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Rapid Food Security Assessment in Kitgwang, Manyo County, Upper Nile State



World Food
Programme

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Key Highlights

- The overall food security conditions in Kitgwang, including food access and household level availability, were hampered by the impact of extensive dry spells which occurred during the 2020 growing season. This resulted to a significant inhibition of seed development and yield of sorghum as well as sesame crops. The poor crop yield substantially reduced access to food as well as income for both host community and IDP households as the very poor yields/lack of seed development in many fields caused diminished volume of work available for the harvesting and processing of grains and this resulted in reduced opportunities for on-farm daily labour work.
- Due to constrained access to food and income for food purchases, households are facing large food consumption gaps and are typically consuming foods with limited nutritional value. Overall, 85.7 percent of households have inadequate food consumption (38.5 percent have poor food consumption while 47.2 percent have borderline food consumption). The prevalence of inadequate food consumption is higher among IDP returnees (100 percent) and IDPs (92.4 percent) than in host community households (66.6 percent). This difference is explained by host community households' higher involvement in relatively more diversified income sources such as petty trading, skilled labour activities and sale of alcoholic beverages and lower reliance on seasonal agriculture-based work for income.
- Based on the Household Hunger Scale, nearly 7 in 10 households (69.5 percent) reported moderate prevalence of food deprivation while the incidence of severe hunger is 6.2 percent. Moderate (76.9 percent) and severe (18 percent) food deprivation is higher among host community households compared to the prevalence rate of 74.2 for moderate food deprivation and 1.5 percent for severe food deprivation among IDP households.
- As a result of constrained access to food, most households (59.8 percent) have resorted to emergency coping strategies such as slaughtering more animals than usual, underage marriage in-order to receive bride wealth and also the engagement of community leaders or local court in collection of debts. There is greater reliance on emergency coping strategies among IDP returnees (100 percent) and IDP households (72.7 percent) as compared to the host community households (17.9 percent). The IDP returnees are mainly returnees who were displaced to other parts of Manyo County by the clashes in January 2021. The scale of households' use of emergency coping strategies is extremely worrisome as these strategies affect their future productive capacity and are generally more difficult to reverse.
- Most households (50.5 percent) reported being affected by at least a shock during the three months preceding the assessment, mainly: high food prices (30.8 percent), loss or reduce employment of household member (24.5 percent), reduced income of household (21.7 percent) and death of household head or spouse (13.3 percent). To respond to these shocks, households have adopted strategies ranging from borrowing from friends and family members (36.5 percent), assistance from friends and family (24.1 percent), selling assets (20.1 percent) or engaging in additional income generating activities (18.1 percent).



Main recommendations

- A multi-sectorial response involving food security and livelihoods, WASH and health would be recommended in addressing the diverse humanitarian needs of the affected community.
- WFP could consider a one-off general food distribution to households in Kitgwang in order to ease the impact of constrained food access on household food insecurity. Alternatively, WFP could consider the targeting of food assistance to the most vulnerable households, particularly the estimated 1,600 returnee households who were recently displaced by conflict as well as vulnerable households within the host and IDP communities (particularly, the elderly, breast feeding and lactating mothers) until the next harvest becomes available in October/November.
- To prevent further distortion of the current livelihood strategies, food/cash for work modality should be considered after a one-off general food distribution to households in Kitgwang.
- Considering the reliance in the use of unsafe water sources by the affected communities mainly from dugouts and dams, WFP should liaise with UNICEF and other health and WASH sector partners in exploring opportunities to provide potable water to the community.
- WFP should liaise with IOM and other NFI cluster partners to provide assistance to IDP returnee households whose shelters were destroyed in January 2021.
- A long-term review of the current land tenure arrangements is needed to guarantee the residents of Kitgwang access to land for cultivation, but this requires concerted and broader national level dialogue between all relevant stakeholders in South Sudan and the Republic of Sudan.

