1.7 million people are facing emergency food insecurity in the country out of which 45,000 people are facing catastrophe or famine in Unity and Jonglei States.

The number of food insecure is expected to rise to 6.0 million during the peak of the lean season.

Fall armyworm crop destruction in Greater Central Equatoria and Greater Bahr El Gazal is likely to impact negatively on harvest prospects for the 2017/2018 agricultural season.

Hyper-inflation and high cost of living continue to be a major challenge with an overall inflation at 362 per cent and food inflation at 358 per cent per annum as at July 2017.

According to latest report from OCHA 2 million people are internally displaced in South Sudan, while 2 million live as refugees in foreign countries; an increase of 100,000 and 500,000 respectively since March 2017.

Constrained humanitarian access continues to pose challenges to humanitarian assistance, thus affecting some of the most vulnerable populations.
The Quarterly National Hazard Early Warning Bulletin is produced jointly by the Relief and Rehabilitation Commission (RRC), and the Ministry of Humanitarian Affairs and Disaster Management (MHADM) of the Government of the Republic of South Sudan, with support from the United Nations World Food Programme (WFP).

This update is informed by both secondary and primary data collected during the quarter under review. The data collected and analyzed is guided by agreed and monitored early warning indicators, including food security, population movement and displacements, human diseases and outbreaks, markets and prices, agriculture, and weather and climate outlook.

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The hotspot map highlights a very concerning interplay of humanitarian crises and hazards that impact negatively on lives and livelihood of the South Sudanese population.

South Sudan is currently facing the worst humanitarian situation in terms of hunger and malnutrition since its independence. Many counties in former Unity, Jonglei, Northern and Western Bahr el Ghazal and Greater Central Equatoria are in Phase 4 of the IPC classification, i.e. emergency food insecurity, while at the same time facing a critical situation in relation to malnutrition.

There is an alarming public health situation. Prevalence of malaria has intensified with the onset of the rainfall season; areas with high number of reported cases and deaths in the former Bahr el Ghazal, Unity, Jonglei, Malakal and the Greater Equatoria areas, including Juba. A combination of human diseases (measles, cholera, malaria), has according to the Ministry of Health, affected the well-being of communities and negatively impacted opportunities for agricultural labour. Such diseases intensify when coupled with poor nutritional status.

In Greater Equatoria, conflict has been the main factor affecting communities, and according to a recent survey by Food and Agriculture Organization (FAO) about 75% of the population in many parts of the Equatoria have fled their homes due to escalating conflict.

In addition, the infestation of the fall army worm has caused significant damage to crops, especially crops planted late in the cropping season.

Figure: Map showing geographic spread of humanitarian crises and hazards
Food security in South Sudan has further deteriorated due to armed conflict, economic crisis, and below-average harvests that were exhausted well before the ongoing lean season. **An estimated 6.0 million (50% of the population) people are expected to be severely food insecure in June-July 2017.** This is the greatest number of people ever to experience severe food insecurity (IPC Phases 3, 4 and 5) in South Sudan. Famine is no longer occurring in Leer and Mayendit counties, and further deterioration was prevented in Koch and Panyijiar counties of former Southern Unity State as a result of immediate and sustained multi-sector humanitarian assistance delivered to the affected population since March 2017. The early detection of the deterioration of the food security situation into famine followed by the subsequent large-scale immediate response averted further loss of life, thus underscoring the importance of evidence based analysis and response. However, in June-July 2017, approximately 45,000 people will still be facing Humanitarian Catastrophe in Leer, Koch, Mayendit in former Unity State and Ayod County in former Jonglei state. The latest field report suggest an alarming situation in Ayod.

Even counties such as Yei, Lainya, Morobo, Kajo-Keji and Magwi in Equatoria region normally known as the green belt, are facing crisis and emergency levels of acute food insecurity. The conflict in the country has been a contributing factor, that has driven people out of their homes, resulting and subsequently leading to severe effects on agricultural activities and markets.

