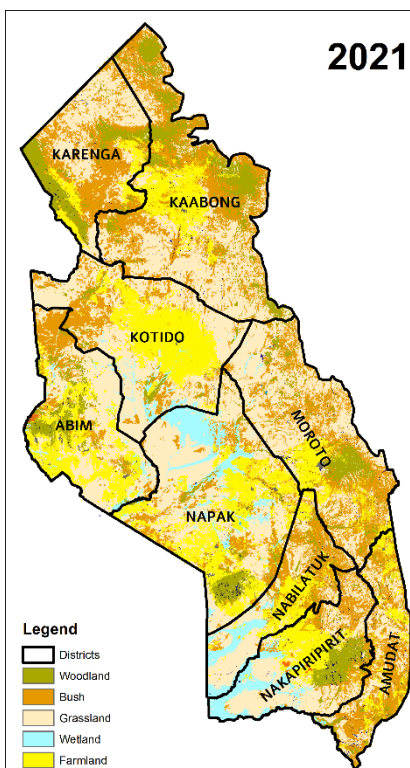
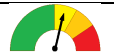
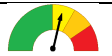
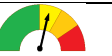
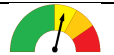
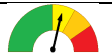
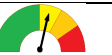
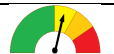
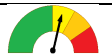
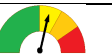









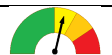

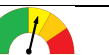





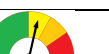
















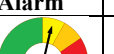



# KARAMOJA DROUGHT BULLETIN SEPTEMBER 2021

## Strengthening Shock Responsive Systems in Karamoja




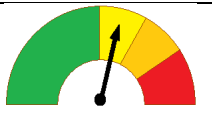



SECTORS	July	August	September
Livestock	 Watch	 Watch	 Watch
Socio - economic	 Watch	 Watch	 Watch
Crops	 Watch	 Watch	 Watch
Water	 Normal	 Normal	 Normal
Livelihoods	 Watch	 Watch	 Watch
Health	 Watch	 Watch	 Watch

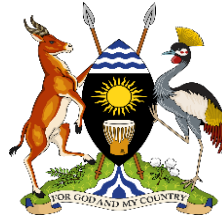
District	July	August	September
Nakapiripirit	 Watch	 Alarm	 Watch
Nabilatuk	 Watch	 Watch	 Normal
Napak	 Normal	 Watch	 Watch
Amudat	 Alarm	 Watch	 Watch
Moroto	 Watch	 Watch	 Watch
Abim	 Watch	 Alarm	 Watch
Kotido	 Watch	 Alarm	 Watch
Kaabong	 Watch	 Alarm	 Watch
Karenga	 Watch	 Watch	 Normal

### Situational Overview

Overall, Karamoja region has been under the **WATCH** stage since July because all nine districts were in Watch stage. All sectors (Livestock, Socio – economic, crop, livelihood and Health) excluding water were at **WATCH** stages. The water sector has been in **NORMAL** stage in the same period from July and this is attributed to the availability of water and pastures for animals save for the heightened cattle raids and theft. The dry spell that lasted up to mid-August saw a total loss of all crops in some sub counties in Amudat and other districts due to drought. The meagre harvest realized in most places may not last a month for many households. Hence the watch stage.

