

Abyei Food Security and Nutrition Assessment Report

A collaborative activity of RRC, Agriculture Department, MoH, FAO, WFP, UNICEF, UNHCR, Mercy Corps, ACAD, Goal.

January 2015

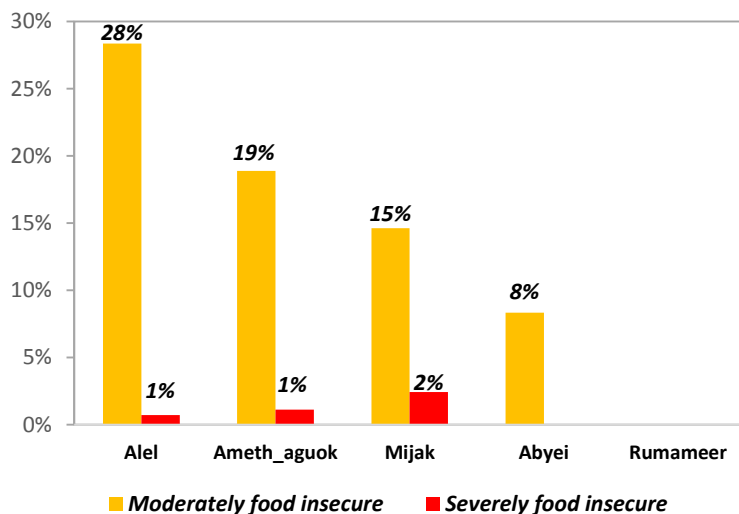
Highlights

- Overall, 38% of households in South Sudan (excluding Abyei) are food insecure, with Warrap having the highest number of food insecure households (67%). In Abyei 20% of the assessed households are food insecure: 19% moderately food insecure and 1% severely food insecure with Alel payam reporting the highest level of food insecurity at 29%.
- Vulnerability to food insecurity is more prevalent among female headed households (25%) compared to male headed households (15%).
- The proportion of households with reliable and sustainable income sources account 76% while poorly reliable and unsustainable sources account for 24% of the households. Warrap state reports only 5% of households to be having unsustainable and unreliable income sources.
- During the 2014 agricultural season, 61% of the assessed households cultivated their land. Overall, these households also experienced, with the main shocks being weeds/pests (92%), delay of rains (81%) and floods (77%).
- About 82% of the assessed households in Abyei had received food assistance (General Food Distribution) comprising all households in Rumameer, 89% in Mijak, 83% in Abyei, 78% in Ameth Agouk and 74% in Alel.

Food security situation

The food security situation was measured and classified using the CARI methodology. This entails grouping households according to their levels of food security based on household's food consumption indicators and coping capacity (using indicators measuring economic vulnerability and asset depletion). This methodology classifies food security status into the following groups: severely food insecure (SFI), moderately food insecure (MFI), marginally food secure (MFS) and food secure (FS).

Figure 1: Food security classifications



About 20% of households in Abyei are currently food insecure, of which 1% is severely food insecure and 19% is moderately food insecure. Of the 20% households that are food insecure, highest proportion of food insecure households is found in Alel payam (29%) followed by Ameth Agouk (20%), Mijak (17%) and Abyei with (8%) (Figure 1). All assessed households in Rumameer payam are food secure, this might be due to the significant higher levels of humanitarian assistance in the form of (food aid) in the payam (Table 1).

The main sources of livelihood in Abyei are: agriculture and sell of cereals (50%), salaried work (9%) and sell of food aid (7%). Some 25% and 2% of households that rely on agriculture and sale of cereals are moderately food insecure and severely food insecure respectively. On the other hand, 24% of households relying on casual labour and 20% those that rely on petty trading are moderately food insecure. However, all households that rely on livestock as a source of income are food secure.

