CRISIS IMPACTS ON HOUSEHOLDS IN UNITY STATE, SOUTH SUDAN, 2014-2015

INITIAL RESULTS OF A SURVEY

Office of the Deputy Humanitarian Coordinator for South Sudan

January 2016
Table of Contents

Summary ........................................................................................................................................... 5
Summary of Recommendations ........................................................................................................... 7
Context ............................................................................................................................................... 8
Methodology ..................................................................................................................................... 12
   The Sampling Approach .................................................................................................................. 13
   Limitations of the Survey .................................................................................................................. 13
Survey Findings ................................................................................................................................. 15
   The Households ............................................................................................................................... 15
   Dislocation .................................................................................................................................... 16
      Protection of Civilian Sites ............................................................................................................. 17
      The Bentiu POC ............................................................................................................................ 18
Deaths and Other Losses .................................................................................................................... 19
   Gendered Mortality .......................................................................................................................... 20
   Calculating Crude Death Rates ........................................................................................................ 21
   Mortality ....................................................................................................................................... 21
   Summarizing the Crisis Impacts ...................................................................................................... 23
Conclusions ....................................................................................................................................... 25
   More Analysis Needed .................................................................................................................... 26
Summary of Recommendations ........................................................................................................ 27
Annex 1. Survey Instrument ............................................................................................................. 29
Annex 2. IPC Update, October 2015 ................................................................................................ 30
Table of Figures

Figure 1. Shocks in Unity State and PoC Population ................................................................. 10
Figure 2. Reconstituting Goat Skins with Bones ................................................................. 10
Figure 3. Nutrition Situation Map, September 2015 .............................................................. 11
Figure 4. Survey Underway in the Swamps .......................................................................... 13
Figure 5. List of Possible Shocks to Households .................................................................. 15
Figure 6. HH Experiences with Dislocation, 2,150 HH ......................................................... 16
Figure 7. Number of Shocks per HH and Use of POC, 2,150 HHs ........................................... 18
Figure 8. Causes of Reduction in HH Size, Arrivals to Bentiu PoC, 499 HH ..................... 18
Figure 9. Age and Sex of HH Members, 2014 to 2015, Bentiu PoC, 499 HH ...................... 19
Figure 10. Persons Abducted, Separated and Unknown, by Gender and Age, 2,150 HH .... 20
Figure 11. Distribution of Mortality by Gender, 2,150 HHs .................................................. 20
Figure 12. Distribution of Mortality by Age, 2,150 HHs .......................................................... 21
Figure 13. Estimated Mortality by Cause .............................................................................. 22
Figure 14. Crude Death Rates, 2,150 HHs ............................................................................ 22
Figure 15. Summary of Crisis Impacts on 24 Communities in Unity State ....................... 23
Figure 16. Rank Order of Crisis Impact on Males, Females and Children Aged Five Years and Younger, 2,150 HHs ................................................................. 24
Figure 17. Comparison of actual and expected gender and age distribution of those sent and those arriving to the Bentiu PoC ........................................................................ 25

Acronyms

ARCRSS Agreement on the Resolution of the Conflict in the Republic Of South Sudan
A/CDR Adjusted Crude Death Rate
CDR Crude Death Rate
DHC Deputy Humanitarian Coordinator
FAO Food and Agriculture Organization
GAM Global Acute Malnutrition
HH Household
IASC Inter-Agency Standing Committee
IDP Internally Displaced Person
IPC Integrated Food Security Phase Classification
MT Metric Ton
NFI Non Food Item
OCHA Office for the Coordination of Humanitarian Affairs
POC United Nations Protection of Civilian Site
SAM Severe Acute Malnutrition
SPLA Sudan People’s Liberation Army
SPLA-IO Sudan People’s Liberation Army in Opposition
UN United Nations
UNMISS United Nations Mission in South Sudan
WASH Water, Sanitation and Hygiene
WFP World Food Programme
Summary

Analysis of the impacts of crises is important for ensuring that humanitarian action is principled, targeted and effective, and that protection is afforded based on specific vulnerabilities. Documenting the impact of war is also important for recovery processes, including accountability, reconciliation and healing. However, due to the combination of violent conflict and disruptions to humanitarian operations, there has been insufficient information about a range shocks on households (HHs) in some parts of South Sudan.

To contribute to the growing body of evidence about the impacts of the crisis, in November and December 2015, a survey of 2,150 HHs explored the impacts of shocks in Unity State, South Sudan. The communities surveyed were located in villages, swamps, forests and floating islands in five counties, as well as the United Nations Protection of Civilian Site (POC) in Bentiu, Unity State. The survey was undertaken in both Government- and opposition-controlled areas. Many communities were remote and insecure. The most extreme sites required 24-hour journeys by canoe or walking to reach.

The survey was undertaken when there was no access for humanitarian operations in many of the survey areas. As with any survey conducted in remote, difficult and high risk areas, compromises were made that could affect the both the reliability and validity of the findings. The limitations of the survey approach, including sources of possible bias, are noted in the methodology section of this report.

The survey was managed by the Office of the Deputy Humanitarian Coordinator for South Sudan with support from partners.  

- The sustained combination of violence, population displacement, asset losses and restrictions on access by humanitarians and peacekeepers has had grave implications. At the end of the 2014 rainy season, the communities surveyed had an estimated total population of 263,864 (µ± 2,025). This approximates one-fourth of the population of Unity State. One year later, the populations had fallen sharply, to an estimated 207,041 (µ± 2,016). The roughly 26,200 households experienced an estimated total loss of 80,500 people while also absorbing an additional estimated 16,000 people that needed shelter: relatives, non-relatives and children separated from their families. These shocks were only partially offset by the normal life course of births (µ=9,030, µ± 219) and marriages (µ=1,804, µ± 96).

- Eighty-six per cent of 2,150 HHs in the survey experienced at least one significant shock over the course of the year. HHs fragmented as a result of shocks as well as coping strategies intended to spread risk across multiple geographies. Over the course of the year, households became 20% smaller, with higher proportions of both children under five years old and females alike. Sending individuals to the POC was the leading cause of reduction in HH size.

- The HHs in the survey using the POC for protection of some members of the HH experienced, on average, three times more shocks than HHs that did not send anyone to the POC. These sending

---

1 Sue Lautze, PhD, Deputy Humanitarian Coordinator, United Nations South Sudan, Lautze@UN.org. Appreciation is extended to the Food and Agriculture Organization (FAO), the Food Security and Livelihood Cluster (FSL), International Organization for Migration (IOM), the World Food Programme (WFP) and others who, for reasons of confidentiality, cannot be named. Appreciation is also extended to colleagues who read and commented on earlier drafts of this report.
HHs also had death rates that were, on average, 1.5 times higher than HHs that did not send anyone to a POC. The analysis suggests that the POC serves as one of several “late” coping resources for the survival and protection of highly vulnerable members of HHs, including young women, mothers and children.

- There were an estimated 10,553 deaths (µ± 472) over the course of the year including an estimated 7,165 deaths from violence (µ± 277) and 829 deaths from drowning (µ± 69). Even though some sources of mortality were underreported in the survey, the estimated Crude Death Rate exceeded the emergency threshold of 1 death/10,000 people/day.

- Most shocks had different effects depending upon age and gender. There was an increase of female headed households. Males suffered the most number of deaths overall, especially violent deaths. Females were more likely than males to be abducted. Most child-headed households were led by girls. Girls aged five or younger were the most likely to drown. It appears that some of the children aged five and under sent to the POCs may not have survived the journey.