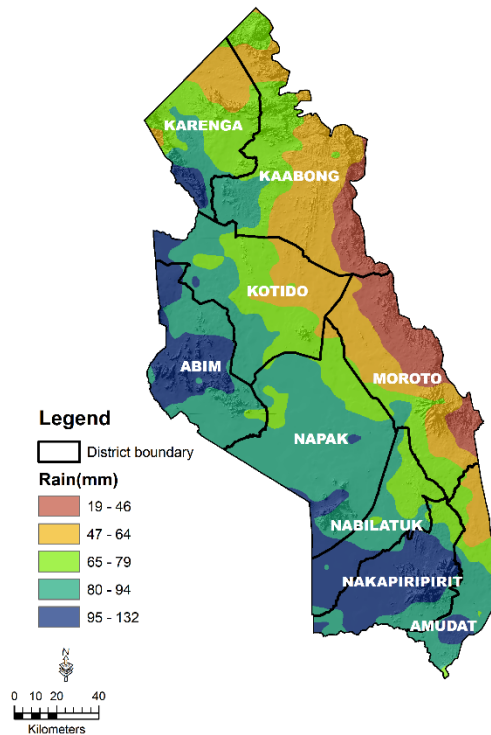
## ANALYSIS OF SECTORS

Sectors	Sectoral levels	Comments and Recommendations
Livestock		<p>Bacterial Tick-borne diseases have been reported in two thirds of the region in the months of July, August and September. Amudat was an exception since it was in “Alarm” due to absence of water and pasture with animal movement toward Nakapiripirit. Other notable diseases such as East Coast Fever, mange, Brucellosis, CBPP and Foot and Mouth Disease. Livestock were reportedly in quarantine in Kaabong while there was a vaccination campaign Napak. Insecurity due to raids and livestock theft has increased in all the 9 districts.</p> <p><b>Recommendations.</b></p> <ul style="list-style-type: none"> <li>• Communities advised to keep kraals hygiene, always respond to the livestock vaccination program and report any identified animal diseases</li> </ul>
	Watch	
Socio-economic		<p>Indicators like average cost of labour, daily wages, terms of trade, prices of food stuffs, and livestock have shown unusual fluctuations outside expected seasonal ranges, but these fluctuations are still minimum. More than 70% households reported depending on casual labour, brewing, sale of firewood and charcoal to get money to access food items from markets.</p> <p><b>Recommendations.</b></p> <ul style="list-style-type: none"> <li>• Communities were advised to use available food stocks sparing</li> </ul>
	Watch	
Crops		<p>Fall Army Worm (FAW) has been reported in all the 9 districts, affecting mainly sorghum and maize. There was prolonged dry spell, destruction of crops by wildlife and hailstorms in Abim. The entire region requested for crop assessment to ascertain the level of food insecurity. Wilting of crops due to drought has been reported in all the 9 districts with some farmers in Amudat reporting wilting of crops beyond recovery</p> <p><b>Recommendations.</b></p> <ul style="list-style-type: none"> <li>• Need for promotion of production of fast-maturing crops in second growing/rainy season</li> </ul>
	Watch	
Water		<p>Most households use boreholes and rivers for water sources which are within a walkable distance. Water sources have been reported as safe in all the 9 districts. Dams and valley tanks still have water in them for livestock use</p> <p><b>Recommendations.</b></p> <ul style="list-style-type: none"> <li>➢ Emphasis being put on water harvesting technologies in all the 9 districts</li> <li>➢ Communities are advised to desist from using stagnant and dirty water for HHs use.</li> </ul>
	Normal	
Livelihoods		<p>Food prices are still above normal ranges in all 9 districts, e.g., a bag of sorghum costs ≈UGX 120,000 against normal UGX 70,000-100,000 though there has been a reduction from UGX 150,000 in July. Household food stock have remained lower than normal in all the 9 districts though harvesting has began. Labor wages are still significantly below the normal ranges in all the 9 districts ≈ UGX 3,500 (&lt; US\$ 1</p> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>➢ Communities are advised to plant short maturing crops especially vegetables to reduce the food shortages.</li> <li>➢ Farmers are advised to sell a few of their animals to purchase food.</li> </ul>
	Watch	

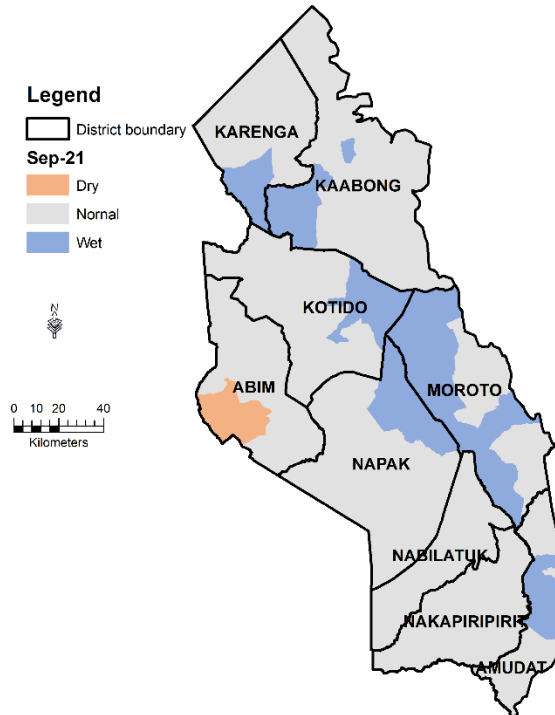


# 2- DROUGHT SEVERITY AND OUTLOOK

## Rainfall and Current Conditions



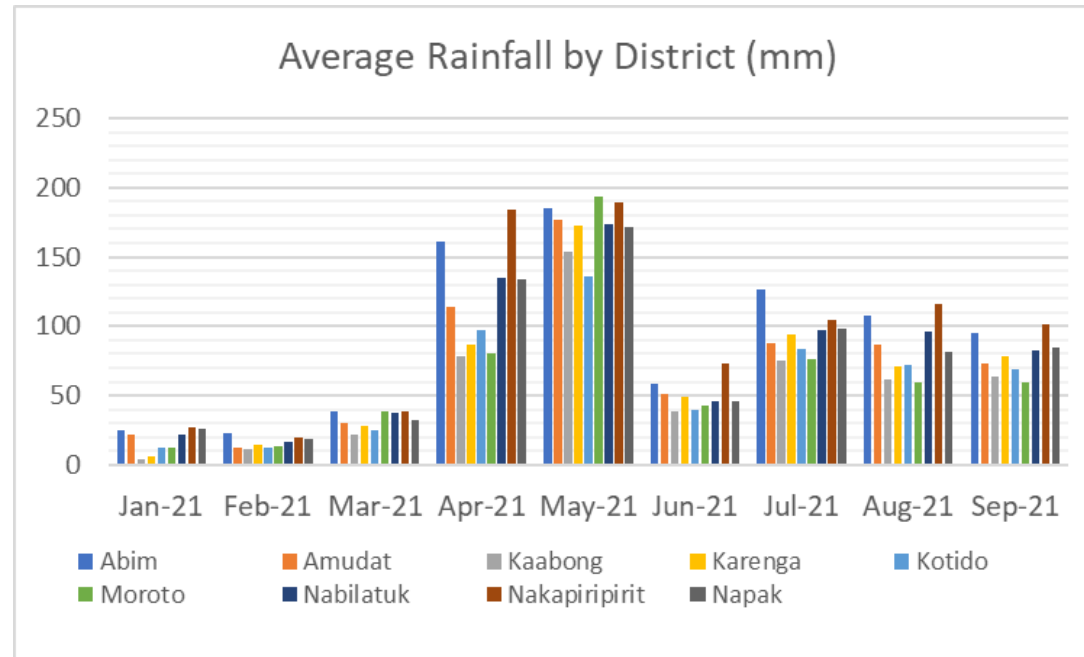
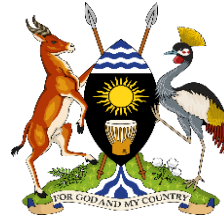
Rainfall in the first 20 days of September