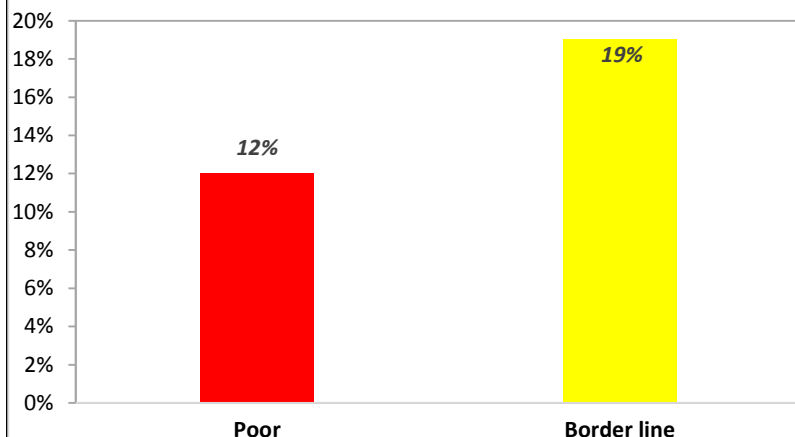
Vulnerability to food insecurity is higher amongst female headed households (25%) than amongst male-headed households (15%), a possible indication of gender based vulnerabilities.

Food consumption

Food Consumption Scores (FCS) based on a seven-day recall period, show that 31% of the assessed households have inadequate food consumption, of which 19% have borderline FCS while 12% have poor FCS (i.e. a grossly sub-optimal dietary intake mainly consisting of

cereals which is inadequate to meet the requirements for a healthy life) (Figure 2). In Warrap, some 72% have either poor or borderline FCS (14% and 58% have poor and borderline FCS respectively)—implying a relatively better food consumption in Abyei County.

Figure 2: Food Consumption Score



As expected, the same payams that are food insecure have high levels of inadequate food consumption: Alel (41%) followed by Ameth Agouk (32%) and Mijak (24%).

Female headed households are more likely to have poor food consumption (59%) as compared to male headed households (41%).

Dietary diversity was measured based the 7-day recall of food groups consumed. The levels of dietary diversity in Abyei are worrisome; 65% of households have a low household dietary diversity scores (HDDS) i.e. consuming only four food groups or less, 31% medium HDDS (ie. 4 – 6 food groups), leaving a few households with high HDDS (4%) (6 or more food groups) in the week preceding the survey.

Agriculture

Abyei has one main cropping season with planting taking place from May to June and late cultivation done in the month of September. The main crop harvest normally takes place between September and October while the late harvest happens from December to January. In the 2014 agricultural season, 61% of households cultivated while 39% did not cultivate.

Of the 61% households that cultivated, Alel had the highest proportions of households that cultivated at 81% followed by households in Rumameer, Mijak, Ameth Agouk and Abyei with 62%, 61%, 50% and 36% respectively. Across the farming households, 69% of the households planted sorghum, 20% planted maize, while groundnuts and sesame were planted by (2%) of the households.

The assessment revealed that at least 55% of the assessed households own livestock. Nevertheless, livestock ownership preferences varies among households. Goats and poultry are the most popular types of animals reared by 44% and 36% of the households respectively. On the other hand, cattle and sheep are the least reared with 14% and 6% respectively.