The Western Upper Nile region is also experiencing high levels of insecurity, especially in Manyo, Panyikang, and Fashoda where large displacements have occurred due to the ongoing armed conflict. The former Northern Bahr el Ghazal State is facing severe food insecurity caused by high food prices and diminished household purchasing power. Western Bahr el Ghazal State saw a rise in armed conflict in the counties of Wau and Raga, the disruption of trade, displaced of populations, and livelihoods have been destroyed.

**Even though no county has been classified under famine (Phase 5) in this IPC update, the situation continues to be very critical.** In June-July 2017, in addition to approximately 45,000 people estimated to be facing Humanitarian Catastrophe, an estimated 1.7 million people are likely to be facing food security emergency (IPC Phase 4) and thus on the edge of famine.

IPC populations projected to be in phases 4 and 5 during June-July 2017 (source: NBS)

<table>
<thead>
<tr>
<th>State</th>
<th>Mid-2017 Population (NBS)</th>
<th>Phase 3 Crisis</th>
<th>Phase 4 Emergency</th>
<th>Phase 5 Catastrophe</th>
<th>% of Crisis, Emergency &amp; Humanitarian Catastrophe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Equatoria</td>
<td>1,609,344</td>
<td>465,000</td>
<td>145,000</td>
<td>-</td>
<td>37.9%</td>
</tr>
<tr>
<td>Eastern Equatoria</td>
<td>1,162,641</td>
<td>430,000</td>
<td>115,000</td>
<td>-</td>
<td>46.96%</td>
</tr>
<tr>
<td>Jonglei</td>
<td>1,822,086</td>
<td>795,000</td>
<td>335,000</td>
<td>20,000</td>
<td>63.1%</td>
</tr>
<tr>
<td>Lakes</td>
<td>1,113,716</td>
<td>330,000</td>
<td>100,000</td>
<td>-</td>
<td>38.6%</td>
</tr>
<tr>
<td>Northern Bahr el Ghazal</td>
<td>1,418,111</td>
<td>595,000</td>
<td>435,000</td>
<td>-</td>
<td>72.6%</td>
</tr>
<tr>
<td>Unity</td>
<td>1,124,916</td>
<td>455,000</td>
<td>155,000</td>
<td>25,000</td>
<td>54.7%</td>
</tr>
<tr>
<td>Upper Nile</td>
<td>1,254,313</td>
<td>430,000</td>
<td>180,000</td>
<td>-</td>
<td>48.6%</td>
</tr>
<tr>
<td>Warrap</td>
<td>1,448,812</td>
<td>510,000</td>
<td>140,000</td>
<td>-</td>
<td>44.9%</td>
</tr>
<tr>
<td>Western Bahr el Ghazal</td>
<td>545,565</td>
<td>245,000</td>
<td>60,000</td>
<td>-</td>
<td>55.9%</td>
</tr>
<tr>
<td>Western Equatoria</td>
<td>705,821</td>
<td>90,000</td>
<td>20,000</td>
<td>-</td>
<td>13.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,235,167</strong></td>
<td><strong>4,345,000</strong></td>
<td><strong>1,685,000</strong></td>
<td><strong>45,000</strong></td>
<td><strong>49.7%</strong></td>
</tr>
</tbody>
</table>
OUTLOOK: The number of food insecure people estimated to be 6 million at the height of the lean season in 2017, during July-August, with some improvement expected during harvest season of October to December.

Population Movement and Displacement

The ongoing conflict in South Sudan has resulted in huge civilian population displacements both internally and externally. Since the last issue published in March 2017, internal and external displacements have increased by 100,000 and 500,000 respectively. Total number of internally displacement populations has now reached 2 million and refugee numbers have reached 1.75 million according to UNOCHA estimates. Most recent displacements have been in former Central Equatoria due to conflict. It is estimated that about 75% of civilian population in Central Equatoria have been forced to flee their homes.
OUTLOOK: More displacements expected in Greater Equatoria, Greater Upper Nile and Parts of Bhar El-Ghazal due to escalating conflict

Human Disease and Outbreaks

Cholera and malaria are the main epidemics affecting South Sudan during the reporting period. Active cholera transmission continues to affect populations in Kapoeta East, Kapoeta South, Kapoeta North, Tonj East, Yirol East, Yirol West, Uror, Nyirol, Panyijiar, and Juba, although it is noted that recent reports from the Ministry of Health and partners in Kapoeta in the month of July show a decline of cholera cases in Kapoeta East, Kapoeta South, and Kapoeta North.