- By the end of 2015, the population of the Bentiu POC neared 140,000 people drawn from a wide area. The contributions by humanitarians and peacekeepers in saving the lives of these highly individuals in this POC (and other POCs elsewhere in South Sudan) are to be commended. As the survey documented, there were dramatic consequences for those who could not find safe refuge in Unity State. For example, given the analysis of mortality, especially violent death, and the gendered nature of recruitment, it is surmised that the men and boys who elected to travel to the POC perhaps did so because they chose not to be a soldier, rebel, criminal or corpse.

- The estimated crisis impacts on HHs in Unity State are summarized in the table below.

<table>
<thead>
<tr>
<th>Estimated Total Exits (People)</th>
<th>µ</th>
<th>µ±</th>
<th>Estimated Total Additions (People)</th>
<th>µ</th>
<th>µ±</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To POC</td>
<td>40,129</td>
<td>1,216</td>
<td>1. Births</td>
<td>9,030</td>
<td>219</td>
</tr>
<tr>
<td>2. Left Behind at Homestead</td>
<td>14,977</td>
<td>629</td>
<td>2. Hosting Relatives</td>
<td>8,957</td>
<td>463</td>
</tr>
<tr>
<td>3. Violent Deaths</td>
<td>7,165</td>
<td>277</td>
<td>3. Children (any age) needing reunification with their families</td>
<td>4,155</td>
<td>273</td>
</tr>
<tr>
<td>4. Sent To Other (Non POC) Areas</td>
<td>6,056</td>
<td>360</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Recruited to a Fighting Force</td>
<td>5,094</td>
<td>190</td>
<td>4. Hosting Non Relatives</td>
<td>2,925</td>
<td>247</td>
</tr>
<tr>
<td>6. Deaths - Other causes</td>
<td>2,559</td>
<td>125</td>
<td>5. Marriages</td>
<td>1,804</td>
<td>96</td>
</tr>
<tr>
<td>7. Divorced</td>
<td>1,353</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. People 'Lost' while Fleeing</td>
<td>1,243</td>
<td>114</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Abducted Persons</td>
<td>890</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Deaths – Drowning</td>
<td>829</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other Unknown</td>
<td>207</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80,501</strong></td>
<td><strong>1,546</strong></td>
<td><strong>26,870</strong></td>
<td><strong>728</strong></td>
<td></td>
</tr>
</tbody>
</table>

- The findings are shocking. The frequent and often protracted disruption of humanitarian action in parts of Unity State for key periods in 2015 meant that people, sharply affected by violent conflict and living in extremis, could not be adequately supported in times of exceptional needs.

- Extraordinary levels of humanitarian assistance in these – and other – areas of South Sudan are urgently required. Given the depth of losses and dislocation at the household level, humanitarian assistance and protection will be needed at scale for the duration of 2016 and
Crisis Impacts on Households in Unity State

beyond. It will take time, money, stability and a favourable enabling environment – one free of hindrance — to (re-)establish full operational capacities and for the requisite services and supplies to reach these highly vulnerable communities. The focus of efforts needs to encompass not only saving lives and addressing the psycho-social consequences of extensive suffering but also recovering livelihoods.

• Further studies need to be conducted as a matter of priority, especially to estimate excess mortality, document the composition of surviving HHs and analyse the changing nature and sequencing of coping strategies as HHs became increasingly stressed. The findings in this report reflect initial analysis. Further review of the survey data continues.

Summary of Recommendations

1. The Government of South Sudan, donor nations, the Office for the Coordination of Humanitarian Affairs’ (OCHA) Central Emergency Response Fund and all people of good will should robustly support humanitarian operations in South Sudan by providing resources for all humanitarian partners, including those in the 2016 the Humanitarian Response Plan for South Sudan, valued at USD 1.3 billion.

2. The Government of South Sudan, other authorities and all groups that have taken up arms are urged to facilitate the unhindered work of humanitarians, including ensuring that all roads and rivers are safe for the transport of goods and staff, removing authorized and unauthorized “taxation” points on road and river networks, eliminating bureaucratic impediments to rapid humanitarian action (notably the proliferation of administrative units associated with the increase from 10 to 28 states), desisting from interference in the advocacy work by humanitarians, etc.

3. Specialists working in the health field should, with utmost haste, conduct mortality surveys in crisis-affected areas of South Sudan in order to more accurately estimate Crude Death Rates.

4. Whilst capitalizing on the dry season for increased deliveries of humanitarian supplies by road, humanitarians also should increase all available means of transportation, including fixed and rotary wing aircraft, to rapidly expand the provision of humanitarian assistance and protection in Unity State. Humanitarian action must be implemented at scale for the duration of 2016.

5. Authorities, traditional leaders, faith-based groups and others are encouraged to work to reduce sources of trauma, fear, suffering and mistrust among communities. Notwithstanding the welcome but still nascent peace process in South Sudan, humanitarians and peacekeepers alike should further their efforts to ensure that all those who need protection are supported, including in the POCs as well as in people’s home areas. Conditions in the POCs should be improved until they approximate minimum humanitarian standards.

6. Recognizing that the responsibility for protection of civilians lies primarily with the Government, all parties to the conflict should ensure the rights of all civilians in line with International Humanitarian Law and end grave violations against children.
7. The Integrated Food Security Phase Classification (IPC), including the IPC Emergency Review Committee, should (re-)consider all available quantitative and qualitative evidence in areas with HHs currently classified as IPC 5 “Catastrophic Food Insecurity”.

**Context**

Following the December 2013 eruption of violence in Juba, South Sudan, the conflict quickly spread northwards to Greater Upper Nile (Unity State, Upper Nile State and Jonglei State). There was extensive violence in Unity State in 2014 and humanitarian operations were frequently suspended due to a combination of insecurity and access constraints. The fighting displaced people from their homes, destroyed villages and disrupted livelihoods. In early 2014, the IPC\(^2\) warned of a risk of famine in South Sudan.

By the end of the 2014 rainy season (October – November), the Government’s South Sudan People’s Liberation Army (SPLA) and opposition fighters (SPLA-IO) each controlled distinct (and largely uncontested) territories in Unity State. Humanitarian operations were scaled up and humanitarians declared that famine had been averted. A primary source of vulnerability at that point was the impact of the rains; the Acting Governor stated “the burning issue is the floods.”\(^3\) The subsequent months from late 2014 to early 2015 saw periods of violence, but it was concentrated in the northern parts of the state: Mayom, Rubkona and Bentiu.

By October 2014, humanitarians considered southern and central Unity State calm enough to plan for a series of dry season operational hubs. However, in March 2015, the situation changed dramatically. The Unity State Government announced a military plan aimed at bringing the entire state under Government control. There was a significant escalation of violence affecting central and southern Unity State in the months that followed as a result of attacks and counter attacks between Government and opposition forces. Conflict deaths included the direct effects of violence and, as people took to the swamps for refuge, drowning.

Following attacks on 12-13 May 2015 in Nhialdiu, its surrounding villages and a WFP food distribution site, a UN mission reported “the town deserted with half the town and market destroyed.” Significant fighting was reported in Leer and Mayendit. On 27 May 2015, OCHA reported: \(^4\)

> A UN mission to Koch found few civilians left. They were told that almost all villages between Boaw and Mirmir were affected...The health care facility looted. The education materials destroyed. The humanitarian compounds were looted and damaged.