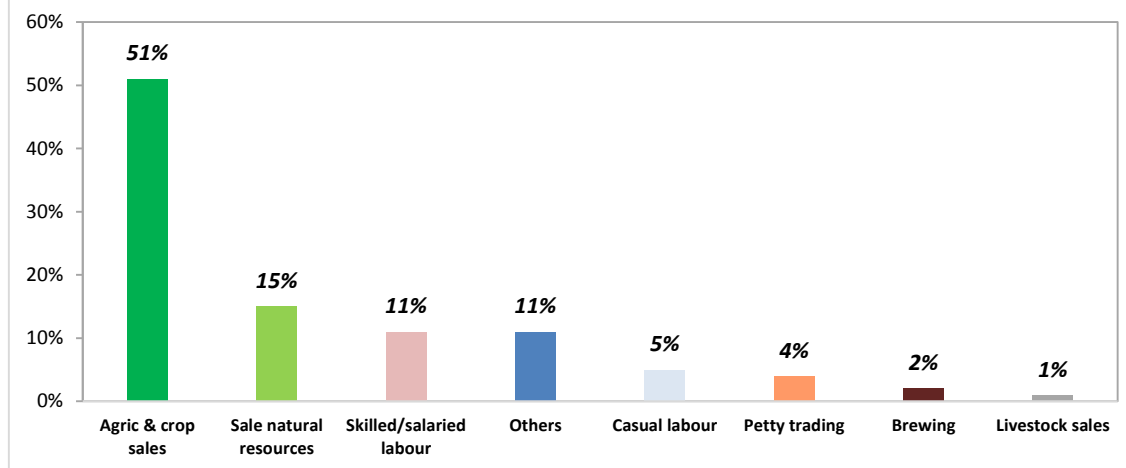
Income sources

The main income sources for households at this time of the year include agriculture and crop sales (52%) followed by sale of natural resources (15%), skilled salaried labour (11%), and sale of food aid (7%), with the least reported income source being from livestock and livestock sales (1%) (Figure 3).

Though the main income sources across most households in Abyei is agriculture and crop sales (52%), it is more prominent in Alel and Mijak payams with 72% and 68% households respectively reporting it as the primary source of income. Interestingly, there is a significant number of households in Rumameer (21%) and Ameth Agouk (17%) that rely on the sale of food aid. This might call for introduction of other food assistance transfer modalities to address the households' food insecurity of these payams e.g. introduction of cash and voucher system where feasible.

Among female headed households, some 56% rely on agriculture and crop sales, 15% on sale of natural resources and 11% on skilled salaried labour as the most popular income sources. The least popular sources of income amongst female headed households are casual labour, petty trading, brewing and livestock and livestock sales with 5%, 4%, 2% and 1% respectively. On the other hand, 49% of male headed households rely on agriculture and crop sales while 12% rely on skilled salaried labour.

Figure 3: Changes in household income



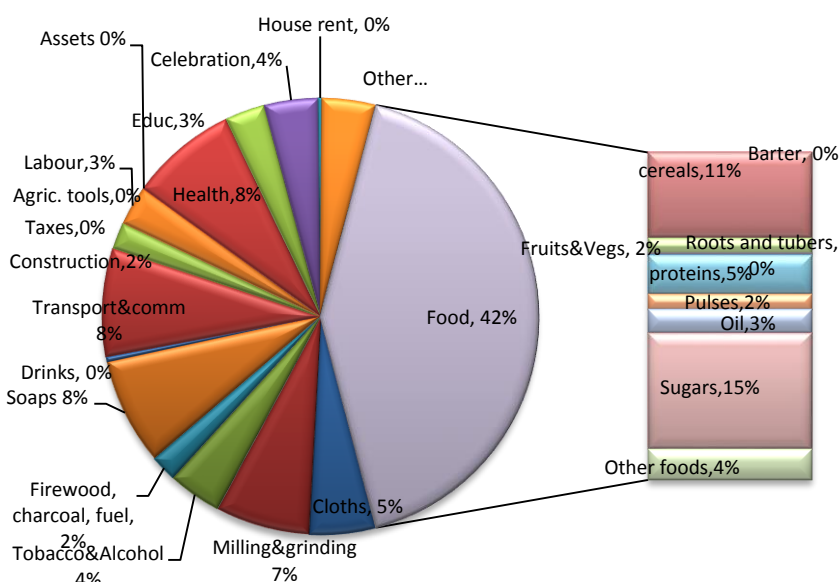
Sources of income also varied according to residential status. The main sources of income for IDPs and residents are: agriculture and crop sales with 50% and 52% respectively (this reflects the importance of agriculture in Abyei). Returnees depend on casual labour (33%) as the main source of income. Households were also classified based on reliability and sustainability¹ of their income sources. The

proportion of households with poorly reliable and unsustainable income is 24% with majority (76%) of the households having reliable and sustainable income.

Expenditure (income proxy) and purchasing power

About 42% of the households' expenditures are devoted to purchasing food as shown in Figure 4. The remaining 58% of the household's expenditure is on non-food items. The expenditure on food is unevenly distributed on various food commodities. Sugar has higher percent