Drought Severity and Magnitude based on SPI

The whole of Karamoja region received more than average rainfall. The western and southern parts of Abim and Nakapiripirit experienced the most rainfall in the first 20 days of the month averaging at about 100 mm (map on the far left). The amount of precipitation reduces northwards and eastwards. The map on the right has details of magnitude and severity of drought classification across the region.

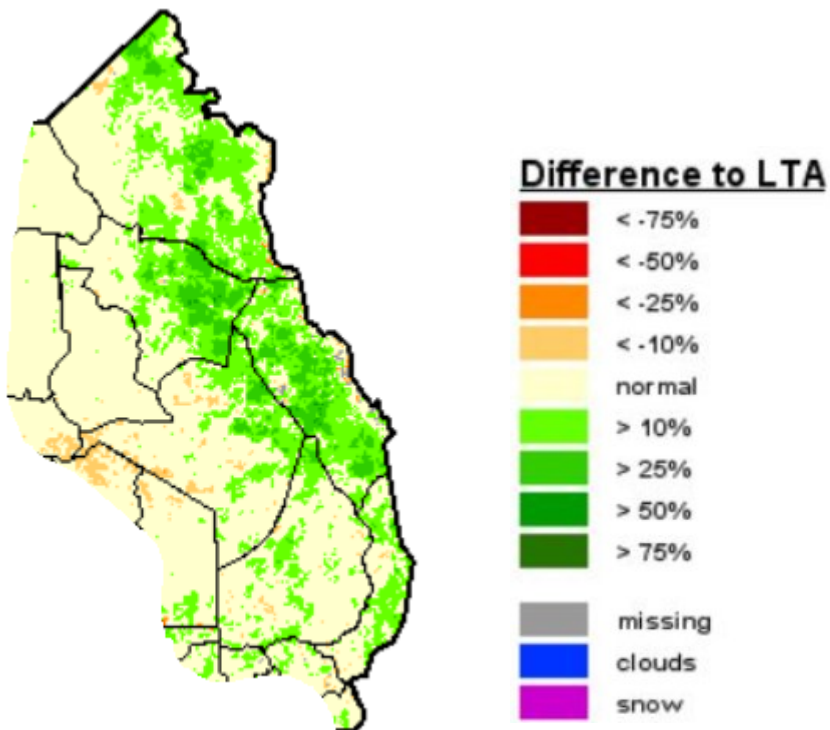
**Source: FEWSNET**



The graphs above show how rainfall has been fluctuating since the beginning of the year in January. From the graph, Moroto experienced the least amount of rainfall since the year began amongst all Karamoja districts. While Abim and Nakapiripirit receive the highest amount of rainfall in the same period. All in all, the year began with very little rainfall which increased as the year progressed. Precipitation values peaked in May then plunged in June and slightly rose again in July to a plateau ever since.



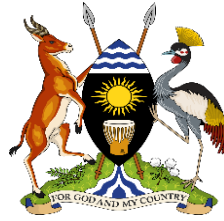
# Vegetation Condition



**The Normalized Difference Vegetation Index (NDVI)** measures the “greenness” of ground cover and is used as a proxy to indicate the density and health of vegetation. NDVI values range from +1 to -1, with high positive values corresponding to dense and healthy vegetation, and low and/or negative NDVI values indicating poor vegetation conditions or sparse vegetative cover. The NDVI anomaly indicates the variation of the current ten days (dekad) to the long-term average, where a positive value (for example 20 percent) would signify enhanced vegetation conditions compared to the average, while a negative value (for instance -40 percent) would indicate comparatively poor vegetation conditions