The cholera outbreak, now in its second year (since June 2016), has according to the Ministry of Health, reached a cumulative total of 19,742 cholera cases with 355 deaths recorded.
Malaria cases have risen, as expected, with the onset of the rainy season. According to the Ministry of Health, over 1 million cases of malaria have been recorded since the start of this rain season (May), with cumulative death toll of 2,434. Kwajok is most affected by malaria cases, followed by Rumbek, Juba and Bentui. According to a survey conducted by the Ministry of Health in July and August 2017 measles has affected the same locations, with cumulative cases reported of 1,030 and a death toll of 24.

Both malaria and cholera cases are reported to be higher in number than in the previous year, the Ministry of Health attributes this rise to a number of reasons including: environmental factors, people living in displacement settlements and constrained/reduced access to basic social services and mosquito nets.

**OUTLOOK:** Widespread cholera and malaria cases are expected to continue and further increase during and post rainy season.

**Agriculture and the Fall Armyworm**

Even though there was overall a prediction of normal to above normal rainfall (favourable for crops), the rainfall over most of the cropping areas started late with inadequate amounts in many places up to the end of May 2017. This caused late planting of crops and will likely result in harvesting delays. As per FAO’s Crop Watch report, despite the delayed planting and the dry spells experienced during the planting season, crops in most areas have recovered and performed well with the improved amount and distribution of rainfall in June and July. Counties most affected by prolonged dry spells include areas within Wau, Jur River, Kapoeta South and Kapoeta East and Gogrial West among others. Many farmers in these areas were forced to replant their fields.
The agricultural season is likely to be negatively affected by the Fall Army Worm (FAW), which has affected some countries in East Africa, like, Kenya, Uganda, and Ethiopia. In South Sudan, the first incident was reported in Magwi County (former Eastern Equatoria) in May 2017. FAW infestation has since then been reported in the former Eastern Equatoria, Central Equatoria, Western Equatoria, Northern Bahr el Gazal, Upper Nile and Jonglei, with maize being the most affected crop. The extent of damage on crops varies from area to area, with average to serious damage in Magwi, Juba, Pochalla and Budi counties. Particularly, late planted crops are reported to be more affected with FAW infestation.

Farming activity has been further adversely affected by the ongoing conflict. The majority of the population (around 75 percent) in the former Central Equatoria have left their living areas due to insecurity, particularly from Yei, Lainya, Morobo, Kajo Keji and some parts of Juba, resulting in a significant decrease in the amount of cultivated area during the current season.

Figure: Map showing army worm affected areas (source: FAO)

OUTLOOK: Overall, crop outlook for the 2017 is not positive and South Sudan is likely to face another year of significant cereal production deficit.
In June 2017, the countrywide year-on-year inflation rate stood at 362 percent and a food inflation rate at 358 percent. With no commensurate increase in income, such a hyper-inflation has led to serious deterioration in the households’ purchasing power. The retail price of the main staple, white sorghum, has increased seasonally in markets of Northern Bahr el Ghazal, Unity, Upper Nile and Lakes states. Similarly, white maize grain in Eastern Equatoria has increased seasonally. The prices of other food commodities such as maize flour and wheat flour have increased in most markets. However, in recent months, staple food commodities in the capital Juba showed stability and some drop in their prices. The observed price behavior in the capital was due to the introduction of subsidized food commodities by Ramciel, a company established by the Government to import selected food commodities from abroad and sell at subsidized prices to consumers in Juba town. The intervention by Ramciel has stabilized the prices of staple food commodities.