Figure 4: Household expenditure breakdown



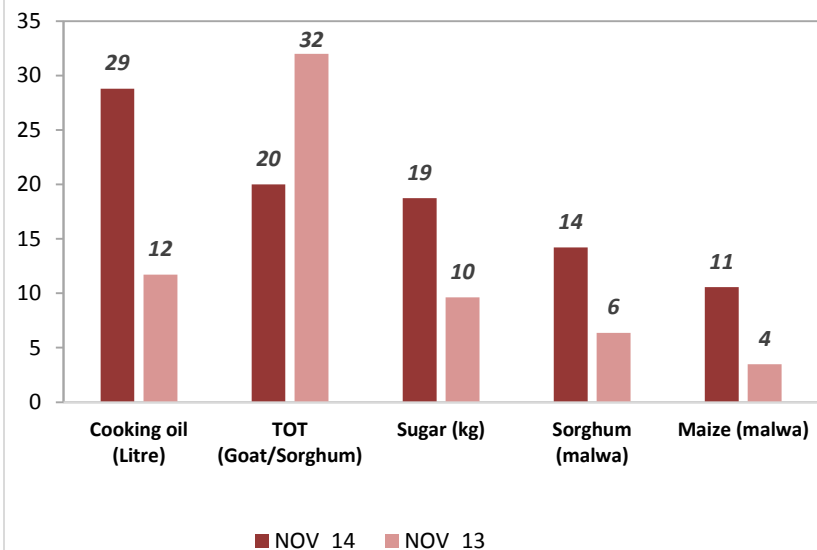
(15%) of expenditure while the lowest expenditure share is on pulses (2%). There was however, no expenditure on roots and tubers. Cereals currently account for (11%) of household's expenditures, while meat account for (5%). The relatively low expenditure share on cereals could be due to the current harvest and food assistance (82% receive food aid) from humanitarian agencies.

The proportion of expenditure devoted to food was on average lower than that of the November 2014 FSNMS which was 44%. However, the food expenditure share in Abyei seems high especially for a county that has overwhelming majority of households relying on General Food Distribution (GFD). The overall expenditure on health is 8%, while expenditure on education is 3%. Interestingly, celebrations (4%) has a higher expenditure share as compared to education (3%). It is possible that the relatively higher expenditure share on celebrations was due to the December festive season. Transportation (8%), soap (8%) and milling (7%) have a significant expenditure share in most households.

¹ Sale of natural resources such as grass, charcoal and firewood are considered as unreliable/unsustainable and therefore poor while sale of crops, salaried work, livestock and petty trading are considered fairly reliable and sustainable and therefore good. Those income sources that fall in between good and poor have medium reliability.

Market

Figure 5: Retail prices of commodities in SSP



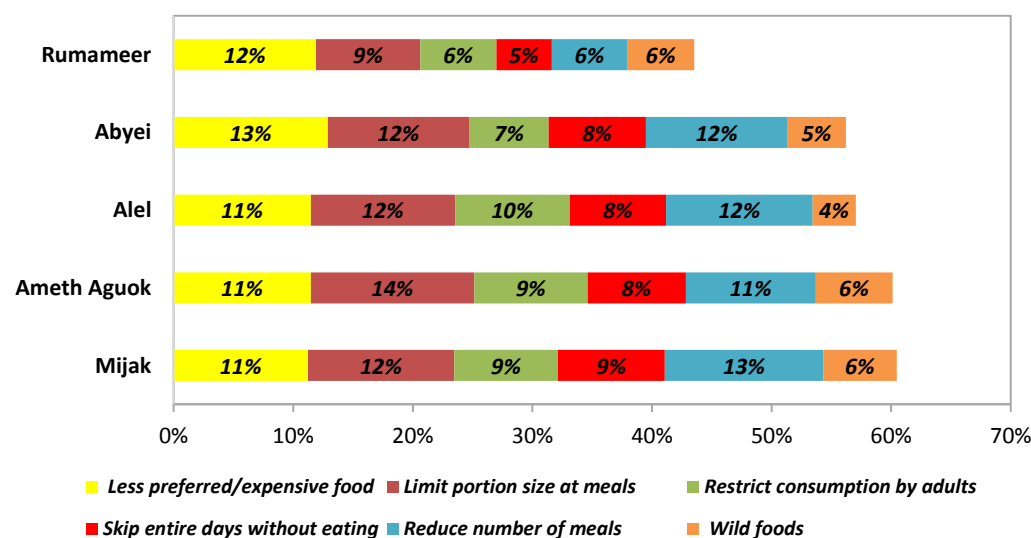
The retail prices of basic food commodities (sorghum, maize, cooking oil and sugar) in Abyei have dramatically increased during the month of November 2014 as compared to a year ago: maize (+202%), sorghum (+123%), cooking oil (+146%) and sugar (+94%).