1. Introduction and context

The fragile security and conflict conditions which have negatively impacted most rural communities across South Sudan have driven displacement, loss of livelihoods and hampered access to food. Inadequate capacity of state institutions to address issues of basic services such as education, health, water and sanitation services have exposed the populace to harsh living conditions. Kitgwang was one of the few relatively safe locations in South Sudan during the 2013 conflict where the local population was never displaced. The community is located on Latitude 11°56'50" North and Longitude 32°06'22" East of the prime meridian in the Manyo County of Upper Nile State and has been under the control of SPLM-IO following the start of the conflict in 2013. Fighting and insecurity in the counties of Fashoda, Malakal and other parts of Manyo County led to the displacement of thousands of individuals to Kitgwang. Despite the relative peace in the community, clashes between pastoralist and residents of Kitgwang over water in January 2021, resulted to the destruction of property and the temporary displacement of some host community households who have now returned home.

A section of the Kitgwang is designed Republic of South with the boundary line between the two countries being a footpath. According to the County Commissioner, Kitgwang has an estimated population of 13,600 individuals including 4,000 host community members, 8,000 IDPs and 1,600 returnees. Most of the IDPs were displaced from Malakal, Fashoda and Manyo counties of Upper Nile State because of the 2013 conflict. Prior to their displacement, their

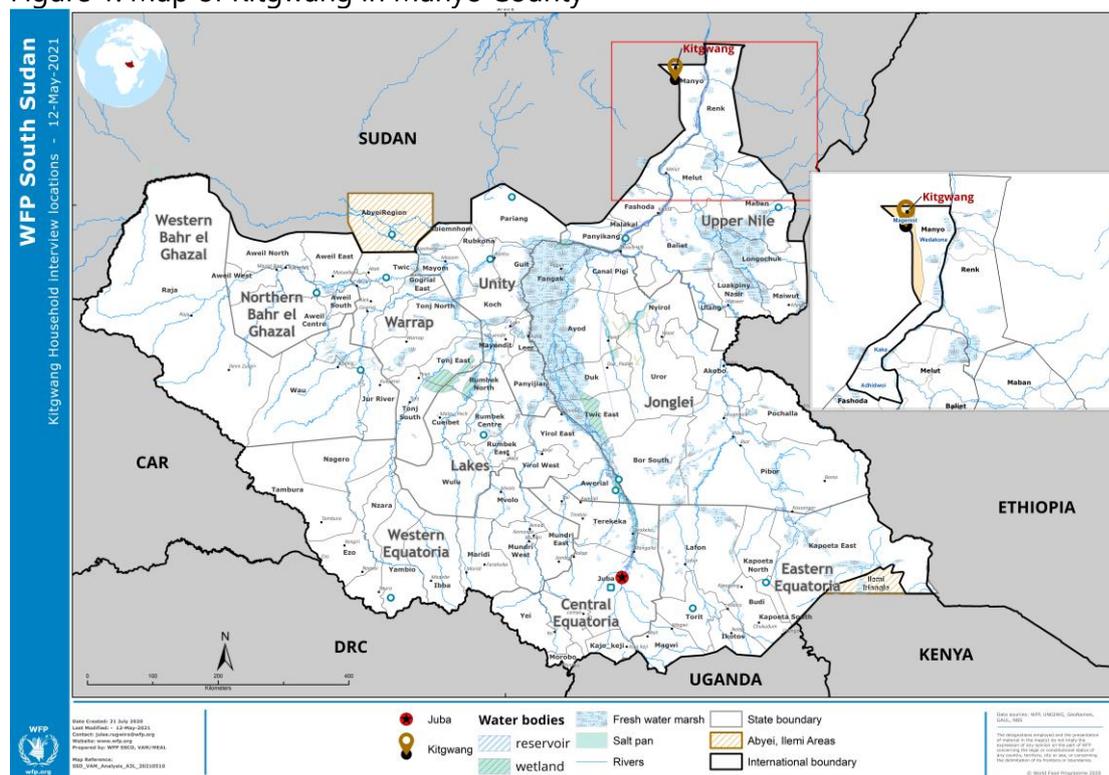
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livelihoods were based on food crop cultivation and livestock keeping. The IDP returnees are mainly individuals who returned to the community after being displaced to Korijari and other parts of Manyo County by the clashes in January 2021. Majority of the population in Kitgwang is of the Shilluk (Chollo) ethnic group, but there also Arab tribes originating from the White Nile and Southern Kordofan States as well as Nuer.