The exchange rate of SSP to US Dollar has shown some stability in recent months, but at elevated levels.

The exchange rate of US Dollar to SSP stood at SSP 153 and at SSP 117 in the parallel and official markets, respectively, compared to SSP 148 and SSP 116.46 respectively in the previous month. Despite some stability in the past few months, there has been a significant depreciation of the SSP in the past one year. During the last 12 months, the official exchange rate dropped from SSP 37.90 to SSP 116.92 (208 percent) per US Dollar, while the parallel exchange rate drifted from SSP 37.90 to SSP 153 (304 percent) per US Dollar.

Market access is significantly constrained by disruption in trade routes which directly affects commodity flows.

Recently trade routes disruptions have been witnessed in former Warrap State, Upper Nile and Central Equatoria due to escalating conflict in these areas. Apart from conflict related disruptions, seasonality has been a factor, especially during the period under review. Most of the roads are impassible. Significant disruption of trade routes in Renk and parts of Wau and Greater Central Equatoria would mean difficulties in getting commodities to the market, reduced availability of commodities in the market, and thus likely to push prices up and increase in number of people with limited market access.
OUTLOOK: *Outlook: Given the intensity of economic challenges, deterioration in purchasing power of households’ and seasonality of products, prices of commodities is very likely to remain high and hence further deterioration of purchasing power of market dependent households.*

**Weather and Climate**

The South Sudan Meteorological Department predicted sustained heavy rainfall during June to September rainfall season in South-west and North-western parts of South Sudan (Lainya, Kajo keji, Yei, Ezo, Nzara, Tombura, Yambio, Raja and parts of W. Bhar el Ghazal) while the rest of the country including; south-eastern, east, central and northern parts were predicted to receive near to above average rainfall during the same season.

Colder than average temperatures have also been predicted by the Meteorological Department over South Sudan during the period from June to September 2017. Though this season favors agriculture and pastures, some areas are likely to experience floods along the river Nile, river Bhar el Ghazal, and settlement in flood prone areas. Also some vital roads are likely to be impaired hindering accessibility for both human and goods while spread of waterborne diseases and increase in malaria prevalence is likely to worsen in the coming months.

Favorable rainfall and vegetable cover was recorded for most parts of Upper Nile State. Actual rainfall performance of this season versus five year average and general vegetation cover as measured by Normalized Difference Vegetation Index (NDVI) for the period of March to May 2017 indicates that a deteriorated vegetative condition was experienced predominantly in the south-eastern part of South Sudan.
The following recommendations have been made based on the analysis of the current situation and the outlook for the next quarter:

- Provide life-saving humanitarian assistance to populations affected by severe food insecurity and malnutrition, particularly those in emergency and crisis food security situations as per most recent IPC update of June 2017;
- Establish an effective system for timely detection and intervention for crop diseases such as Fall Army Worm (FAW) infestation;
- Government and armed opposition should continue to provide unfettered access to the humanitarian organizations to all parts of the country;
- Timely prepositioning of agriculture inputs (seeds and tools) is recommended to enable farmers to take advantage of favourable weather conditions in the South-Western and North-Eastern/Western parts of the country;
- Support establishment of on-farm physical structures to improve drainage of excess water in flood-prone areas and moisture retention structures in low rainfall areas;
- Ensure continuous crop monitoring in order to provide early warnings and timely intervention;
- Embrace good economic practices and diversify the economy in order to arrest hyperinflation; Establish and embrace people-centred integrated early warning systems;
- Mainstream disaster risk reduction strategies across economic sectors.

**OUTLOOK:** Flood conditions likely to affect settlements and agriculture along the bank of river Nile, Bhar el Ghazal, Jur and Yei river due to predicted above normal rainfall.

Figure: Consensus Rainfall Outlook for June, July, August, September 2017 showing areas with predicted normal (N) and above normal (A) rainfall. (Source: South Sudan Meteorological Department). Numbers inside map indicate probabilities (%) of above normal, normal or below normal rainfall in the area.