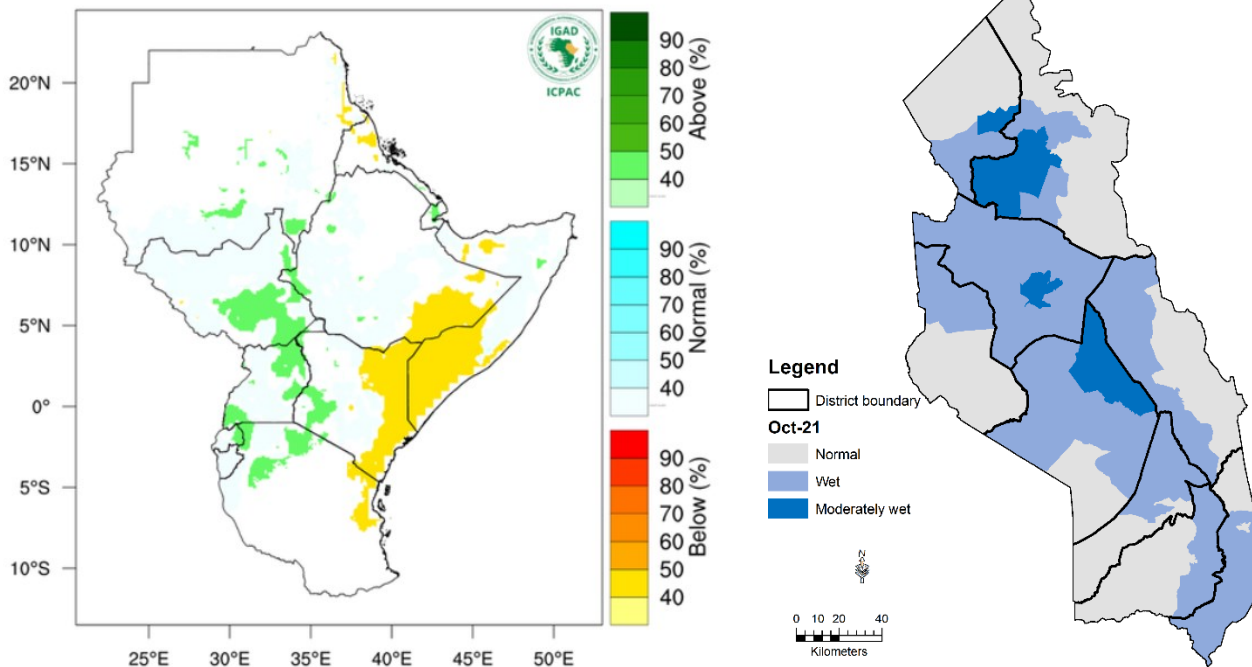
For the month of September and based on the NDVI average over the long term average, Karamoja region experienced an improvement of between 10 to 25% in vegetation health mainly in the eastern to the central parts of the region.

**Source:** FAO Earth Observation – Country Indicators:  
<http://www.fao.org/giews/earthobservation/country/index.jsp?lang=en&code=UGA>



# Weather Forecast

Rainfall Probabilistic Forecast for October 2021



### Rainfall Forecast:

Rainfall forecast for October 2021 is favorable, with a greater chance of experiencing wetter than usual conditions (above normal rainfall conditions) predicted for Karamoja as a whole. The seasonal forecast issued by the IGAD Climate Prediction and Applications Centre (ICPAC) is presented in the map on the left. The forecast puts at least 40% or better possibility for wetter than usual conditions. A localized computation of the ICPAC prediction highlights that a central belt stretching diagonally from between Abim and Kaabong in the northwest to Amudat in the southeast, will be wetter than usual. Along Kaabong – Karenga district boundary, central Kotido and western Napak within that belt are predicted to be even much wetter. Other parts outside the central diagonal belt are expected to receive normal rains in October. (map on the right).

**Source:** ICPAC – IGAD Climate Prediction and Application Center.

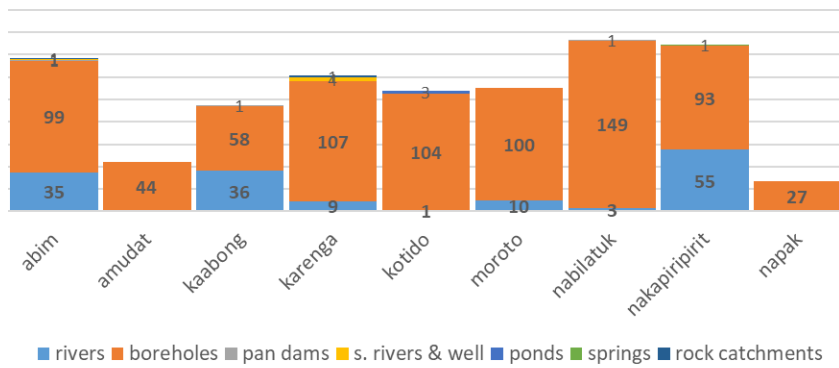
### Risk of Drought

Based on the seasonal forecast issued by the IGAD ICPAC and its localized computation, the risk of drought is quite unlikely in October. With increased precipitation, vegetation conditions are expected to improve even more ensuring both pasture and water sources for animals. Crops with short maturing periods will be able thrive through October.