The area's primary economic activities are agriculture, charcoal burning, and the rearing of livestock. No humanitarian actors have a permanent presence in Kitgwang and a small health centre is being ran by the local authorities. As a result, the population have limited access to basic services, especially water, sanitation, and hygiene (WASH) as well as health and nutrition services.

Following a request from local authorities in Kitgwang, who were reporting a very precarious food security situation, WFP organized a rapid assessment mission to the affected communities in April 2021 to gather information on the scale and magnitude of household food insecurity, health, and WASH needs and to evaluate the impact of any ongoing humanitarian assistance on the affected population.

Figure 1: Map of Kitgwang in Manyo County



2. Objectives

The goal of this assessment was to ascertain the scale and magnitude of food insecurity, and WASH needs as well as other priorities of the community in the context of recent shocks, livelihood activities of the different population groups and any other underlying vulnerabilities. In particular, the immediate research questions are:



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- How dire is the food security and WASH needs in Kitgwang?
- Which population groups are worst affected and should be targeted for assistance?
- What kind of assistance is WFP already providing in Manyo counties and how could this be extended to this community to meet the needs of the affected communities?

The objectives of the assessment were as follows:

- Evaluate the food security, nutrition, livelihoods, and overall vulnerability situation of the affected households in Kitgwang and provide recommendations for action.
- Understand how recent shocks and population movement have contributed to the current scale of food insecurity and other needs among the most vulnerable population.
- Evaluate the impact of any ongoing humanitarian assistance on the food security situation in those areas.

3. Methodology

The assessment was conducted using a combination of household interviews, key informant interviews and Focus Group Discussions (FGD) to collect primary data. Key informant interviews were conducted with local county administrators, representatives of displaced people and lead farmers from the host community. In addition, the assessment team conducted 3 focus group discussions with host community members, IDPs and IDP returnees. Furthermore, secondary data was obtained and reviewed from reports available through previous assessment missions

Table 1. Households assessed by residential status

Resident	39
IDP	66
IDP Returnee	11
Total	116

to the location by humanitarian agencies.

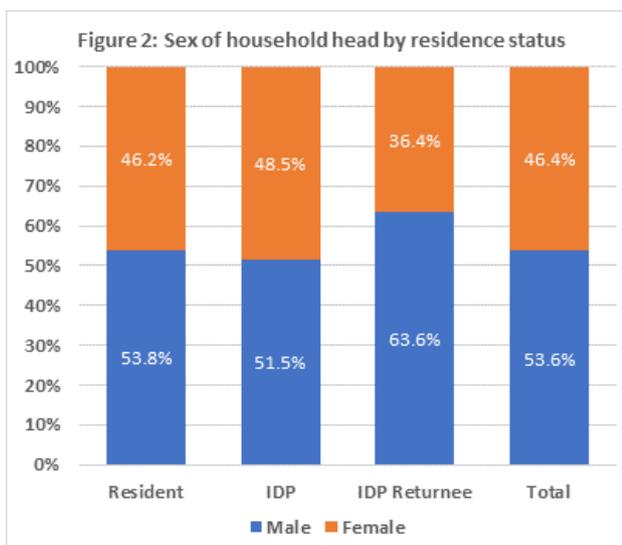
Considering the presence of three population groups, random sample of 75 households (25

household for each group) was initially planned, but this number was ultimately exceeded, with more IDPs households interviewed since they constituted the largest share of the population. However, the IDP returnee households were under-sampled due to challenges in locating those households. **Given the lower number of sampled households achieved for the IDP returnee population group, the results were weighted to ensure that the survey respondents are more representative of the statistical population.** The household data collection tool was programmed in WFP Moda platform and deployed in tablets for the data collection. A team of 10 enumerators were identified through the local authorities and given a one-day training on how to administer the questionnaire.

5. Key Findings

5.1. Demographics

Overall, 53.6 percent of households surveyed during the assessment are headed by males whilst the remaining 46.4 percent of household headed by females. The proportions of male-headed households among residents, IDPs and IDP returnees are 53.8 percent, 51.5 percent, and 63.6 percent respectively. These gender dynamics ultimately have implications for the level of food insecurity in the households due to unequal power relations and access to and control over productive assets and resources. Overall, the average household size is 7.7 people, but residents, IDPs and IDP returnees have an average household size of 8.1, 7.9 and 5.6 individuals, respectively.