In early June 2015, there was fighting in Dablual, Rubkuai, Leer and Takair (among other areas). In some areas, vulnerable populations (out of concern that humanitarian assistance would draw attacks) requested that food assistance deliveries be stayed until the situation stabilized.\(^5\) In late June, a UN mission to Guit observed that there were no standing/unburned *tukuls* (grass thatched

---

\(^2\) The IPC is a set of standardized tools that aims at providing a ‘common currency’ for classifying the severity and magnitude of food insecurity. See www.ipcinfo.org

\(^3\) Author’s notes, visit to Bentiu, Rubkona and the Bentiu POC, 10 October 2014.

\(^4\) OCHA daily update, 27 May 2015.

\(^5\) Author’s note, HCT meeting 1 June 2015
huts) between Bentiu and Guit.⁶ In these and other violent clashes, significant livestock raiding caused many communities to lose all cattle, sheep and goats, an important source of nutrition from blood, meat and milk products, as well as cash income. Due to looting and attacks, most markets collapsed and basic commodities were unavailable or, if goods were available, they were exorbitantly expensive.

There was a dramatic decrease in access to humanitarian assistance and protection in these critical months. The Protection Cluster estimated that access restrictions prevented the delivery of assistance to over 300,000 people in Unity State in May and June 2015.⁷ Nutrition partners estimated that fighting in Unity State disrupted 72% and 63% of Outpatient Therapeutic Programme and Targeted Supplementary Feeding Programme sites, respectively, between April and June 2015. Due to service disruptions, a total of 6,780 Severe Acute Malnutrition (SAM) cases and 18,116 Moderate Acute Malnutrition (MAM) cases that were enrolled in selective feeding programs were lost to follow up during this period.

Arguing for a continuation of the Inter-Agency Standing Committee (IASC) Level 3 designation for South Sudan, the Humanitarian Coordinator, noted:⁸

> From the beginning of April to mid-June, as fighting escalated in Unity State, close to 12,000 MT of nutrition supplies, 6,450 MT of NFIs...37.5 MT of seeds and livelihood inputs, and 12 MT of WASH supplies were lost or looted, USD 467,000 worth of medical supplies were burned, and an estimated USD 753,000 in operational assets, including 10 warehouses and 3 Rubb Halls, were destroyed or looted.

The violence had a profound impact on civilians. The Protection Cluster estimated that at least 1,000 civilians were killed, 1,300 women and girls were raped, and 1,600 women and children were abducted in Leer, Mayendit and Koch counties between April and September. Thousands of civilians fled into swamps to escape the violence; some reported the attackers followed people into the swamps, where more people lost their lives.⁹

Clashes continued through the rainy season, even after the signing of the Agreement on the Resolution of the Conflict in the Republic of South Sudan (ARCRSS) in August 2015. The attempts by humanitarians to re-establish presence in Leer in late September ended dramatically in violence in early October. Significant violence in Mayendit and Koch persisted. The increasing stress in Unity State was reflected in the rising numbers of people who sought the protection of the UN in Bentiu (Figure 1). After increasing slowly over the course of one year since April 2014, the size of the population in the POC surged from March 2015 until the end of the year.

---

⁶ OCHA daily update, 22 June 2015
⁷ Protection Cluster, Protection Trends South Sudan No. 5.
⁸ OCHA. Review of the IASC Level 3 Response by the South Sudan HCT: Recommendation & Analysis, August 2015.
Crisis Impacts on Households in Unity State

The escalation of the conflict in Unity State coincided with the beginning of the crop cycle. Farmers were unable to prepare land and sow seeds on time, leading to a diminished “green harvest” at the end of the 2015 rainy season. This was compounded by poor seasonal rains, after which only some households, e.g., in parts of Leer County, were able to sow fields with reserve seed stocks. However, renewed conflict and displacement resulted in total loss of these re-planted crops. In Koch, Guit, Rubkona and parts of Mayendit, the majority of the households did not cultivate at all.

Typical sources of food and income such as livestock sales, crop sales, kinship ties, sales of charcoal and grasses were no longer possible for HHs due to displacement and destruction of livelihoods. Water lily, fish and limited quantities of food assistance increasingly became the sole sources of food, food that adults often prioritized for children. People walked for days to access food assistance in the Bentiu POC. Others set out for Panyijiar, a dangerous journey using canoes that took up to two weeks from parts of southern Unity State.

The protracted nature of severe food insecurity prompted significant changes in coping strategies. As conditions became desperate, people reported extracting what they could from the environment to survive. According to sources in deep field locations in Unity State in late 2015, coping strategies among the most severely food insecure households included:

- Eating papyrus roots and lalob leaves (after sources of water lilies are low or exhausted)
- Eating dried goat skins (boiled with bones, Figure 2)
- Eating inner sections of palm tree trunks
- Eating wild rice (difficult to find, difficult to thresh)
- Selling or trading household items for food (e.g., sleeping mats)
- Killing teams of oxen (where existent) for food
- Not celebrating cultural events, holidays or weddings

Figure 1. Shocks in Unity State and PoC Population

![Figure 1. Shocks in Unity State and PoC Population](image)

October IPC report states: 40,000 people could be living on the brink of food insecurity in southern Unity. Due to lack of access, reporting should not be more specific. After further consideration of the situation, December IPC report states: “Given the double emergency level and nutrition statistics, tens of thousands of people at risk.”

Figure 2. Reconstituting Goat Skins with Bones

![Figure 2. Reconstituting Goat Skins with Bones](image)

Crisis Impacts on Households in Unity State

- Not paying dowry (bride prices are to be paid in the future)
- Eating poor quality/least preferred types of dried fish (stockpiled from the rainy season)
- Migrating for food
- No longer gathering under trees to socialize (men)
- The elderly no longer talking/have a “quietness”
- Not calling in debts
- Pressuring children to forage for food

Alarming high malnutrition rates reflected the seriousness of the situation. Humanitarians – including technical data teams to assess food insecurity, nutrition, health or mortality - could not access the most conflict-affected areas.\(^\text{11}\) However, nutrition surveys among populations in areas of relative refuge, such as in Panyijar County in May 2015 and the Bentiu PoC site in August 2015, found Global Acute Malnutrition (GAM) prevalence rates of 24.2\% and 34.1\%, respectively. Data from the Bentiu PoC showed children from newly arrived HHs were significantly more likely to suffer from acute malnutrition than children who had been in the POC for longer periods. The prevalence of GAM was 47.2\% among children from households who had arrived in the POC during the previous three months compared to 29.3\% GAM for children whose families had been in the POC for more than three months.\(^\text{12}\) The nutrition situation was “very critical” in most of Unity State (Figure 3).

Figure 3. Nutrition Situation Map, September 2015

The food security situation for a majority of households in Unity State had been classified as IPC Phases 3 or 4 since May 2014, with associated poor food consumption, failing livelihood systems,

\(^{11}\) Between December 2013 and December 2014, 43 humanitarians were killed in multiple locations in South Sudan, including in Unity State. Although there was an urgent need for technical assessment missions in Unity State, humanitarian access was denied for extended periods. Where access was granted, the HC advised against sending IPC verification teams to some areas because of the risks to these teams that included staff not already based in communities in Unity State.