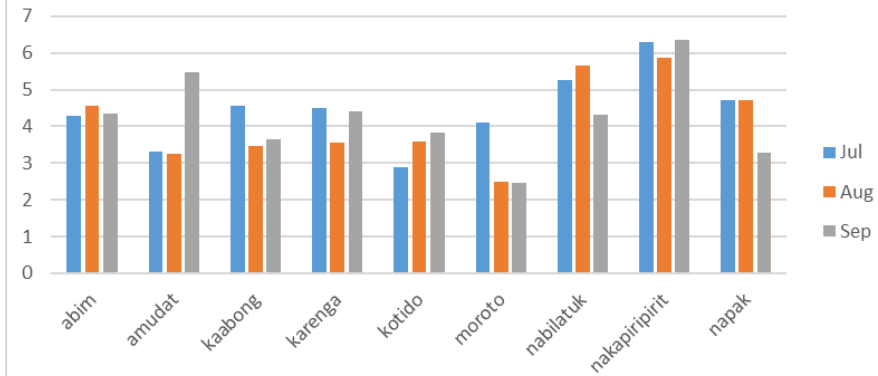


# Access & Usage of Water

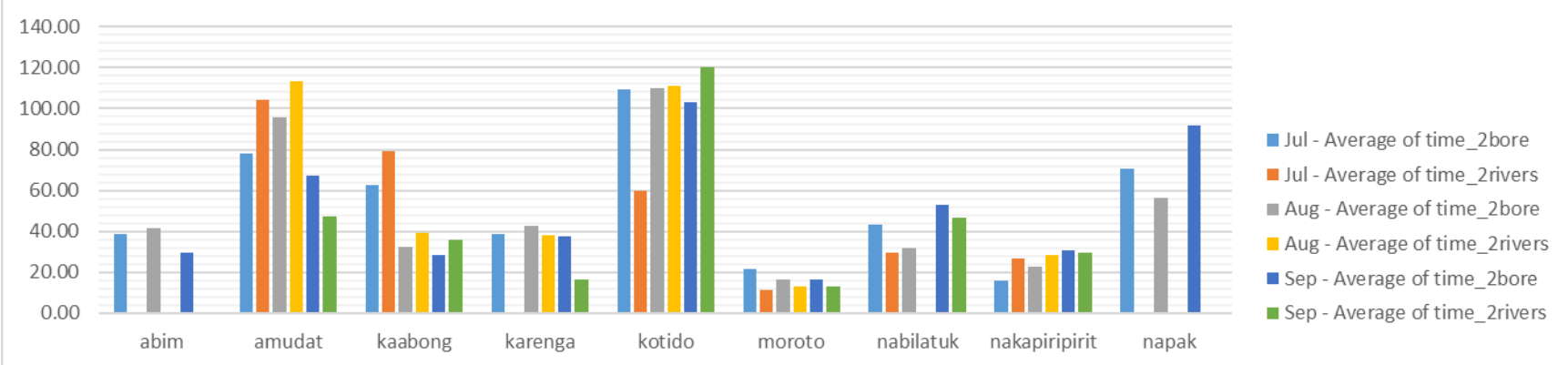
Water usage in Karamoja by Source

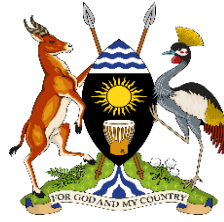


Volume of water (number of jerricans) per Household



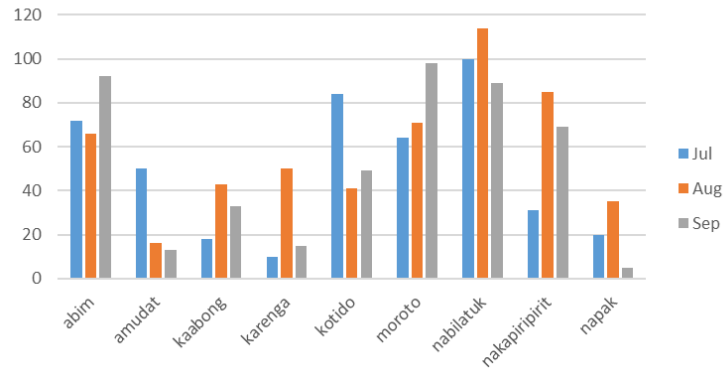
Time to Water Source



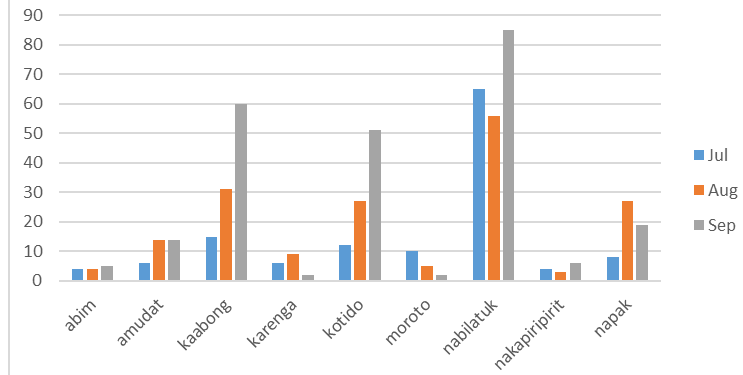


## Sources of Income: July - September

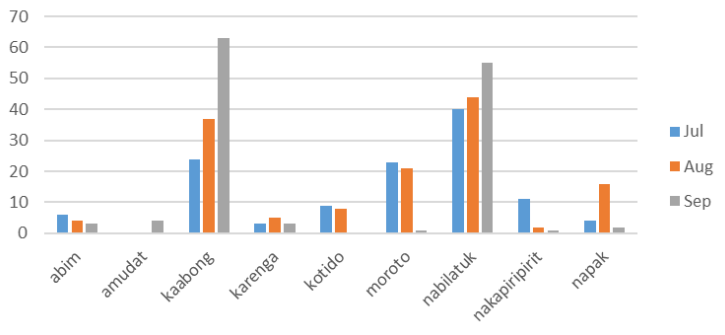
Casual Labour by District



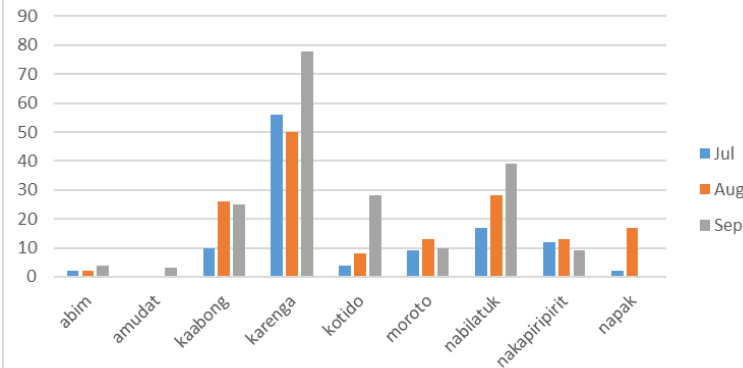
Respondents involved in Firewood



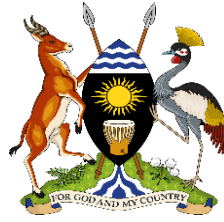
Respondents involved in Charcoal  
Production