5.2. Displaced and returnee population.

The displaced households in Kitgwang originated from locations within the Upper Nile State, primarily from Malakal, Manyo and Panyikang counties. The IDP returnees are those who were displaced by the recent violence in January 2021 to Fashoda (54.5 percent) and Manyo Counties (36.4 percent) and have returned to the

County	IDP		IDP Returnee	
	Number	Percent	Number	Percent
Baliet	1	1.5%	0	0.0%
Fashoda	9	13.6%	7	54.5%
Guit	1	1.5%	0	0.0%
Luakpiny/Nasir	1	1.5%	0	0.0%
Maban	1	1.5%	0	0.0%
Malakal	10	15.2%	1	9.1%
Manyo	26	37.9%	5	36.4%
Maridi	1	1.5%	0	0.0%
Nyirrol	1	1.5%	0	0.0%
Panyikang	17	24%	0	0.0%

community. Some 51.5 percent of these IDP and 18 percent IDP returnee households cited insecurity and conflict as the reason for their current stay in Kitgwang. Some 39.4 percent of IDPs plan to return to their place of habitual residence while 59 percent are unsure of their future plans.

5.3. Food security situation

Food security conditions in the community, including food access and household level availability are hampered by the impact of extensive dry spells which occurred during the 2020 growing season. This resulted to a significant inhibition to seed development and overall yield of sorghum and sesame crops. Key informant interviews revealed that the dry spell resulted in an estimated 60 to 70 percent loss of harvest in locations in the northern confines of the county. The poor crop yield substantially reduced access to food as well as income from on-farm daily labour work for both host community and IDP households. Host community households that cultivate crops normally retain some food stocks up to the end of May, but

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stocks from the last harvest only lasted up to 4 months in most cases. Precipitation analysis for the whole of Manyo County (Figure 3) indicates that there was persistent rainfall anomaly during June to late August, but mid-July to mid-August appears to be the driest period. However, as no rain gauge data in this area is integrated into the rainfall estimate, the situation could be more critical than it appears. In Figure 3, the lines below 100 indicate drier than average conditions.

Figure 3: Rainfall anomaly for Manyo County

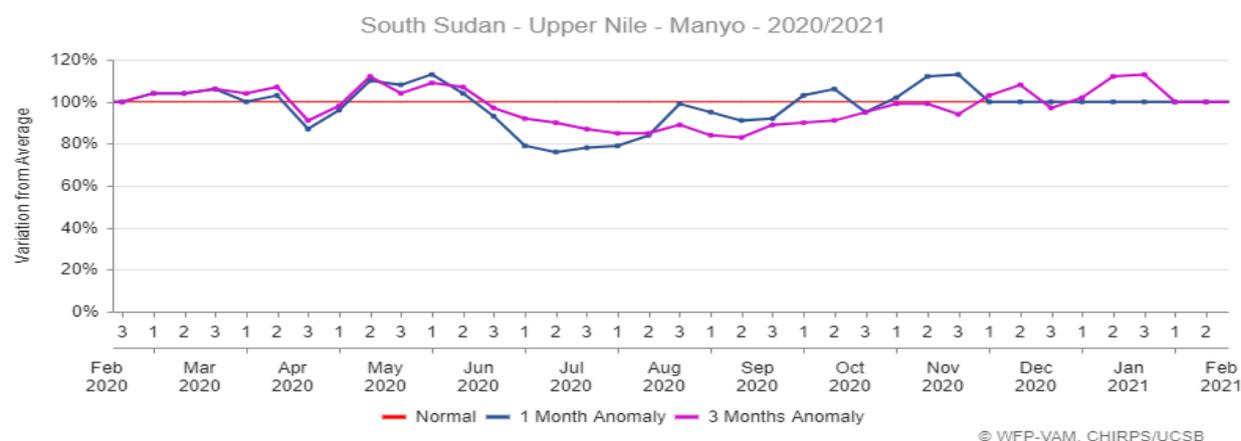
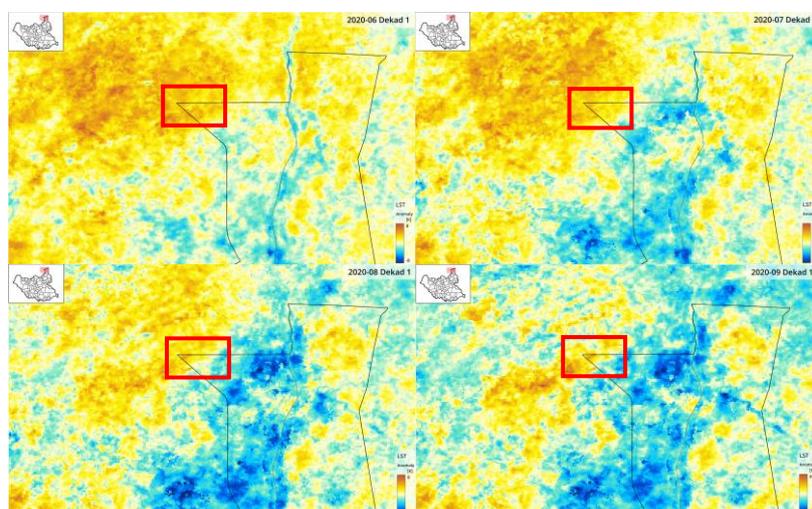