\(^{12}\) Weight-for-height z-scores. Confidence intervals do not overlap.
high malnutrition and elevated mortality rates. As multiple stressors came together, the IPC issued its starkest warning about the risk of famine in October 2015. For the first time in the history of the IPC in South Sudan, some HHs in Leer, Guit, Koch and Mayendit Counties in Unity State were classified in Phase 5 “catastrophic” food insecurity. Further, the IPC warned of a “concrete risk of famine” in the period October – December if humanitarian access and assistance was not provided in key areas. Writing in October 2015, the IPC concluded:

“Currently, 3.1 million are in Crisis (IPC Phase 3) and 830,000 in Emergency (IPC Phase 4), and of extreme concern are 30,000 people estimated to be Catastrophe (IPC Phase 5) requiring urgent humanitarian assistance...Famine is not declared at this time in areas highly affected by conflict due to limited evidence available. There is a concrete risk of famine occurring between October and December 2015 if urgent humanitarian access and assistance is not provided in the most affected areas...The worst affected areas are 4 counties in the areas highly influenced by conflict in Unity State (Leer, Guit, Koch and Mayendit Counties).”

According to the IPC, famine was not declared “due to limited evidence available”. As described above, there was information to describe that other markers of famine – double the emergency threshold for malnutrition rates and livelihood collapse – were observed. The IPC’s statement about “limited evidence available” referred to a lack of mortality data. What data on mortality that was available was disconcerting.

Against this background, and in light of continued restrictions on humanitarian access in October and November in key parts of Unity State, a survey was organized to provide an initial indication of the crisis impacts on HHs, including experiences of mortality and other shocks. The survey was managed by the Office of the Deputy Humanitarian Coordinator with support from partners. The cost of the survey was contributed in kind by partners.

Methodology

From 4 November to 10 December 2015, enumerators interviewed 2,150 HHs from 24 communities in Guit, Koch, Leer, Mayendit and Panyijar Counties in Unity State, as well as newly arrived HHs at the Bentiu POC. The survey was timed to coincide with the end of the rainy season. Using a basic instrument, enumerators captured changes in HH demographics over an approximate one-year period. HHs recalled the numbers of and reasons for people joining and leaving the HH from the period “the end of the rainy season in 2014 to the end of this rainy season (2015)”. The age and sex of heads of HHs at the beginning and end of the survey period were enumerated, but

See Annex 2 for the full text.


Malnutrition rates in these communities have been elevated historically as a result of the combined underlying drivers of malnutrition: health, food and caring practices. The crisis led to further sharp deterioration of malnutrition. Evidence of death rates from the surveys included from Panyijar (CDR 2.56, U5CR 2.69), Bentiu POC (CDR 1.29, U5CR .17), and southern Mayendit (CDR 2.78, U5CR .71).

Sue Lautze, PhD, DHC, UN South Sudan, Lautze@UN.org. Appreciation is extended to the Food and Agriculture Organization (FAO), Food Security and Livelihood Cluster (FSL), International Organization for Migration (IOM), World Food Programme (WFP) and many others.

A household was defined as “those who eat together”.

The survey instrument is found in Annex 1.
other data was collected on the basis of males and females “aged five years and younger” and “aged six years and older.”

At the time of the survey, humanitarian operations remained suspended in many of the areas enumerated. However, a number of qualified South Sudanese remained in situ. Some with established presence in the communities surveyed served as enumerators. These enumerators were supported in the field by supervisors or, where that was not possible, remotely from Juba. All enumerators were provided with training on the survey instrument, either in person or remotely.

Training consisted of an introduction to the survey, sampling methodology and sample household exercises. Some (but not all) field supervisors were able to accompany enumerators to survey sites to monitor their work and address concerns as they arose.

Data were entered into Excel and exported to SPSS. Data analysis was conducted using a combination of SPSS and Excel. The results of the analysis were validated with the participating organizations on 8 January 2016.

### The Sampling Approach

Between 4 November and 10 December 2015, a random sample of 2,150 HHs (with an estimated midyear population of 19,397 people) was surveyed in 24 different communities, including new arrivals to the Bentiu POC. Aside from the Bentiu POC site, enumerators were located in relatively small communities, populated by people who had fled to swamps, forests and floating islands to escape violence. Many communities were remote and at times insecure. The most extreme sites required a 24-hour journey by canoe, walking, or a combination of both to reach (see figure 4).

Enumerators were tasked with randomly selecting a minimum of 20% of the population in each community to be surveyed. These communities, comprised of an estimated 26,200 HHs, had a combined estimated population of 207,040 (µ± 2,016) people at the time of the survey. The sample of 2,150 HHs is large enough to be considered representative of the 24 communities surveyed. A review of the selection processes used by each enumerator indicates that the HHs were selected with an adequate degree of randomness. Combined with the sample size, the data are analysed with a 95% confidence interval.

### Limitations of the Survey

As with any survey undertaken in remote, difficult and high risk areas, compromises were made that could affect the both the reliability and validity of the findings. This statement bears repeating: the

---

19 An initial instrument that included more detailed breakdown of ages was field tested with 404 HH in Leer and Mayendit. It was concluded that this was overly complicated for use in the prevailing field conditions. The data from these HHs is not included in this report.

20 For example, Voice Over Internet or satellite phone.

21 Of the 2,150 HHs enumerated, a total of 499 HHs were drawn from all of the HHs that arrived at the Bentiu POC between 6 November and 3 December 2015. The Bentiu POC arrivals in this time frame constitute the 24th “community”. 
survey was conducted under exceptionally challenging circumstances and there are important limitations to consider as a result, including:  

- The methodology of having HHs recall the period between rainy seasons suffers from the same potential bias as with all long-recall surveys.
- The “end of the rainy season” is subjective and may vary slightly based on location. The period between the two rainy seasons only roughly approximates one year.
- The survey included sensitive questions on the shocks experienced by HHs. Enumerators reported that people were reluctant to discuss mortality, especially among children aged five years and younger. Information on deaths included in this report should be treated as an underestimation of mortality.
- There may have been HHs that had become extinct due to deaths from all causes. The results therefore reflect, to an unknown degree, “survivor bias”.
- The sample population is assumed to be statistically representative of the larger communities from which they were drawn. The sample was not designed to be representative of specific populations within the sample, such as women, HHs with members in the fighting forces, or those using or not using the POCs. Where analysis is conducted on sub-groups, it should not necessarily be assumed to be as representative as other data on the survey population as a whole but rather should be read only as descriptive statistics.
- All enumerators were provided standard instructions for sampling. Upon review of actual sampling processes, some deviation was observed. This was due to issues of access, security, time available, etc. No attempt has been made to weigh the data based on these deviations.
- The HHs selected at the Bentiu POC for inclusion in the survey were interviewed as they arrived, often after long and perilous journeys. It was the view of enumerators and other observers that these HHs were not always able to discuss the events of the past year; in particular, the range of shocks (deaths, people lost during fleeing) and the extent of recruitment into fighting forces by family members was felt to be underestimated. Similar feedback was provided by enumerators surveying populations that were in hiding elsewhere in Unity State.
- The survey did not include a specific question on people who left the HH as a result of marriage. Given the patrilineal societies in Unity State, this means that the number of women leaving their homes for marriages would not have been enumerated. Similarly, women (re-)joining their original homes as a result of divorce were not enumerated. This latter omission is more serious given the vulnerability of divorced women generally.
- The survey did not include a question on children abandoned, aside from asking about those who were lost during flight. Enumerators reported that, out of shame, HHs did not want to discuss numbers of children that had been abandoned deliberately (e.g., at health posts) in response to extreme pressure on the HHs.