Respondents involved in Brewing

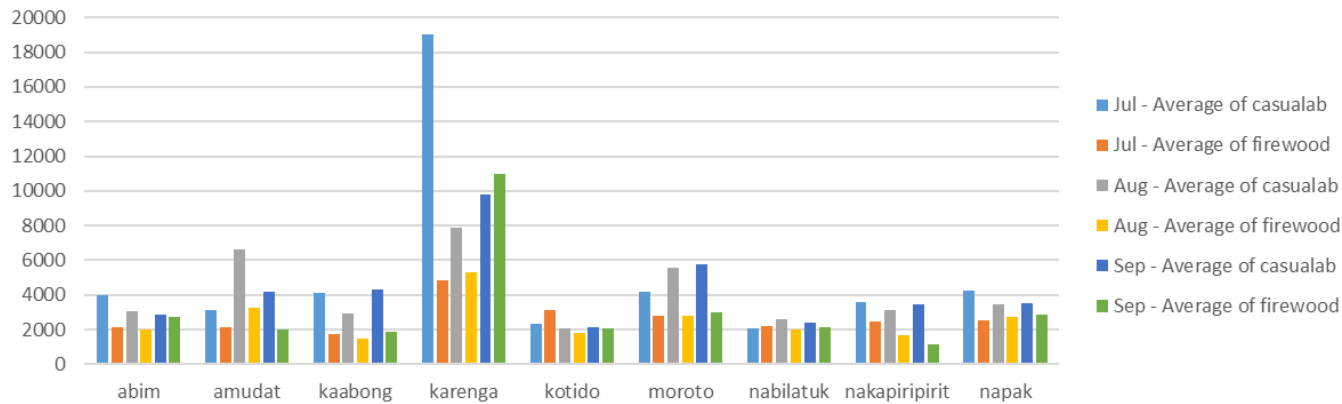




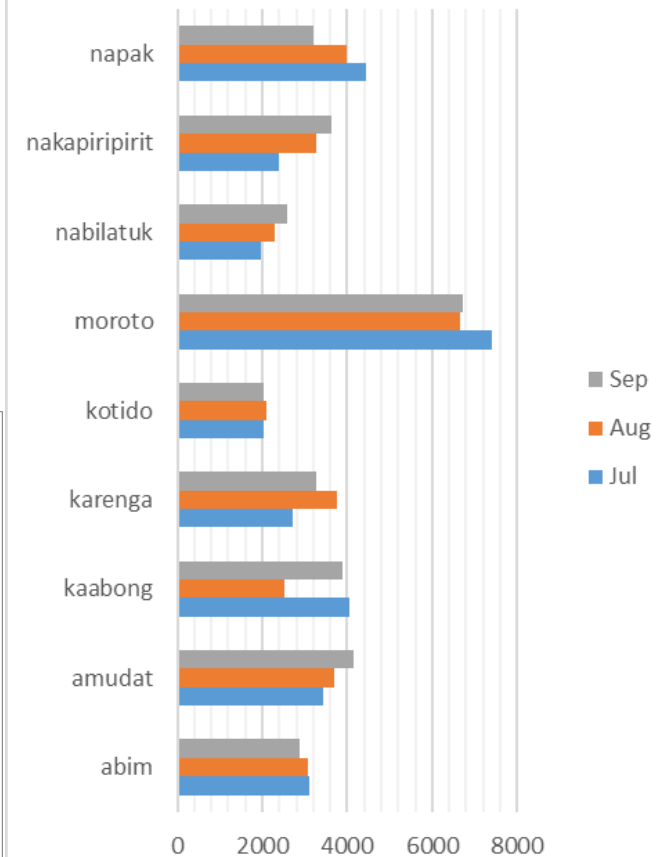


# Income fluctuations: July - September

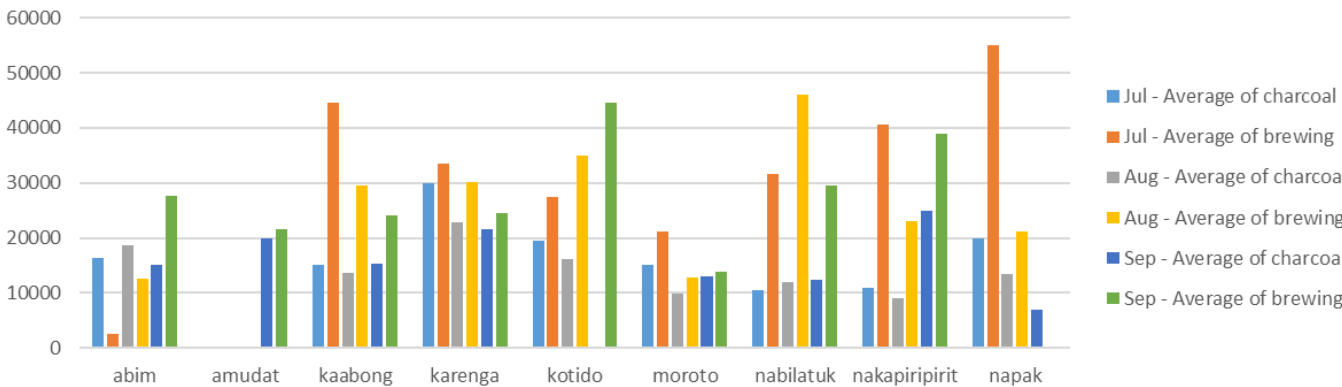
### Casual labour wages & Firewood sales compared

