Yirol West Food Security and Livelihoods Brief

Yirol West County, Lakes State, South Sudan, January 2018

Introduction

Severe levels of food insecurity, cattle raiding, and restricted access to humanitarian services have been reported across Lakes State throughout 2017, including Yirol West County.[1] A November 2017 assessment by the Shelter/NFI cluster highlighted widespread displacement and severe gaps in food security in the area, but was unclear about the severity of the lack of services or the nature of the gaps. To provide a better understanding of the food security and displacement situation in Yirol West County, REACH conducted a rapid assessment between January 12 and 19 in collaboration with CUAMM who were conducting a SMART survey to better understand the nutrition situation. Data was collected through 10 focus group discussions (FGDs), 7 Key informant (KI) interviews with local leaders, traders, and humanitarian actors, and direct observation across 8 locations in Yirol West County, including Yirol town, Abang Payam, Geng-Geng Payam, Anuol Payam, Pannak Boma, Mengeng Boma, and Payji Boma.

Key Findings

- Below average and irregular rainfall patterns between 2014 and 2017 have resulted in low harvest yields, forcing households (HHs) to rely on excessive livestock selling and wild food consumption to mitigate food consumption gaps.
- HH coping strategies have been further limited by cattle raiding and the outbreak of disease, which have shrunk cattle herds traditionally sold or relied upon during the lean season.
- The depreciation of the South Sudanese Pound (SSP), increased transportation costs during the rainy season, and HHs' willingness to sell livestock at a lower rate to compensate for low food stocks has severely decreased HH terms of trade (ToT), particularly between April and July.
- **Incidents of cattle raiding have increased as a direct result of rising food insecurity in order for HHs to cover food consumption gaps.** Last year (2017) was regarded by FGD participants as one of the worst years in terms of both frequency and scope of cattle raiding incidents; raiding is expected to increase if similar food gaps are experienced in 2018.

Background

Traditional Livelihoods

Most HHs are highly dependent on livestock products throughout the year.[2] During the lean season (May through July) when food stocks are typically depleted, HHs depend more heavily on the market to cover food gaps left by the lack of cultivation by selling livestock, working as casual labour, or selling wild foods and fish that they have foraged for. HHs that are better off typically generate additional income in the market through the sale of surplus food or livestock, while less fortunate HHs depend on the sale of charcoal and firewood and, when opportunities are available, also work as casual labour in Yirol town.[3]

The only primary market is located in Yirol town, which is located in northern Yirol West County. FGD participants from the northern half of the county reported having easy and regular access to Yirol town. Those in the southern half were reportedly less able to access the town due to poor road infrastructure, particularly during the rainy season, when most roads are inaccessible. Furthermore, during the rainy season, roads deteriorate, resulting in a decrease in trade and general access to services, including education and healthcare, which are already relatively limited in southern Yirol West County.