Figure 5 shows the prices of basic food commodities and terms of trade in the two periods (November 2013 and November 2014). The price difference during the two period reflects the prevailing scarcity of commodities in the market to meet the local demand. During the harvest season (October-December), prices were expected to remain stable but the situation was quite different. Though Abyei is not located in the conflict affected areas, the observed surge in prices could be due to indirect effect of the conflict in parts of South Sudan. Thus, traders from Sudan reduced their trading interests with Abyei.

On the other hand, the terms of trade between medium sized goat and sorghum declined by 38%. In November 2013, one medium sized goat was traded for 32 malwas (3.5 kgs) of sorghum while in November 2014 the terms of trade had reduced to only 20 malwas of sorghum per medium sized goat. The decline in the terms of trade was triggered by the high prices of sorghum and low prices of goat. Consequently, the decline in terms of trade has affected the purchasing power of livestock dependent households.

Coping strategies index and shocks

Figure 6: Reduced Coping strategies



Overall, 64% of the assessed households engaged in some form of coping strategies in the month preceding the assessment. The frequently food consumption related coping strategies adopted by households were: eating less preferred foods (12%), eating fewer meals (11%), and limiting portion size (12%).

Of the 64% households that are adopting some form of coping strategies most households had switched to consumption of less preferred and cheaper, substitutes with 13% households in Abyei, 12% in Rumameer and 11% each in Alel, Ameth Aguok

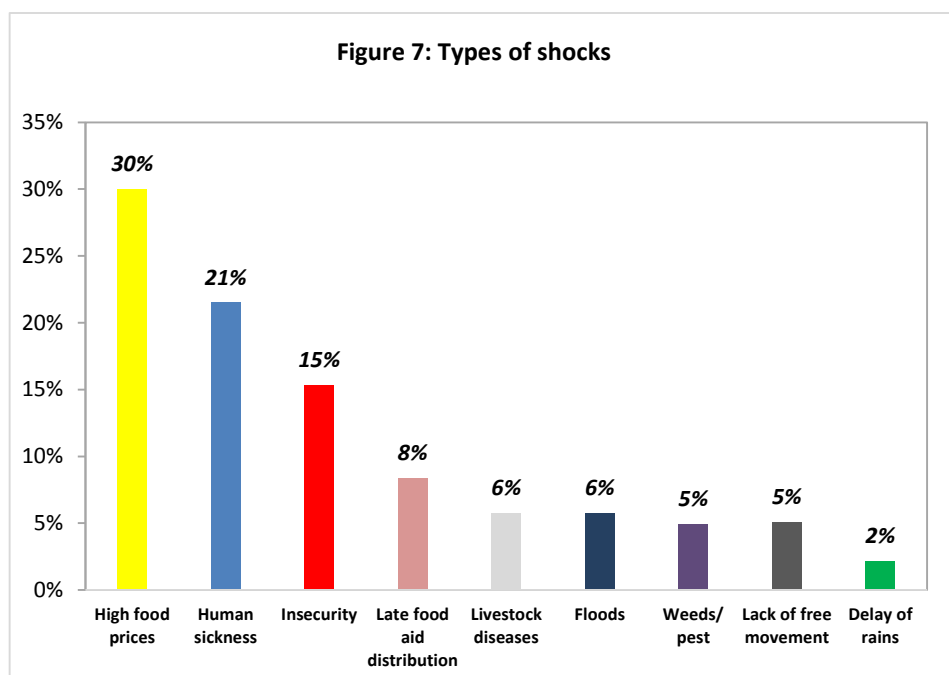
and Mijak payams reporting the strategy (Figure 6).

Other commonly used coping strategies involved rationing the foods available to households (e.g. cutting portion size or the number of meals, favouring certain household members over others, or skipping whole days without eating) (Figure 6).

Some 44% of the households borrowed food or relied on help from friends and relatives while 37% begged. Furthermore, households are forced to consume seed stocks held for the next season (15%) and spend their savings (15%). In other cases, household members are sent to eat somewhere (2%). The severe coping mechanisms employed are selling of productive assets and selling of last female animals reported by 9% each.