---

22 Exact locations of survey sites have been withheld from the report for reasons of confidentiality.

23 Where services were available, such as the Bentiu POC, enumerators took note of obvious problems and advised respondents how to get assistance. In most areas, no services were available as a result of a lack of humanitarian access at the time of the survey. The field supervisors trained the enumerators to afford every HH the chance to not be interviewed. Information was not collected on the number of those who declined to be interviewed. A post-survey check was undertaken with the enumerators to gauge the actual sampling process used as well as any issues encountered. Enumerators explained, for example, “Respondents were randomly selected over xx days...The interval was around every xx HHs, but only those who accepted to be interviewed were selected.”
The survey question on “children currently in need of family reunification” did not specify if such children had come into the HH or had been lost to the HH in question. Further, the question of “family reunification” was left to the discretion of the HH (as opposed to a technical definition used in Family Tracing and Reunification programmes, for example).24

The survey was only conducted in areas that enumerators could access. Notwithstanding, the data is generally representative of the 24 communities surveyed. These communities are considered to be generally homogenously exposed to shocks and coping resources in the period under review.25

Survey Findings

The Households

Normal lifecycle events happened for some of the 2,150 HHs in the survey. A total of 741 children (evenly divided between girls and boys) were born to 620 HHs and 148 marriages were recorded in 146 HHs. However, these additions of 889 people in 2015 did not offset the losses and shocks over the course of the year, so the average HH size decreased.

The 2,150 HHs reported a total of 21,653 people in their combined HHs at the end of the 2014 rainy season. One year later, this figure had declined by 22%, to 16,990 people. Half of these losses (50%) were males over six years old; over one-third (37%) were females in the same age category. One in ten of those not in the HH at the end of the 2015 rainy season were children aged five and younger. As a result of the events over the course of the year, the surveyed HHs were, on average, 20% smaller, carrying a higher relative burden of children under five years old (29% in 2014, 34% in 2015) and were relatively more feminine (52% females in 2014, 54% females in 2015).26

Reflecting these dynamics, the number of female-headed HHs increased from 707 (33% of all HHs) to 925 (43% of all HHs), as did the number of HHs headed by

---

24 The question of “family reunification” was left to the discretion of the HH and could indicate temporary separation in which the primary caregiver intends to return quickly or prolonged separation in which the caregiver is unable to return to the child due to insecurity, losing contact, or other factors.

25 Whilst it is assumed that the communities are “generally homogenously exposed to shocks and coping resources in the period under review,” please note that the surveyed population over-represents smaller communities: two-thirds of the 2,150 enumerated HHs are drawn from communities with fewer than 1,000 HHs. The estimated populations of these smaller communities comprise only one-third of the estimated 26,200 HHs.

26 This finding is echoed in other reports. For example, a December 2015 Rapid Response Mechanism to Thonyor, Leer County, found an increase in the number of female headed households and girl mothers.
children under 18 years old, which rose from 23 HHs in 2014, to 59 HHs in 2015. By 2015, the majority of these child-headed HHs were led by girls (39 of 59 HHs). At the opposite end of the age spectrum, HHs led by adults aged 65 years and older declined from 158 HHs in 2014 to 139 HHs in 2015.

On average, there were 10 people per HH in 2014 and 8 people per HH in 2015. This overall average masks a range within the sampled population. Fifty-eight percent of HHs (1,253 HHs of 2,150 HHs) recorded an average decrease of nearly five people over the year, 19% of HHs (412 HHs of 2,150 HHs) recorded an increase of an average of three people, and the balance of HHs remained unchanged in net terms. A minority of HHs hosted other people fleeing conflict: 339 HHs took in nearly 1,000 people, about 75% of whom were relatives. About one-third of those hosted were children aged five and under.

Overall, few people were untouched by tragedy. Only 309 HHs (14% of 2,150 HHs) recorded no direct shocks (Figure 5) at the HH level such as death, displacement, hosting others who had fled violence elsewhere (including children in need of family reunification), abductions or similar events.

A total of 418 people reported joining an armed group over the course of the year, including three females. These recruits were drawn from a total of 319 HHs, at least 222 (70% of all HHs with recruits) of which had sent at least one person also to a POC during the year.

Dislocation
A range of questions captured different experiences of displacement over the year. Each HH was asked to self-identify as a Host HH or HH of internally displaced persons (IDPs). They were also asked if they had changed location at any point of the year (to capture displacement and return between the end of the 2014 and 2015 rainy seasons). The survey gathered information on the number, gender and age group of people who left the HH to travel to a POC and whether others had been sent elsewhere (i.e., “non-POC” areas) for safety or for other reasons. The survey documented those who were “lost” in the course of fleeing during violence. Additional queries explored if additions to the HH were a result of hosting relatives or non-relatives or if there were children that needed reunification with their families.

The HHs fragmented as a result of both the crisis as well as coping strategies. Only one in five HHs (432 HHs of 2,150 HHs) reported no experiences associated with dislocation, including having HH members displaced or hosting those who had been displaced from elsewhere (Figure 6). The

---

27 The term “host” pertains to HH that, at the time of the survey, were residing in their home areas.
difficulties associated with dislocation directly affected the remaining 80% of HHs. One-half of all HHs identified as IDP HHs (1,055 HHs of 2,150 HHs), the majority of which were headed by women (58%, 610 HHs of 1,022 HHs). This should be compared to host households, 29% of which were headed by women.

The survey considered the problems of children separated from their families as well as abductions of HH members of any age. Out of 2,150 HHs, some 178 HHs, about 8% of all HHs, reported at the time of the survey that they were either hosting or had lost a total of 341 children (54% males, 46% females) in need of reunification with their families. A total of 73 people from 64 different HHs were reported as abducted; the vast majority (85%) were females aged six years and older.

Fifty percent of HHs (1,134 HH of 2,150 HH) reported sending at least one person away from the HH, either to a POC, another area or a combination of these options. About 11% of HHs sent members only to other, non-POC areas or sent members to both the POC and non-POC areas (8.65% and 2.84%, respectively). The gender and age composition differed between the groups that were sent to the POC and those that were sent elsewhere. Individuals and groups sent to non-POC sites were more likely to be older and to include more males than those sent to the POCs.

**Protection of Civilian Sites**

One-half of all HHs (1,073 HH, 50% of total HH) sent at least one person to a POC site over the course of the year, for a combined total of 5,308 people. On average, the HHs that sent at least one person the POC experienced more than three times the number of shocks than those HHs that did not send anyone to the POC (average of 1.44 shock/HH not using POCs vs. 4.59 shocks/HH using POCs).

Fifty-eight percent of HHs that did not send anyone to the POC (626 HHs of a total 1,077 HHs) recorded either none or only 1 shock over the course of the year. By contrast, 93% of the HHs that sent at least one person to the POC (of a total 1,073 HHs) experienced three or more shocks, including nearly 40% percent that had experienced between five and twelve shocks between rainy seasons (Figure 7).

---

28 Note that this question was asked only about children separated at the time of the survey.
29 It was not possible to ascertain from the survey if these non-POC sites were areas located in South Sudan or were further afield, e.g., refugee camps in a neighboring country.
30 Aside from 2,150 people in the 499 HH enumerated upon arrival at the Bentiu POC, it was not possible to ascertain how many of these people successfully arrived at the POC.
31 The sample was not designed to compare POC and non-POC HHs. These findings pertain only to the 2,150 HH in the survey, i.e., they are descriptive statistics and cannot necessarily be extrapolated to the larger population of 26,200 HHs.
The Bentiu POC

The 2,150 HH surveyed included 499 newly arrived HH at the Bentiu POC from the period of 4 November to 3 December 2015. The majority of these HHs (461 HHs/499 HHs) reported above average declines in their HH size over the year, from originally having eight people at the end of 2014 to having an average of four per HH upon arrival to the POC in late 2015. Some 372 of 499 HH (75%) reported that they had left behind at least one person in their original homesteads, suggesting that only some of the members of the original HH had been sent to the POC.