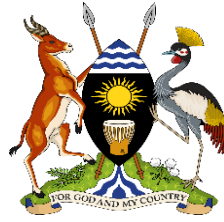


### Coping Labor Wages



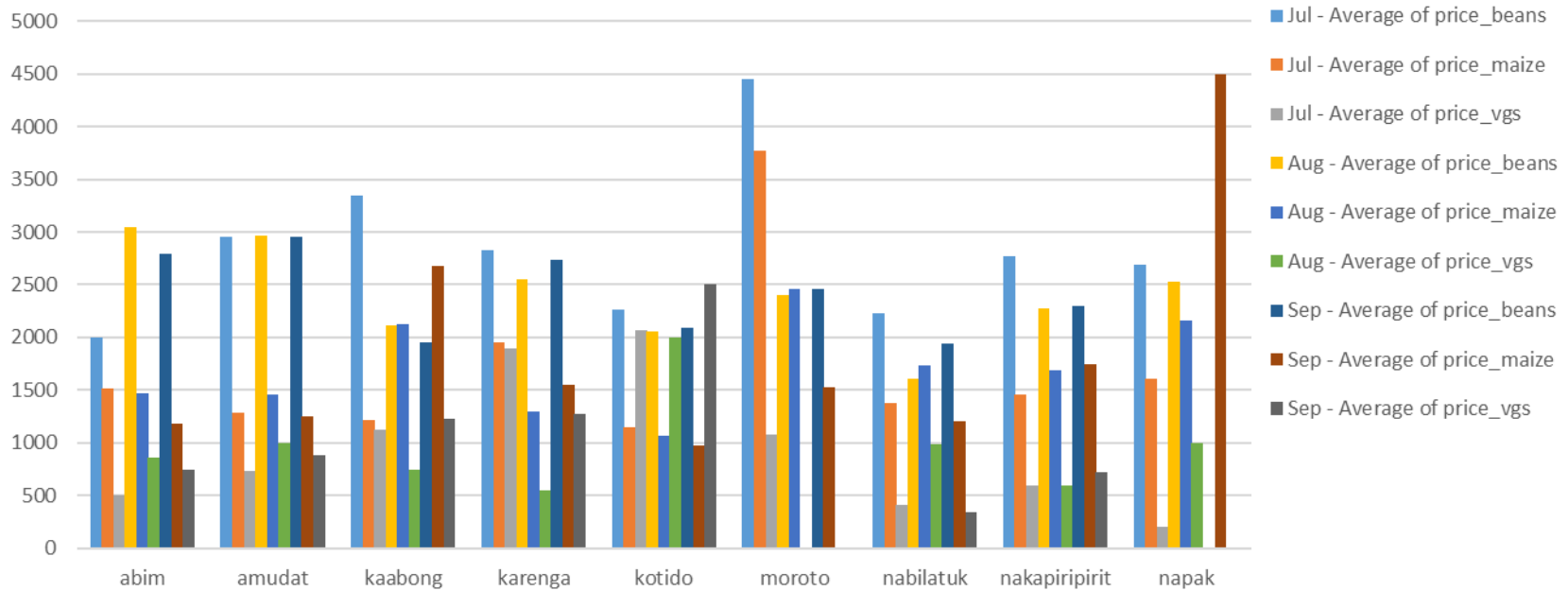
### Charcoal & Brewing sales compared





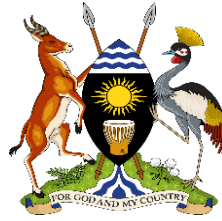
# Food prices: July - September

### Major Food Prices July - September 2021





Food and Agriculture  
Organization of the  
United Nations



### **Trends in Water access, Income Sources and Food prices**

The major source of water is borehole followed by rivers. Most households in all districts used at least a borehole as a water source. The average number of jerricans per household ranges from 2 in Moroto during the month of August to 6 in Nakapiripirit in all the months. Time spent fetching water also varied considerably across the region from as low as 10 minutes to more than 2 hours in Karamoja. People spent more time at rivers than boreholes.

The number of people involved in casual labour was highest in Nabilatuk (more than 90) on average in all three months. But there was no clear pattern across the region as to whether the numbers were increasing or reducing with increasing rainfall in Karamoja. For instance, the number increased steadily through July to September in Moroto, but a direct opposite was experienced in Amudat while it increased and then reduced in Nabilaatuk in the same period. Casual labour wages on the other hand, reduced with increasing rains from July to September in all districts overall. Exceptions were in Amudat and Karenga. Amudat had a rise then a reduction while Karenga experienced a more than half (about UGX 10,000) reduction then a rise. These wages ranged between UGX 2,000 (most of the region) to more than 18,000 (Karenga).