It is noteworthy that low coping strategies are used as compared to high to very severe coping strategies. About 41% of the households engaged in low coping (less severe) strategies whilst 23% employed high to very severe coping strategies (Figure 6). As is expected, female headed households were more likely (32%) to have applied high to very severe coping strategies as compared to male headed households (17%).

All assessed households experienced a shock or more in the three months preceding the assessment. On aggregate, high food prices (30%), human sickness (21%), and insecurity (15%) are commonly reported shocks (Figure 7). In addition to the above mentioned shocks, late food aid (8%), floods (6%), livestock diseases (6%), lack of free movement (5%), weeds/pest (5%) and delayed rains (2%) are among the reported shocks. Since a large proportion of South Abyei depends on food assistance, it was therefore not surprising for them to highlight any marked delay in distribution as a shock.



Since a large proportion of South Abyei depends on food assistance, it was therefore not surprising for them to highlight any marked delay in distribution as a shock.

Of the 30% households that reported high food prices as a shock, Mijak has the highest levels (88%) followed by Alel (83%), Abyei (75%), Ameth aguok (73%) and Rumameer (66%). In addition to the high food prices, insecurity is significantly present in Ameth aguok (86%). Human sickness is most prevalent in Rumameer (79%) and Abyei (71%). Late food aid as a shock affected households mainly in in Rumameer where all reported having received food assistance (34%), followed by Abyei (29%), Mijak (27%), Ameth Agouk (23%) and Alel (13%).

Nutrition status of Children 6 to 59 months and Women 15 to 49 years

A total of 264 children were included in the anthropometric analysis with more male (146) than female (118) children represented in the sample. The global acute malnutrition (GAM) using WHZ<-2 and/or oedema was 16.7% (11.7 – 23.1% 95% CI) (the GAM levels are high compared to the November 2014 FSNMS which was 12.5%) whilst severe acute malnutrition (SAM) stood at 3.8% (WHZ<-3 and/or oedema). Based on the mid upper arm circumference (MUAC), the proxy GAM (MUAC<125mm) and SAM (MUAC <115mm) were 9.3% and 2.2% respectively.

The critical level of acute malnutrition observed in Abyei places the area above the emergency threshold requiring continuation of interventions to treat and prevent acute malnutrition.

Women Anthropometry

Out of 295 women aged 15 to 49 years old assessed, 9.8% were pregnant, 39.3% were lactating while 50.8% were neither pregnant nor lactating. GAM based on MUAC (<230mm) was prevalent in 25.1% of the women, depicting high levels of maternal malnutrition when compared to levels of maternal under nutrition in South Sudan that was estimated at 10.4% in the recent FSNMS.

The level of acute malnutrition was high among pregnant (34.5%), lactating (22.4%) and non-pregnant, non-lactating women reporting a GAM of 25.1%. Therefore, interventions to address malnutrition among women in Abyei should necessarily cover all women of reproductive age.

Infant and Young Child Feeding (IYCF)

Analysis of IYCF indicators included children aged 6 to 23 months and assessed quality and frequency of complimentary feeding among children in this age group.

Minimum dietary diversity (MDD), the proportion of children who received at least four food groups during the previous day was only 15.6%, indicating the poor quality of complementary feeds provided to majority of children aged 6 to 23 months.

Minimum Meal Frequency (MMF); the proxy indicator for energy intake among children 6 to 23 months shows that majority (70%) of children 6 to 23 months received at least the minimum meal frequency.

Minimum acceptable diet (MAD); the composite indicator of quality and quantity of complimentary feeds provided to children 6 to 23 months shows an appalling situation; the proportion of children that received the MAD was only 13.3%.