The declines in HH size among the new arrivals enumerated at the Bentiu POC were explained, in order of importance, as leaving HH members behind, earlier displacement to the POC, displacement to other areas and death of HH members (Figure 8). Some arrivals came to the POC to join their relatives; 123 HHs already had members in the POC. There were three recruitments of HH members into an armed force.

Thirty-seven of the 499 HHs surveyed represented single person HHs, including fourteen single females and 22 single males. Single children traveling alone included boys aged 12 (1), 14 (3) and 15 (2) and girls aged 14 (1) and 18 (1). The oldest adults included a 68, 70 and 80 year old man and a 64 year old woman, all traveling independently. The survey population enumerated twelve men of fighting age.
(19-40 years old) also traveling alone to the POC.³³

Among the HHs that arrived to the POC, there had been significant shifts in the gendered composition of the HH over the course of the year as a result of the fragmentation of HHs. Eighty two percent of HHs (407 of 499 HHs) that came to the POC were female-headed, nearly double the percentage of female-headed households at the end of the 2014 rainy season when 212 of these 499 HHs were headed by women and girls. There were exceptions. While one in five HHs (95 of 499 HHs) that arrived at the POC consisted entirely of females, one in ten HHs that arrived (50 of 499) consisted entirely of males.

For the HHs arriving at the POC, there were a total of 146 deaths, three-quarters of which were due to violence. A total of 91 HHs (18% of 499) reported at least one death from any cause (range 1-6/HH) including 71 HHs (14% of 599 HHs) that reported at least one death from violence (range 1-6/HH). One hundred of the 146 total deaths resulted from violence against males over the age of six. Twelve females (including 2 girls aged five or younger) also died in violence. Two males drowned.

Figure 9 reports the changes in HHs that arrived at the Bentiu POC by age group and sex. The reductions in the number of males of all ages is notable (-23% boys aged five and younger, -69% of males aged six and older). Men and boys staying behind in home areas was the primary reason why comparatively fewer males arrived in the POC, accounting for 60% of the reduction. Over one-quarter of males had been displaced prior to the arrival of the family at the Bentiu POC, including earlier migrations to the POC. Deaths from all causes explained 12% of the decline. Eleven percent of males had fled to other areas instead of the POC.

Figure 9. Age and Sex of HH Members, 2014 to 2015, Bentiu POC, 499 HH

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All children aged 5 and below</td>
<td>833</td>
<td>681</td>
<td>-152</td>
</tr>
<tr>
<td>Boys</td>
<td>441</td>
<td>341</td>
<td>-100</td>
</tr>
<tr>
<td>Girls</td>
<td>392</td>
<td>340</td>
<td>-52</td>
</tr>
<tr>
<td>All aged 6 and above</td>
<td>2,994</td>
<td>1,334</td>
<td>-1,660</td>
</tr>
<tr>
<td>Males</td>
<td>1,425</td>
<td>442</td>
<td>-983</td>
</tr>
<tr>
<td>Females</td>
<td>1,569</td>
<td>892</td>
<td>-677</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3,827</td>
<td>2,015</td>
<td>-1,812</td>
</tr>
</tbody>
</table>

Deaths and Other Losses

Enumerators sat with 2,150 HHs to discuss the number and causes of deaths and other losses in the period between the ends of the two rainy seasons. Deaths were categorized as deaths due to violent assault, drownings (often as a result of violence) and deaths from natural or other causes.³⁴ This was difficult work, for both the people interviewed as well as the enumerators. As one enumerator explained:

³³ The ages of these men are known because they were enumerated as heads of HH.

³⁴ Death from natural and other causes includes sickness, disease, old age, hunger, snakes bites, etc.
Crisis Impacts on Households in Unity State

When people are asked what change(s) have happened in their household, people pause and start crying before explaining the story...People also do not want to tell and having anger for (are angry about) what had happened to their beloved one(s).

According to the enumerators, many people felt that those that had been “lost” while fleeing from attacks had been killed, but they could not confirm these as deaths on the survey. They similarly were unsure as to what had happened to those who had been abducted as well as to those HH members of whom they had no information about their fates at the time of the survey. None of the 192 people who fell into these categories are included in the death rates reported in the next section, but their numbers are reflected in Figure 10. Some 63% of this total is female (120 females of 192 total, a factor to bear in mind when reading the section on gendered mortality.) Some uncertainty surrounded the fate of those who had taken up arms over the course of the year, most of whom were males.

Figure 10. Persons Abducted, Separated and Unknown, by Gender and Age, 2,150 HH

<table>
<thead>
<tr>
<th></th>
<th>Boys Aged 5 and Younger</th>
<th>Girls Aged 5 and Younger</th>
<th>Males Aged 6 and Older</th>
<th>Females Aged 6 and Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abducted</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>62</td>
</tr>
<tr>
<td>Separated While Fleeing Attacks</td>
<td>24</td>
<td>14</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>Fate Unknown</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>20</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>

Gendered Mortality

The patterns of mortality were gendered. Figures 11 and 12 demonstrate the different drivers of mortality by gender and age, respectively. The bulk of male deaths are due to violence, while female deaths are more equally distributed between violence and natural causes. Nearly 10% of violent deaths (57 of 588 violent deaths) were of children aged 5 years and younger. Females and children aged five and younger were more at risk of drowning than males or those aged six years and older.

Figure 11. Distribution of Mortality by Gender, 2,150 HHs
Calculating Crude Death Rates

The survey was designed to enable an estimation of death rates. As is standard practice in emergency settings, the Crude Death Rate (CDR), expressed as deaths per 10,000 people per day, was calculated as:

\[
CDR = \left( \frac{\left( \frac{\text{Total Deaths}}{\text{Mid Year Population}} \right) \times 10,000 \text{ People}}{365 \text{ Days}} \right)
\]

The denominator reflects the one year period of the survey. As such, the formula assumes that mortality is distributed evenly across 365 days in the year. The validity of this assumption was examined. The team reviewed the timeline of violence in Unity State and concluded that mortality due to violence and drowning was concentrated in the period that followed the dramatic increase in violence from April 2015. An Adjusted CDR (A/CDR) was used that (conservatively) assumed an even distribution of mortality from natural and other causes and a (more likely) concentration of mortality due to all forms of violence (assaults and drowning) in the final seven months of the survey period (approximately 210 days). Field supervisors opined that 90%-95% of the mortality from these causes occurred in this period. A more conservative estimate of 85% was used in an A/CDR. The A/CDR was calculated as:

\[
\text{Adjusted CDR} = \left( \frac{\left( \frac{\text{Total Deaths from Natural Causes}}{12 \text{ months}} \times 7 \text{ months} + (85\% \times \text{Total Violent Deaths and Drownings}) \right)}{\text{Mid Year Population}} \right) \times 10,000 \text{ People} / 210 \text{ days}
\]

Mortality

Across 2,150 HHs, with an average mid-point population of 19,321 people, there were a total of 866 deaths recorded from all causes (natural and other causes, violence and drowning). This represents a CDR of 1.23 with a 95% confidence interval of 1.19-1.27. The Adjusted CDR is 1.68 with a 95% confidence interval of 1.64-1.72. These values exceed the emergency threshold (CDR >1/10,000/day).