Figure 4: Land surface temperature for 1st dekad of June, July, August and September 2020



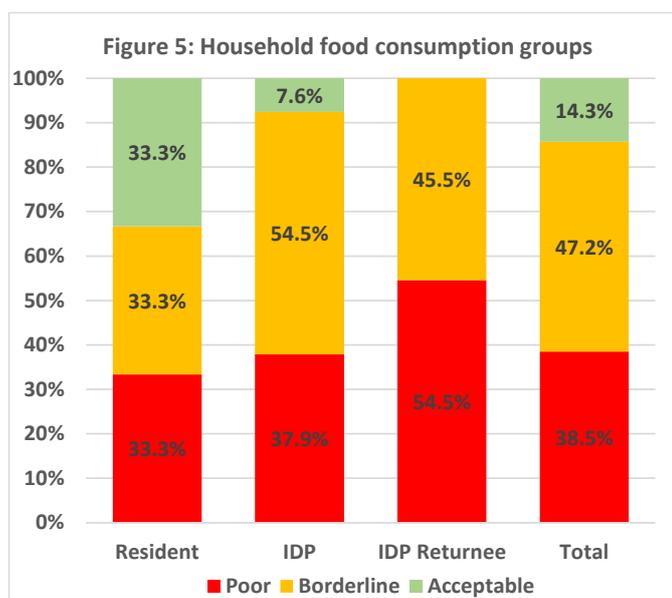
Further land surface temperature analysis for Kitgwang and its environs (Figure 4) for the first dekads (first ten days of the month) of June, July August and September 2020, indicates that temperatures were noticeably warmer than average (orange and yellow colours) potentially indicating drier than normal

conditions.

Household interviews indicates that overall, agriculture-based casual labour (45 percent), skilled labour (10.8 percent), sale of firewood/charcoal (11.1 percent) and petty trade (10 percent) were the most important activities for getting income and food. IDP returnees (63.8 percent) and IDPs (48.5 percent) are generally more reliant on agriculture-based casual labour wages that host community households (30.8 percent).

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Due to constrained food access, households in Kitgwang face large food consumption gaps and are typically consuming foods that have limited nutritional value. Overall, 85.7 percent of households have inadequate food consumption, of which 38.5 percent have poor food consumption while 47.2 percent have borderline food consumption (Figure 5). The prevalence of inadequate food consumption is higher among IDP returnees (100 percent) and IDPs (92.4 percent) than among host community households (66.6 percent). In relation to the gender of household head, 91.3 percent of male-headed households have inadequate consumption compared to 79.3 percent of female-headed households.