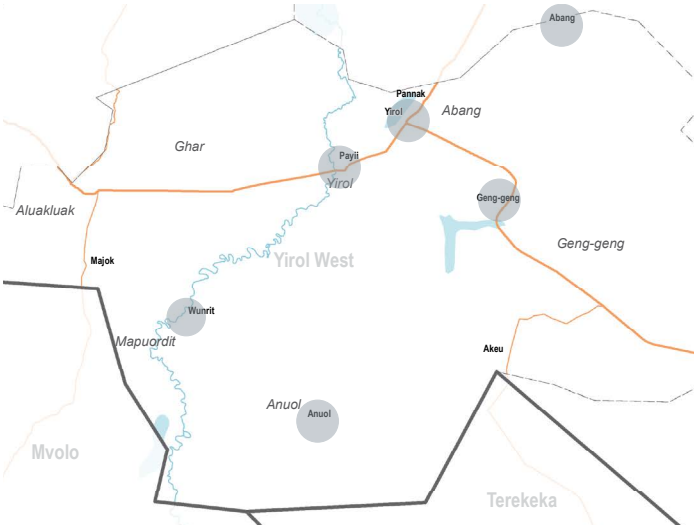
Food and Livelihood Shocks

Consecutive Years of Poor Harvest

Early rainfall over the past three years has disrupted harvest patterns, severely shrinking crop yields. World Food Programme's (WFP) Vulnerability Analysis and Mapping Unit noted an early peak in rainfall during the planting and early weeding season (April - May) between 2014 and 2017.[4] By dekad, rainfall during this period has reached over 200% higher compared to the 20 year average.[5] The early rains were followed by below-average rainfall during the growing season (June to July). Rainfall was recorded as falling 3-4 dekads between 2014 and 2017; 30% below the 20 year average. KIs noted that this disrupted the growth of short-maturation sorghum, the staple crop for most HHs.

KIs emphasised that since 2015, harvest yields have been below normal levels, and food stocks insufficient, leading to extended food consumption gaps. Most FGD participants agreed that the 2016 harvest that supplied food for the 2017 lean season was worse than the 2017 harvest that will supply the food for the 2018 lean season. However, FGD participants noted that both years were poor. Through KI interviews and direct observation, food stocks for the majority of HHs were estimated to last until mid-February. Following this period, HHs will reportedly be likely to rely on wild foods considered to cause acute diarrhoea and disease, and undertake negative livelihood coping strategies for longer periods.

Map 1: Areas assessed by REACH, January 2018



Decrease in HH Terms of Trade (ToT)

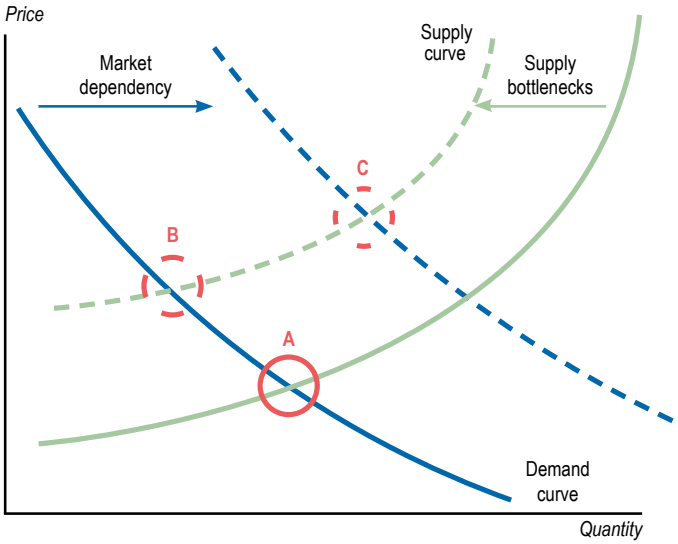
HH ToT normally fluctuate throughout the year due to changes in seasonality in Yirol West that affect both harvest patterns and changes in road access that affects the supply of good in markets. During the dry season, the increase in market goods increases supply, while food stocks from HH cultivation lower demand; both effects depress the price of market goods, and increase the overall relative value of HHs assets (such as cattle) which they would otherwise need to sell in order to afford market goods to cover food gaps. This is shown by A in Figure 1.

At the start of rainy season typically around March and April, the rains make roads inaccessible, decreasing the supply of market goods and increasing prices in markets relative to the overall value of cattle and other HH assets. This is shown in Figure 1 by the shift from A to B. During this period HHs reportedly still have access to resources from non-market sources such as fishing and cattle products, and are less dependent on markets due to the availability of food from home production.

HH ToT decline even further between May and August (lean season), when consumption gaps are highest; food stocks run out and non-market food sources are restricted, increasing HH market dependency and raising the demand for market goods, shown by the shift from B to C in Figure 1, in Yirol town market. This further increases the price of the limited number of market goods. According to traders, a 50 kilograms (kg) of sorghum is expected to increase from the dry season price of 7,500 SSP to 14,000 SSP during the rainy season (May through July). The increased market dependency also lowers the relative value of HH assets, lowering the ToT, and HHs are willing to sell more cattle at a lower rate. During this time, a HH's ability to sell livestock for food is severely limited, often pressuring HHs to sell more cattle to meet food consumption gaps than in other periods of the year; a bull that sells for 100,000 SSP during the dry season will sell for only 80,000 SSP in the rainy season. According to KIs, prices and quantity demanded normally return to point A by mid-September when HHs harvest their crops and roads become accessible again.

The rainy season decline in HH ToT has reportedly become much worse in recent years as a result of the continued depreciation of the SSP, a decrease in available goods and an increase in transportation

Figure 1: Seasonal changes in market prices January - August



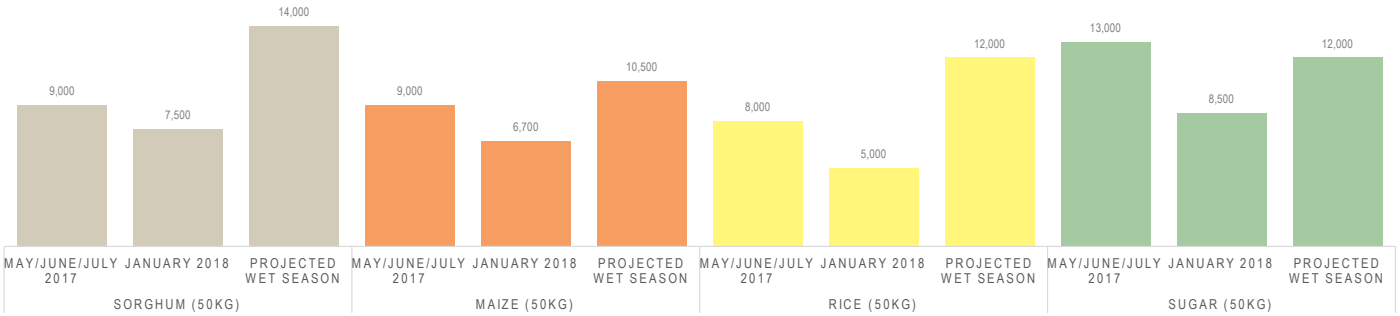
costs. All three factors have caused prices to rise and value of cattle and other HH assets to fall.[6] According to FGD participants, the decrease in ToT for cattle and staple grains has been exacerbated by the decrease in livestock herds and HH assets. In previous years, selling five cattle was sufficient to purchase enough cereals to get through the lean season. However, as ToT for cattle have decreased and the demand for cereals has increased, the number of cattle that need to be sold has also increased; FGD participants reported selling up to 10 cattle to support their HH throughout the lean season.

Livestock Reduction

KIs noted that cattle disease, cattle raiding, and abnormally high sales of livestock have substantially reduced herd sizes since 2015. FGD participants reported that consecutive years of below-average harvest yields have caused HHs to trade livestock for food earlier than usual, leading to higher than typical lean season livestock sales.

There has been a reported increase in cattle mortality due to disease. **Multiple FGD participants noted that up to 50% of the cattle owned by their HHs died from disease in the previous year.** FGDs participants noted that lack of water, grazing land and veterinary services are the leading causes of disease outbreaks; with the cattle showing symptoms including shivering, diarrhoea, and coughing. The reduction in vegetation coverage from the abnormal rainfall

Table 1: Reported changes in the price of commodities (SSP) by KIs



patterns in 2017 will likely have a negative impact on grazing and water availability, milk production, and lean season coping strategies.[7] REACH observed large numbers of sick and malnourished cattle in the herds in the assessed areas.[8] Additionally, there was confirmed cattle mortality linked to Rift Valley Fever (RVF) in Yirol East, less than a day's walk from Yirol town.[9] However, the outbreak was still contained to Yirol East County at the time of the assessment.

Finally, KIs noted that there was a sharp increase in cattle raiding in 2016 and 2017, resulting in increased cattle loss. **KIs and FGD participants stressed that the increase in cattle raiding is a direct reaction to a decrease in availability and access to food during the lean season.** Cattle is stolen and then sold in markets for money which is used to purchase food or to repay debts. FGD participants noted that since most cattle raids take place at cattle camps it rarely leads to a large displacement of people. Overall, there has been a substantial reduction in many HHs' ability to cope with food consumption gaps through traditional coping strategies, such as selling cattle, due to an overall reduction of cattle herds from a combination of increased early cattle sales, cattle disease and raiding.

Restricted Access to Traditional Grazing Pastures

FGD participants reported that the increase in cattle raiding has made traditional dry season grazing areas unavailable. In Abang Payam in north-west Yirol West County, FGD participants reported that the reduction in cattle has been so severe that there is enough grass in their current locations to feed all of the cattle, and no need to take cattle to grazing pastures. KIs from Pannak Boma, north of Yirol town stated that traditional grazing areas to the north do not have sufficient water to support their herds and pastures in Rumbek East County are insecure, forcing cattle to graze in nearby fields. Additionally, KIs from Geng-Geng Payam reported traditional grazing pastures near Mingkaman Spontaneous Settlement are no longer accessible due to a government intervention to reduce potential cattle raiding and instead HHs reportedly bring cattle to Anuol Payam in south-central Yirol West County. Although KIs from Anuol Payam have suffered from increasingly frequent cattle raids, they reported that HHs still intend to use the same traditional dry season grazing lands and cattle migration routes near the Lou River in south-central Yirol West County.

The limited number of dry season grazing areas has forced HHs to combine cattle camps. Furthermore, FGD participants reported that due to the limited availability of food between mid-February and April entire HHs move to cattle camps to access food; with women returning to homestead in May to start planting crops. As a result, there is a higher concentration of cattle and people in the same location, increasing the likelihood of contaminated drinking water and risk factors for acute malnutrition for children under five.[10]

Coping Strategies

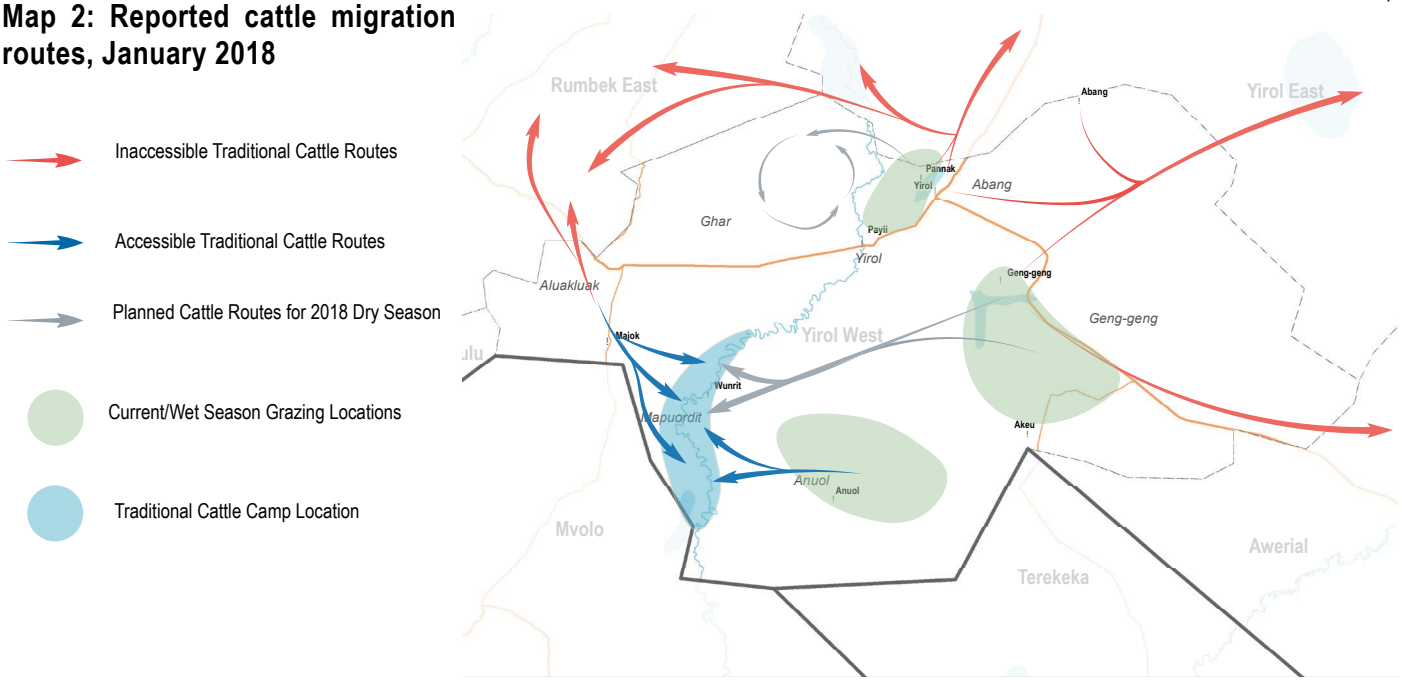
As a result of the confluence of multi-year poor harvests, livestock loss, and declining purchasing power, FGD participants reported that most HHs had adopted a variety of extreme and potentially unsustainable coping strategies in order to cover food gaps.

Cattle Raiding to Mitigate Inadequate Access to Food

Cattle raiding has been a common livelihood practice in South Sudan for an extended period. FGD participants openly discussed how cattle raiding is used to gain more cattle which then are sold for cash to purchase cereals when food stocks are depleted. Cattle raiding is considered high risk and dangerous and only used as a strategy of last resort when other coping mechanisms such as casual labour or wild foods are unavailable. **According to KIs, as food security deteriorated over the last three years, the frequency and intensity of cattle raiding has increased as a coping strategy by HHs to replenish their lost and devalued assets.**

Currently, cattle raiding reportedly mainly occurs between communities in different counties; KIs reported that direct intra-communal raiding between villages is uncommon.[11] Although FGD participants were reluctant to raid cattle from members of their own communities, they

Map 2: Reported cattle migration routes, January 2018



reported indirectly aiding in cattle raids against other HHs living in Yirol West County by providing contacts in other counties with information on the locations of their neighbour's cattle so they could raid them in exchange for cattle locations in other counties. FGD participants acknowledged that this practice has led to a vicious cycle of distrust and raiding. However, FGD participants highlighted the limited number of other options available and that without cattle acquired through raiding, their HH will starve. FGD participants noted that cattle raiding has decreased following the harvest period, but as food stocks deplete in the coming months the number of raids is expected to increase.[12]

Food-based Coping Strategies

FGD participants reported that people were already using food coping strategies to maintain current food stocks. FGD participants reported that most HHs are currently eating one meal per day; during the 2017 lean season it was common for HHs to regularly go whole days without eating meals.

KIs also noted that wild foods have become a primary food source over the previous years, and were often mixed with normal staple foods (i.e. millet and sorghum). During the lean season, HHs rely heavily on wild leaves, such as the akuor leaf.[13] Wild leaves are prepared by boiling them for long hours to create soup that is eaten with grains. FGD participants reported that continued reliance on akuor leaves can cause excessive diarrhoea, leading to malnourishment and preventing the body from defending against other, more dangerous diseases such as malaria and pneumonia, during the lean season.

Migration Driven by Food Insecurity

In addition, **KIs reported that due to consecutive years of poor harvest, many settlements have either been abandoned or consolidated to increase access to resources in Anuol Payam in south-central Yirol West County.** Most HHs are reported to have migrated permanently to nearby settlements to access food and land for cultivation, further straining local communities' resources.