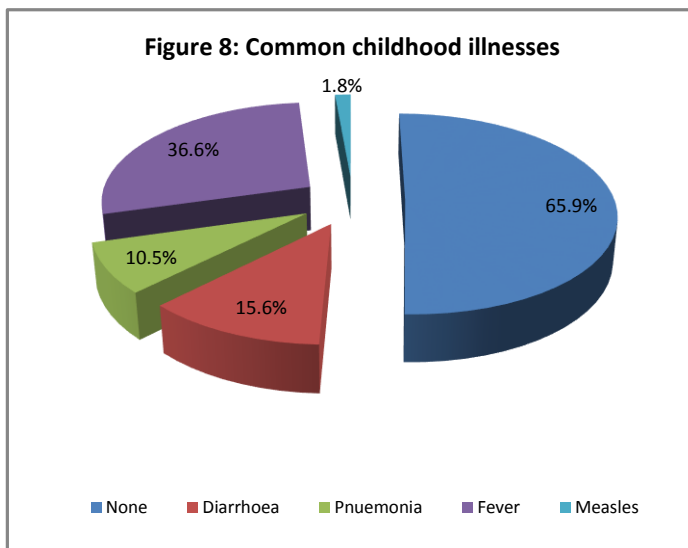
The implication of the IYCF findings is the need to promote optimal complimentary feeding among children 6 to 23 months, with focus on addressing the poor dietary diversity.

Note: Due to the small sample of children included in the analysis of the IYCF indicators, interpretation of the results needs to be done with caution

Prevalence of common childhood illnesses

Retrospective morbidity was determined based on recall of illnesses a child suffered from two weeks prior to the assessment. About four in every ten children in Abyei suffered from at least one of the common childhood illness which represents a substantial level of morbidity. Fever was the most prevalent illness affecting 36.6% of the children (Figure 8).

Morbidity is a risk factor for malnutrition, hence measures to treat and prevent communicable diseases in Abyei are necessary to possibly contribute to improved nutrition situation in Abyei.



Assistance received

| <i>Payam</i> | <i>Food Assistance</i> | <i>Food insecure</i> |
|--------------|------------------------|----------------------|
| Abyei | 83% | 8% |
| Alel | 74% | 29% |
| Ameth_aguok | 78% | 20% |
| Mijak | 89% | 17% |
| Rumameer | 100% | 0% |
| Total | 82% | 19% |

Approximately 57% of the assessed households reported receiving at least one form of assistance or another in the three months preceding the assessment. Of the households that received some form of assistance, about 82% received food assistance, 17% agricultural tools and/or seeds, 35% veterinary services, 32% veterinary and fisheries services, and 29% non-food items.

Out of the 82% households that received General Food Distribution (food assistance), all households in Rumameer, 89% in Mijak, 83% in Abyei, 78% in Ameth Agouk and 74% in Alel received food assistance. As much as the food assistance targets 100% of the displaced populations, some households still have families in Twic report having missed some distributions conducted in Abyei due to their back and forth movements between their families in Twic and staying in the camps. The highest percentage of food assistance recipients is recorded amongst female headed households (86%) as compared to male headed households (79%). The payams with households that reported high

levels of food assistance have the least number of food insecure households (Table 1). The communities also verified that food assistance made a difference in the consumption patterns. Households receiving food assistance find it easier to supplement from own production and are likely to have better food security states.

Food security Outlook

The food security situation in Abyei is expected to remain stable throughout the early quarter of 2015. However, 39% of the households that did not plant (and some of the (61%) households that cultivated but whose harvest will not be able to meet their food needs) will continue being at risk of food insecurity unless they receive food assistance or have income generating activities that guarantee reliability and sustainability of their income sources in order for them to access food from the market. At the same time, most of the vulnerable communities in Abyei are not resilient to the impacts of successive shocks such as floods, high food prices, insecurity crises etc. The interaction of these shocks threatens food security and livelihoods of these households. Thus, households will continue to depend on the little assets they have while also relying heavily on food assistance support from humanitarian organizations.

Conclusion and recommendations

The findings of the food assessment indicate that 20% of households in Abyei are currently food insecure, of which 1% is severely food insecure and 19% is moderately food insecure with Alel payam reporting the highest levels of food insecurity. Local food availability through markets (67%), own production (15%) and food assistance (11%) are significantly important for household's food security in Abyei. The findings further indicate that 82% of the households in Abyei rely on food aid.