Due to constrained food access, households in Kitgwang face large food consumption gaps and are typically consuming foods that have limited nutritional value. Overall, 85.7 percent of households have inadequate food consumption, of which 38.5 percent have poor food consumption while 47.2 percent have borderline food consumption (Figure 5). The prevalence of inadequate food consumption is higher among IDP returnees (100 percent) and IDPs (92.4 percent) than among host community households (66.6 percent). In relation to the gender of household head, 91.3 percent of male-headed households have inadequate consumption compared to 79.3 percent of female-headed households.

Focus Group Discussions revealed that most host community and IDP households do not have access to land for crop cultivation as the land is mostly owned by farmers from the Republic of Sudan, with only an estimated 20 percent of host community having access to land on which they cultivate crops. Thus, most host community and IDP households are mainly reliant on on-farm casual labour work for income to meet their food needs. Heavy reliance on on-farm labour work, creates challenges in access to income especially during the dry season. Furthermore, households typically resort to the cutting of grass, firewood and poles as well the burning of charcoal in order to generate income so as to meet their food needs. Some women regularly wash clothes for their wealthier neighbours of the Republic of Sudan all year round. As a result of food shortages, some 70 households that were unable to cope with food shortages moved to other communities within the Upper Nile State at the beginning of February 2021 in search for work and are likely to return to Kitgwang at the start of the rainy season.

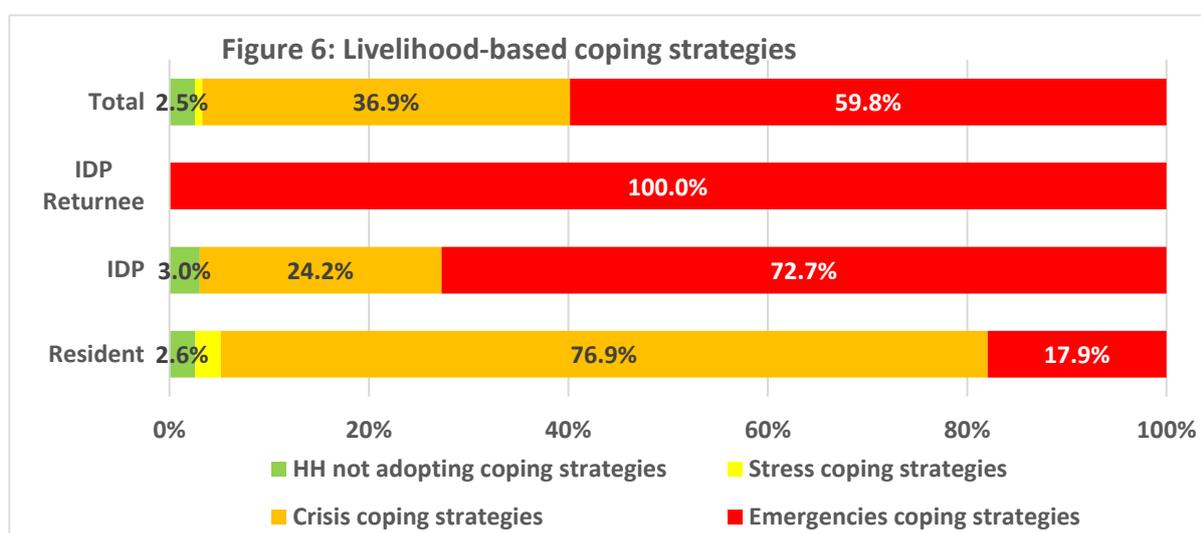
Constrained access to food resulting from high prices of staples and limited access to wage labour opportunities have contributed to some degree of food deprivation. Based on the Household Hunger Scale, nearly 7 in 10 households (69.5 percent) reported moderate prevalence of food deprivation while the incidence of severe hunger is 6.2 percent. The prevalence of moderate (76.9 percent) and severe (18 percent) food deprivation is higher among host community households compared to prevalence rate of 74.2 for moderate food deprivation and 1.5 percent for severe food deprivation among IDP households.

Overall, all households (100 percent) that experienced severe hunger had inadequate food consumption during the week preceding the survey while 80.6 percent of households that

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experienced moderate hunger also had inadequate food consumption. Households that were assessed to have acceptable food consumption during the 7 days preceding the assessment were only affected by slight (17.3 percent) and moderate hunger (19.4 percent) during the past 30 days.