Access to Services

Access to services in Yirol West County is limited. Settlements located along major roads and near Yirol town are reported to have access to services from most sectors all year while settlements located in Anuol Payam have seasonal access. CUAMM runs several primary health care units (PHCUs) in the county and two hospitals including one in Yirol town. Access to clean water via boreholes varies throughout the county. FGD participants in Abang Payam noted that the closest borehole is three hours away by foot; HH members and livestock drink water gathered from a local pond. Furthermore, there was limited access to education or capacity building programmes outside of Yirol town, directly affecting the ability of HHs to generate income. According to KIs in Abang Payam, HHs are unable to get casual labour jobs in Yirol town because HH members do not have the necessary skills, such as writing, mathematics or laying bricks.

Conclusion

Consecutive years of poor harvest and high rates of cattle loss coupled with increasing market prices have severely reduced HHs' ability to mitigate severe food consumption gaps during the upcoming lean season; **likely further increasing the frequency and intensity of cattle raiding in the 2018 lean season.** Due to cattle losses and lack of access to services, Anuol and Abang Payams are considered to be the areas with the most vulnerable populations, and are likely to revert to severe coping strategies without additional assistance during the lean season. The majority of FGD participants noted that food stocks would likely be depleted by mid-February, forcing HHs to rely on a combination of wild foods, livestock sales, and fishing. Furthermore, KIs indicated that HHs without access to livestock, mainly cattle, will be more likely to engage in cattle raiding, and insecurity in the county. However, HHs are reluctant to relocate to other counties to access food and services due to the distrust between communities and perceived insecurity in other counties. **HHs reportedly feel stuck in their current location, are unable to relocate to other, more fertile areas, and will have to rely on severe coping strategies with long term negative implications.**

Endnotes:

1. Food Security and Nutrition Monitoring Survey from June 2017 suggested extreme levels of food insecurity in Yirol West County. A recent shelter assessment carried out by the South Sudan Shelter Cluster (Assessment and verification, Yirol, 15 November 2018) recommended that a more in-depth food security assessment be carried out.

2. Food and Agriculture Organisation (FAO) South Sudan Livelihood Zones Report 2013.

3.Ibid.

4. http://dataviz.vam.wfp.org/seasonal_explorer/rainfall_vegetation/visualizations

5. Dekads are defined as the periods going from 1 to 10, 11 to 20 and 21 until the end of each month.

6. Famine Early Warning Systems Network, South Sudan Food Security Outlook October 2017 to May 2018.

7. According to WFP VAM vegetation coverage for 2017 was 15% below the 20 year average.

8. Confirmation was made using the Pictorial evaluation Tool for Body Condition Scoring Livestock and Forage Assessment in South Sudan developed by FAO in 2015.

9. According to the World Health Organization RVF is a viral zoonosis that primarily affects animals but also has the capacity to infect humans. Infection can cause severe disease in both animals and humans. The disease also results in significant economic losses due to death and abortion among RVF-infected livestock.

10. "Community Resilience to Acute Malnutrition" Programming in the Dar Sila Region of Eastern Chad, 2012–2015. Feinstein International Center, 2016; Marshak, Anastasia, et al. "The Relationship Between Acute Malnutrition, Hygiene Practices, Water and Livestock, and Their Program Implications in Eastern Chad." Food and Nutrition Bulletin, vol. 38, no. 1, 2017, pp. 115–127.

11. This is different than the Rumbek region in Lakes State where cattle raiding between villages in the same payam is reported to be more common.

12. During the assessment period, January 12-19, there were 4 raids reported in nearby settlements.

13. According to the Oxfam report, "Indigenous Solutions to Food Insecurity: Wild Food Plants of South Sudan," (2015) akuor is a common wild leaf eaten across settlements to supplement food consumption gaps.