In view of the above situation, the following are some of the possible recommendations:

Food security

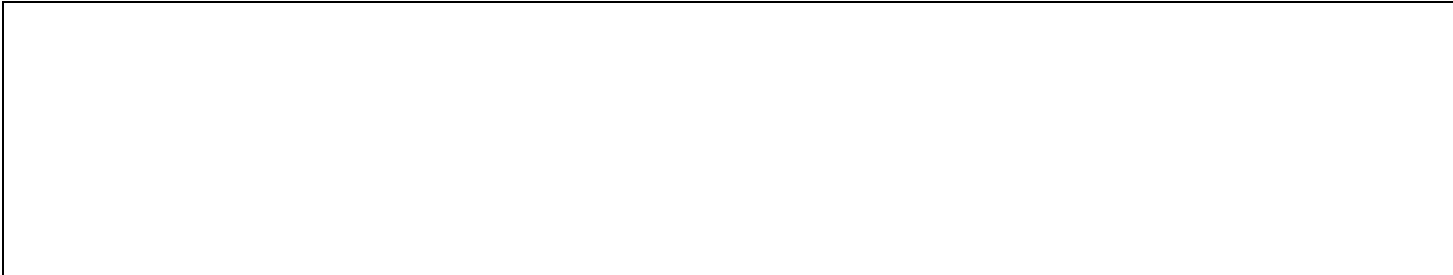
- Food and non-food assistance should be continued in Abyei. However, there is need to implement programmes that builds and restores their resilience (Food or cash for work) especially for settled IDPs. Free food assistance should primarily target asset poor households, households with disabled individuals, female headed households and households headed the elderly (over 60 years of age). However, there is urgent need to explore support that helps the communities to create and restore their assets.
- The county has an average of 9% households that rely on selling food aid. For this reason, there might be need to introduce other transfer modalities to address the households' food insecurity including introduction of cash and voucher where feasible.

Nutrition

- Given the critical level of acute malnutrition in Abyei, it is an immediate priority to provide curative feeding programmes (targeted therapeutic and supplementary feeding programmes) for vulnerable groups such as children under 5 and pregnant and lactating women (PLWs).
- Alongside the curative interventions, prevention and reduction of malnutrition should be tackled in the short term through seasonal food based nutritional assistance such as blanket supplementary feeding programmes (BSFP) for children under 5 and PLW as a cushion during the lean season.
- Promotion of infant and young child feeding practices (IYCF) should be a key component of the nutrition interventions as a long term approach to prevent malnutrition during the first 1,000 days of life from conception until six months of age. This should be explore through the use of community resource people by government and non-government actors alike.
- Lastly, prevention and treatment measures for childhood morbidity such as vaccination and vitamin A campaigns, malaria prevention activities and promotion of hygiene and sanitation at household level are necessary to improve the nutrition situation in Abyei.

Market

- Given the heavy reliance of households on markets as a source of food, there is need to commence market monitoring.



Methodology

The Abyei food security assessment was a collaborative effort involving about 10 organizations (Government, UN, NGOs and Community-Based Organizations). This assessment was carried on the southern part of the river, in areas primarily inhabited by Dinka Agoks and provides results that are representative for only the lower/southern part of Abyei County. It utilizes data collected from 25 clusters (selected sites) selected from southern part of Abyei based on probability proportional to sizes (PPS) and 15 randomly selected households interviewed from each site. One community/key informant questionnaire and two trader checklists (where applicable) were administered at each selected site to provide supplementary information.

Data collection from a total of 373 households was undertaken during the month of December followed by data analysis and reporting conducted in January 2015. Of the assessed households, 39% were female headed. About 97% of the respondents were residents, 2% were IDPs and returnees were 1%.

The food security assessment provides basis for future monitoring trends and changes in key food security and nutrition indicators over time.

In understanding food security situation, the below were basic indicators used:

Food consumption was derived using a seven-day recall period and the food items were weighted based on their nutritional value to establish a food consumption score that classifies the households having either acceptable, borderline or poor food consumption.

The Coping Strategies Index was derived from the severity and the frequency of the consumption coping strategies applied by households in the last seven days prior to the assessment. More severe coping strategies are often those with irreversible effects on the households' livelihoods.

The household's food security situation was measured and classified using the Consolidated Approach to Reporting Indicators of food Security (CARI). This entails classifying households into four descriptive groups: food secure (FS), marginally food secure (MFS), moderately food insecure (MFI) and severely food insecure (SFI).

For additional information, please contact Juba.VAM@WFP.org

The Food Security Assessment partners:

