.8%	15.2%	38.1%	42.9%	61.0%	23.8%	15.2%	60.0%	23.8%	16.2%	15.2%	6.7%	78.1%	0.0%	69%	6.8%	58.9%	21.0%	5.7%	36.2%	37.1%
Koch	1.0%	4.9%	69.9%	24.3%	95.1%	3.9%	1.0%	75.2%	10.9%	13.9%	2.9%	7.8%	84.5%	4.9%	56%	5.3%	44.0%	57.3%	2.9%	16.5%	23.3%
Leer	0.7%	2.7%	74.7%	22.0%	95.3%	3.3%	1.3%	86.0%	9.8%	4.2%	11.3%	3.3%	66.0%	19.3%	35%	2.9%	22.1%	20.7%	10.0%	6.7%	62.7%
Mayendit	0.9%	11.0%	76.1%	11.9%	77.1%	19.3%	3.7%	87.9%	6.5%	5.6%	74.3%	6.4%	19.3%	0.0%	22%	1.0%	2.9%	16.5%	4.6%	4.6%	74.3%
Paynijar	17.1%	18.1%	51.4%	13.3%	52.4%	14.3%	33.3%	58.8%	26.5%	14.7%	53.3%	1.9%	44.8%	0.0%	54%	17.9%	27.4%	62.9%	8.6%	5.7%	22.9%