Furthermore, 59.8 percent of households resorted to the use of emergency coping strategies such as slaughtering more animals than usual, underage marriage to receive bride wealth and using community leaders or a local court to collect debts. There is greater reliance on the use of these three types of emergency coping strategies among IDP returnee households compared IDP and host community households (Figure 6). The scale of households' use of emergency coping strategies is extremely worrisome as these strategies affect their future productive capacity and are generally more difficult to reverse.



There is widespread use of food-based coping strategies by 68.4 percent of households. The most widely adopted food-based strategies are consumption of less preferred foods (68.4 percent), limiting portion size during meals (65.6 percent), restricting consumption by adults for children to eat (59.4 percent) and reducing the number of meals (60.2 percent). The employment of coping strategies is likely to become less pervasive from June when the onset of the seasonal rains is expected to increase the availability of on-farm casual labour wage opportunities and improved access to food.

There is a functioning market at the Republic of Sudan side of Kitgwang which provides adequate supplies of cereals, fish, meat, oil, sugar and other food items. The prices of food these items have increased significantly as compared to the previous year. A maluwa of sorghum is currently being sold for 400 Sudanese Pounds (SDG) as compared to 50 Sudanese Pounds during the same time last year. At the same time, the price of sugar, oil, and oil have all increased partly due to a steady depreciation in the value of the Sudanese pound. Given that the current level of food insecurity is conditioned by the poor crop harvest from the last growing season and reduced access to income from daily labour, households expect a gradual

improvement in the food security situation with the onset of the seasonal rains as this will enhance the availability of on-farm labour opportunities.

5.4. Dietary Diversity

Overall, on a weekly base average, households consumed cereals/tubers for 2.9 days, fish for 1.7 days and milk for 1.2 days. Host community households had better diets than other population groups, consuming cereals for 4 days, meat/fish for 2.3 days and sugar for 3.7 days per week. In comparison, IDP households consumed cereals for 2.4 days, meat/fish for 1.4 days and sugar for 1.9 days weekly (Table 3). Households with acceptable food consumption had greater access to various food items, consuming cereals for 6.2 days, milk for 2.5 days, meat for 3.6 days and sugar for 5.6 days in a week. On the contrary, households in the poor food consumption group consumed cereals/tubers for 1.8 days and meat for 1 day with very little consumption of milk (0.7 days).

In general, 75 percent of households consumed milk at least once during the week preceding the assessment while 84.2 percent of households consumed meat/fish at least once during the week preceding the assessment. Key informant interviews revealed that most households currently consume 1 or 2 meals a day and the typical meal is based on sorghum, dried fish and vegetables.

Table 3: Average number of days food groups are consumed

	Cereals, grains, roots and tubers	Legumes / nuts	Dairy products	Meat, fish and eggs	Vegetables	Fruits	Oil/fat	Sugar/sweets
Resident	4.0	1.5	1.2	2.3	1.6	0.3	2.5	3.7
IDP	2.4	1.6	1.2	1.4	1.4	0.8	1.3	1.8
IDP Returnee	2.5	1.1	1.4	1.2	1.5	1.2	0.9	1.3
Total	2.9	1.5	1.2	1.7	1.5	0.7	1.6	2.3

5.5. Shocks and challenges

Overall, 50.5 percent of households reported being affected by at least a shock during the three months preceding the assessment, mainly high food prices (30.8 percent), loss or reduce employment of household member (24.5 percent), reduced income of household (21.7 percent) and death of household head or spouse (13.3 percent). To respond to these shocks, households have adopted strategies ranging from borrowing from friends and family members (36.5 percent), assistance from friends and family (24.1 percent), selling assets (20.1 percent) or engaging in additional income generating activities (18.1 percent). Focus Group Discussions revealed that most host community and IDP households currently cope with the constrained access to food by engaging in the burning of charcoal as well as the cutting and sale of firewood and poles.