The number of people involved in charcoal burning, firewood and brewing generally increased across Karamoja despite the returns from charcoal (UGX 11,000 - 30,000) and firewood sales (UGX 2,000 – 11,000) not changing much save for Karenga where firewood sales were increasing every month.

Brewing was the most lucrative business in Karamoja between July and September fluctuating between UGX 2,000 and 55,000. Like other sources of income, the returns from brewing did not exhibit clear trends during the period of investigation.

All food prices were unstable from July to September. Bean prices ranged from UGX 4,500 in Moroto (July) to less than 2,000 in Kaabong and Nabilatuk (September). In the three months, beans were the most expensive food commodity. The cheapest food were vegetables whose prices ranged between UGX 200 in Napak (July) to 2,500 in Kotido (September).

Though majority of households derive their source of income from casual labour, households involved in brewing earn more from that activity.



## Contingency Activation

Recommendation to activate emergency plan for Karamoja were district specific. Generally, all contingency actions were to address prolonged dry spell and erratic rainfall experienced in the period of June, July and August 2021 that led to wilting and scorching of crops in the gardens. Damage due to water stress caused tremendous losses like complete drying of crops in gardens in districts like Amudat. This was worsened by the prevalence of crop pests (fall army worms, leaf miners/hoppers and beetles) that seriously affected sorghum, maize and beans crops. Relatedly, crops planted late in the season (May and June 2021) experienced stunted growth and low yields.

The green harvest (sorghum, maize) was expected to replenish household food stock, ensure more food commodities supply in the market and reduce prices in the subsequent month in several districts of Karamoja. The pastures and water have remained abundant for livestock. However, there is need to take action on reported cases of livestock and crop pests and diseases (Anaplasmosis, East Coast Fever, mange, Helminths, fall armyworm, beetles) and livestock insecurity in the region.

There is a need to advise households to start rain water harvesting during the short rains so far experienced since mid-August.

## Early Action Messages

No	Sector	Early Warning Message
01	<b>Socio-Economic and Livelihoods</b>	<ul style="list-style-type: none"> <li>• Harvest at the right time, stock foods, minimize post-harvest losses, use the harvested foods sparingly while reserving for consumption in the period of scarcity.</li> <li>• Reporting cases of livestock raids, theft and potential insecurity to authorities for follow-up.</li> <li>• Have relevant documents to enable them to sell off livestock.</li> <li>• Use income obtained from casual labor, economic activities (sales of livestock, charcoal, brewing, retail business and others) to buy food stock and reserve for future consumption.</li> <li>• Harvest and dry green vegetables for futures consumption.</li> </ul>
02	<b>Livestock</b>	<ul style="list-style-type: none"> <li>• Cut and preserve pastures in form of hays and silages for use during season of scarcity.</li> <li>• Take initiatives to spray and deworm livestock routinely.</li> <li>• Keep hygiene in the kraals and routinely check for cases of foot rot.</li> <li>• Ensure correct use and application of acaricide in the market.</li> </ul>



		<ul style="list-style-type: none"> <li>• Routinely vaccinate livestock against notorious diseases.</li> <li>• Seek help from qualified and registered service providers’/extension workers in your Sub County.</li> <li>• Report any disease outbreaks or symptoms of previously unknown diseases to the extension officers.</li> <li>• In all district, there was advise to conduct routine livestock disease surveillance to avoid sudden outbreak.</li> <li>• Ensure restriction in the movements of animals to control spread of livestock diseases.</li> </ul>
03	<b>Crops</b>	<ul style="list-style-type: none"> <li>• Practice vegetable growing and kitchen gardening to provide alternative food supplements to HHs.</li> <li>• Practice soil and water conservation measures such as digging of water retention ditches, contour bans, mulching to preserve adequate soil moisture for vegetable growth.</li> <li>• The district production/agriculture departments are encouraged to stock up crop pesticides, fungicides to support crop farmers in time.</li> <li>• Liaise with agriculture extension workers and timely report prevalent cases of crop diseases and pests.</li> <li>• Guide farmers on recommended practices (timely planting, crop rotation, use of tolerant seed varieties and organic pesticides).</li> <li>• Plant fast maturing crops in the short rains</li> <li>• The districts to conduct routine crop pests and disease surveillance during crop growth stages and take timely action.</li> </ul>
04	<b>Water</b>	<ul style="list-style-type: none"> <li>• Communities are encouraged to use boreholes / taps as the main sources water of drinking water so as to avoid infections.</li> <li>• Protect and maintain proper hygiene and sanitation around water sources (boreholes, taps, springs/wells).</li> <li>• Make use of water harvesting facilities under roofs like tanks and drums to harvest rain water when and if it rains.</li> <li>• Report any borehole breakages to the right authorities as soon as possible so that they can be helped in time.</li> <li>• District water department is encouraged to carry boreholes/taps functionality assessments to help map out faulty ones for repairs.</li> </ul>
05	<b>Health</b>	<ul style="list-style-type: none"> <li>• Follow Covid-19 standard operating procedures (SOPS) issued by the Ministry of Health (social distancing, washing hands regularly with soap, wearing masks especially when in crowded places).</li> <li>• Go for COVID-19 vaccination when an opportunity presents itself.</li> <li>• Sleep under mosquito nets and clear bushes around HHs and homesteads.</li> </ul>