---

35 As noted, the recall period used in the survey is a rough (rather than exact) approximation of one year.
36 The mid-year population was calculated as the average difference between the 2014 and 2015 populations.
37 Given that the mid-year population is estimated as the average of the population at the start and the end of the survey period, this likely represents a slightly inflated population at the mid-point of the seven months considered in the A/CDR. This would slightly underestimate the adjusted crude death rate.
Based on the survey findings, in the 24 communities (an estimated 26,200 HHs), there was an estimated total of 10,553 deaths (µ± 472) over the course of the year, including 7,165 violent deaths (µ± 554) and 829 deaths from drowning (µ± 139) (Figure 13).

Figure 13 reports a range CDR and A/CDR for the survey population of 2,150 HHs. Because of the design of the sampling approach, only the total deaths and deaths by cause can be estimated for the full survey population (above). All other rates reported in Figure 14 should be read as descriptive only of the 2,150 HHs.

**Figure 14. Crude Death Rates, 2,150 HHs**

<table>
<thead>
<tr>
<th>Community</th>
<th>Population 2014</th>
<th>Population 2015</th>
<th>All Deaths</th>
<th>Adjusted Deaths</th>
<th>CDR</th>
<th>Adjusted CDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Survey</td>
<td>21,653</td>
<td>16,990</td>
<td>866</td>
<td>680</td>
<td>1.23</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.19-1.27</td>
<td>1.64-1.72</td>
</tr>
<tr>
<td>All Males</td>
<td>10,485</td>
<td>7,896</td>
<td>521</td>
<td>480</td>
<td>1.55</td>
<td>2.49</td>
</tr>
<tr>
<td>All Females</td>
<td>11,168</td>
<td>9,244</td>
<td>270</td>
<td>200</td>
<td>0.72</td>
<td>0.93</td>
</tr>
<tr>
<td>All Hosts</td>
<td>11,124</td>
<td>9,305</td>
<td>391</td>
<td>306</td>
<td>1.05</td>
<td>1.43</td>
</tr>
<tr>
<td>All IDPs</td>
<td>10,282</td>
<td>7,448</td>
<td>474</td>
<td>374</td>
<td>1.46</td>
<td>2.01</td>
</tr>
<tr>
<td>All aged 6 years and older</td>
<td>15,354</td>
<td>10,927</td>
<td>677</td>
<td>540</td>
<td>1.41</td>
<td>1.96</td>
</tr>
<tr>
<td>HHS w/recruits</td>
<td>4,945</td>
<td>3,073</td>
<td>263</td>
<td>201</td>
<td>1.80</td>
<td>2.39</td>
</tr>
<tr>
<td>HHS w/out recruits</td>
<td>16,708</td>
<td>13,917</td>
<td>603</td>
<td>479</td>
<td>1.08</td>
<td>1.49</td>
</tr>
<tr>
<td>Protection of Civilians</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bentiu POC Arrivals</td>
<td>3,827</td>
<td>2,015</td>
<td>146</td>
<td>109</td>
<td>1.37</td>
<td>1.88</td>
</tr>
<tr>
<td>All HHs using POC</td>
<td>11,942</td>
<td>6,919</td>
<td>511</td>
<td>401</td>
<td>1.48</td>
<td>2.02</td>
</tr>
<tr>
<td>All not using POC</td>
<td>9,711</td>
<td>10,071</td>
<td>355</td>
<td>279</td>
<td>0.98</td>
<td>1.34</td>
</tr>
<tr>
<td>Guit</td>
<td>8,156</td>
<td>5,506</td>
<td>258</td>
<td>193</td>
<td>1.03</td>
<td>1.35</td>
</tr>
<tr>
<td>Host</td>
<td>6,302</td>
<td>4,331</td>
<td>141</td>
<td>105</td>
<td>0.73</td>
<td>0.94</td>
</tr>
<tr>
<td>IDP</td>
<td>1,671</td>
<td>1,009</td>
<td>117</td>
<td>87</td>
<td>2.39</td>
<td>3.09</td>
</tr>
<tr>
<td>Koch</td>
<td>373</td>
<td>343</td>
<td>28</td>
<td>22</td>
<td>2.14</td>
<td>2.93</td>
</tr>
<tr>
<td>Leer</td>
<td>4,494</td>
<td>3,524</td>
<td>232</td>
<td>189</td>
<td>1.59</td>
<td>2.24</td>
</tr>
<tr>
<td>Mayendit</td>
<td>2,060</td>
<td>1,924</td>
<td>43</td>
<td>31</td>
<td>0.59</td>
<td>0.75</td>
</tr>
<tr>
<td>Panyijar</td>
<td>3,968</td>
<td>4,284</td>
<td>192</td>
<td>157</td>
<td>1.27</td>
<td>1.81</td>
</tr>
<tr>
<td>Host</td>
<td>2,701</td>
<td>3,178</td>
<td>113</td>
<td>90</td>
<td>1.05</td>
<td>1.47</td>
</tr>
<tr>
<td>IDP</td>
<td>1,243</td>
<td>1,074</td>
<td>79</td>
<td>66</td>
<td>1.87</td>
<td>2.72</td>
</tr>
</tbody>
</table>
As per Table 14, above, mortality rates in excess of twice the emergency threshold (CDR >2/10,000/day) were surpassed for some populations in the surveys (highlighted in red). CDRs above these thresholds were found in Koch (CDR 2.14) and IDPs in the surveyed communities in Guit (CDR 2.39). In other communities, the data found mortality above the emergency threshold (highlighted in yellow) in almost every population in the survey, with rates ranging from 1.05 – 1.87.

Based on the justified assumption that 85% of deaths due to violence and drowning were concentrated in the last seven months of the survey period, the A/CDR increases for most population, including the overall survey population (from 1.23 to 1.68). Based on this assumption, the death rates that were already more than twice the threshold for an emergency increase (i.e., from 2.39 CDR to 3.09 A/CDR among IDPs in Guit and from 2.14 CDR to 2.93 A/CDR for the surveyed communities in Koch). Additional mortality rates in excess of 2/10,000/day are surpassed, including for all males across 2,150 HHs (A/CDR 2.49), for all IDPs in the study (A/CDR 2.01), for HHs that have at least one person recruited to a fighting force (A/CDR 2.39) and the surveyed population in Leer (A/CDR 2.24) and IDPs in Panyijar (A/CDR 2.72). The emergency threshold is surpassed for all HHs not sending anyone to a POC, while the mortality rates increase for those communities already in excess of the emergency threshold, with A/CDRs ranging from 1.34 to 1.96.

### Summarizing the Crisis Impacts

At the end of the 2014 rainy season, the combined populations of the 24 communities where the survey was undertaken communities totalled an estimated 263,864 (µ± 2,025). One year later, this had fallen sharply, to 207,041 (µ± 2,016). The roughly 26,200 HHs experienced an estimated total loss of 80,500 people while also absorbing an additional estimated 16,000 people that needed shelter: relatives and non-relatives alike, including children separated from their families. These shocks were only partially offset by the normal life course of births (µ=9,030, µ± 219) and marriages (µ=1,804, µ± 96).

In May 2014, the IPC estimated that the population of Unity State was 993,768. The estimated population of the 24 communities in this survey is estimated to represent about one-quarter of the total population of Unity State. Because of the limitations of the sampling methodology, the study findings cannot be extrapolated to the whole of Unity State. However, it is useful to bear this is mind when considering Figure 15, the summary of crisis impacts on the 24 communities.