5.6. WASH and Health

The water crisis facing households in Kitgwang is as critical as the food security constrains and the inability of households to adequately meet both their food and WASH needs which is linked to the impact of the devastating dry spell during the previous growing season. For many years, the community relied heavily on water collected in dugouts from seasonal rains, but these water sources which are highly contaminated due to widespread open defecation, dried up much earlier than usual. No borehole has ever been constructed in the community because the water table is very low.

The magnitude of the water crisis affecting the community is reflected in the recent conflict between pastoralist households from the Republic of Sudan and residents of Kitgwang over access to and use of water. The disagreement over the use of the same water point by the community for both human and animal consumption culminated in the burning of several houses and subsequent displacement of between 100 to 150 households from Kitgwang in January 2021. The drying up of water sources and increasing reliance on water supplies from the Republic of Sudan has led a hike in the price of water. Currently, water in the community is supplied by tanker from Tartar in South Kordofan with a drum of water selling for 1, 500 Sudanese pounds while a jerrican is sold for 120 Sudanese pounds. Around April 2020, a drum of water was sold for 150 Sudanese pounds while a jerrican cost 50 pounds. The lack of adequate access to safe water sources increases the risk of water-borne diseases posing serious health implications for community members.

Due to the water shortages in the community, some 125 households have moved to Pukrung while other have moved to Korijari. Another 200 households moved to Akaf and all these households are expected back in Kitgwang with the onset of the rains.

5.7. Land use dynamics

Land access and ownership within Kitgwang presents an interesting dynamic which impacts on the ability of both host and IDP communities to produce or access adequate food for consumption. Land ownership rights and investment in mechanized agriculture in the region is generally controlled by farmers from the Republic of Sudan. With adequate financial support from some Sudanese financial institutions, farmers from South Kordofan as well as White and Blue Nile states are able to explore and invest substantially in agriculture in South Sudan.

Mechanized farming in these regions has been in place for many years, well before South Sudanese independence and the bonds and links between local authorities and Sudanese farmers run deep. With limited access to land for their own cultivation, most IDP and host community households work as casual laborers on these and except for planting, all other work is carried manually and employs quite considerable numbers of people. However, most of the production goes the Republic of Sudan and this output is also typically not accounted for in the calculation of national South Sudan production and cereal deficit.



6. Conclusions

Household food security conditions are hampered by the seasonality of income-earning opportunities for the predominantly agriculture wage-income dependent populace which was further compounded by the poor harvest of crops, rising prices of food items and impact of shocks on the general population. The outlook for the food security situation is of concern as conditions will remain precarious until the onset of the rains and the start of farming activities provide the much-needed agriculture labour opportunities and improved access to income for food purchases.

The recent displacement of some households in Kitgwang due to clashes has contributed to a slight increase in the food security needs of the affected communities while lack of access to water has compelled some households to relocate to other communities. The prevailing food insecurity and water crisis in the community calls for urgent response from WFP and other humanitarian actors to safeguard the food security and other essential needs of the population.

7. Recommendations

Based on the findings on the prevailing food security, WASH and health conditions in the community, the following recommendations are being proposed:

- A multi-sectorial response involving food security and livelihoods, WASH and health would be recommended in addressing the diverse humanitarian needs of the affected community.
- WFP could consider a one-off general food distribution to households in Kitgwang in order to ease the impact of constrained food access on household food insecurity. Alternatively, WFP could consider the targeting of food assistance to the most vulnerable households, particularly the estimated 1,600 returnee households who were recently displaced by conflict as well as vulnerable households within the host and IDP communities (particularly, the elderly, breast feeding and lactating mothers) until the next harvest becomes available in October/November.
- To prevent further distortion of the current livelihood strategies, food/cash for work modality should be considered after a one-off general food distribution to households in Kitgwang.
- Considering the reliance in the use of unsafe water sources by the affected communities mainly from dugouts and dams, WFP should liaise with UNICEF and other health and WASH sector partners in exploring opportunities to provide potable water to the community.
- WFP should liaise with IOM and other NFI cluster partners to provide assistance to IDP returnee households whose shelters were destroyed in January 2021.
- A long-term review of the current land tenure arrangements is needed to guarantee the residents of Kitgwang access to land for cultivation, but this requires concerted and



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broader national level dialogue between all relevant stakeholders in South Sudan and the Republic of Sudan.