**Figure 15. Summary of Crisis Impacts on 24 Communities in Unity State**

<table>
<thead>
<tr>
<th>Estimated Total Exits (People)</th>
<th>µ</th>
<th>µ±</th>
<th>Estimated Total Additions (People)</th>
<th>µ</th>
<th>µ±</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To POC</td>
<td>40,129</td>
<td>1,216</td>
<td>1. Births</td>
<td>9,030</td>
<td>219</td>
</tr>
<tr>
<td>2. Left Behind at Homestead</td>
<td>14,977</td>
<td>629</td>
<td>2. Hosting Relatives</td>
<td>8,957</td>
<td>463</td>
</tr>
<tr>
<td>3. Violent Deaths</td>
<td>7,165</td>
<td>277</td>
<td>3. Children (any age) needing reunification with their families</td>
<td>4,155</td>
<td>273</td>
</tr>
<tr>
<td>4. Sent To Other (Non POC) Areas</td>
<td>6,056</td>
<td>360</td>
<td>4. Hosting Non Relatives</td>
<td>2,925</td>
<td>247</td>
</tr>
<tr>
<td>5. Recruited to a Fighting Force</td>
<td>5,094</td>
<td>190</td>
<td>5. Marriages</td>
<td>1,804</td>
<td>96</td>
</tr>
<tr>
<td>6. Deaths - Other causes</td>
<td>2,559</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Divorced</td>
<td>1,353</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. People 'Lost' while Fleeing</td>
<td>1,243</td>
<td>114</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Abducted Persons</td>
<td>890</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Deaths – Drowning</td>
<td>829</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other Unknown</td>
<td>207</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80,501</strong></td>
<td><strong>1,546</strong></td>
<td></td>
<td><strong>26,870</strong></td>
<td><strong>728</strong></td>
</tr>
</tbody>
</table>
Figure 16 provides an overview of the top seven impacts of the crisis in terms of gender and age. For all groups, being sent to the POC was the most frequent impact. The splitting of HHs contributed the most impacts to children aged five and younger and females of all ages due to a combination of being sent to the POC, a relative’s household or another area, or being left behind at the HH’s original homestead. One way to read the impact on males is to note their proximity to violence: being left at the homestead, dying violently or taking up arms.

**Figure 16. Rank Order of Crisis Impact on Males, Females and Children Aged Five Years and Younger, 2,150 HHs**

<table>
<thead>
<tr>
<th>Males of All Ages</th>
<th>Females of All Ages</th>
<th>Children Five and Younger</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sent to the POC</td>
<td>1. Sent to the POC</td>
<td>1. Sent to the POC</td>
</tr>
<tr>
<td>2. Left at Homestead</td>
<td>2. Left at Homestead</td>
<td>2. Joined a Relative’s HH</td>
</tr>
<tr>
<td>3. Violent death, including drowning</td>
<td>3. Joined a Relative’s HH</td>
<td>3. Left at Homestead</td>
</tr>
<tr>
<td>4. Recruitment</td>
<td>4. Sent to Other Areas</td>
<td>4. Sent to Other Areas</td>
</tr>
<tr>
<td>5. Joined a Relative’s HH</td>
<td>5. Violent death, including drowning</td>
<td>5. Violent death, including drowning</td>
</tr>
<tr>
<td>6. Sent to Other Areas</td>
<td>6. Female child (any age) needing reunification</td>
<td>6. Joined a Non-Relative’s HH</td>
</tr>
<tr>
<td>7. Male child (any age) needing reunification</td>
<td>7. Joined a Non-Relative’s HH</td>
<td>7. Death - Other Causes</td>
</tr>
</tbody>
</table>

The importance of the POC as a coping resource for each group – males, females and children - deserves additional examination. An estimated 40,000 people (µ = 40,129, µ± 1,216) were sent to the POC from the communities over the course of one year. To this must be a total of 6,809 people that were registered by humanitarians as new arrivals to the POC between 7 November and 3 December (i.e., when the survey was ongoing among new arrivals). Combined, this accounts for nearly 47,000 people. This should be compared to the total 80,000 individuals that were actually registered as arrivals to the Bentiu POC from anywhere over a one year period. Figure 17 (next page) compares the gender and age breakdown of the actual arrivals at the Bentiu POC based on registration data between 1 November 2014 and 30 November 2015 with the expected gender and age distribution of those sent from the 24 communities based on the survey data.

The 80,000 arrivals to the POC in the period November 2014 to November 2015 came from across Unity State. It seems improbable that the communities in the survey, with a population approximately 27% of the total population of Unity State, contributed to approximately 60% of all arrivals (46,809 estimated arrivals from 24 communities of 80,000 total actual arrivals). This raises the question of what happened to people once households sent them to the POC. Did everyone arrive?

The difference between the proportion of children sent (µ 30.6%, µ± 0.1) and the actual proportion arriving (24.1%) is potentially unsettling. Alternatively, it could reflect the general problem of accurately determining the age of children in rural South Sudan, or it could suggest that other communities tended to send fewer children aged five years and younger to the POCs. The data is

---

38 These households are included in the estimated 26,200 households in all 24 communities because one of these 24 “communities” was all new arrivals to the POC between 6 November and 3 December 2015. This is the period when enumerators were systematically sampling every fifth household that arrived.
unclear. Further analysis on the question of who was sent and who arrived to POCs is needed, especially given the extraordinary rates of acute malnutrition registered among children arriving to the POC.

**Figure 17. Comparison of actual and expected gender and age distribution of those sent and those arriving to the Bentiu POC**

<table>
<thead>
<tr>
<th>Age and Gender</th>
<th>Bentiu POC Arrivals, 1 November 2014 and 30 November 2015</th>
<th>Proportion of Individuals Sent to POC (26,200 HHs in 24 Communities)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sent to the POC (µ)</td>
<td>Lower Limit</td>
</tr>
<tr>
<td>All aged 5 and Younger</td>
<td>24.1%</td>
<td>30.6%</td>
</tr>
<tr>
<td>Males Aged 6 and Older</td>
<td>31.8%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Females Aged 6 and Older</td>
<td>44.1%</td>
<td>38.8%</td>
</tr>
</tbody>
</table>

**Conclusions**

The sharply unfavourable climatic, political, social and economic environment of Unity State during the survey period directly affected almost every HH. People were not passive in the face of risk and vulnerability. HHs broke up in an effort to spread risks across geographic areas, including sending children in myriad directions: to the POC, to be with relatives, to stay at homesteads, etc. People turned to their relatives and friends for refuge. Many fled into swamps to survive, taking refuge on small floating islands. However, these coping strategies did not ensure survival for many thousands of people, as the analysis of mortality revealed.

The crisis impacts on HHs are shocking. The sustained disruption of humanitarian action in parts of Unity State for key periods in 2015 meant that people living in extremis could not be adequately supported in times of exceptional needs. Notwithstanding a welcome peace process in South Sudan, many of the types of crisis impacts documented in this analysis are likely to continue. At the time of writing, the dry season is underway, rendering it more difficult for people to access wild foods and fish—currently among the only foods available in areas of Unity State. Such suffering demands an exceptional effort in order to address the immediate, medium and long-term implications for the affected populations.

Due to a combination of conflict and access constraints, humanitarian operations started to resume in the affected areas only in December 2015, aided in part by the establishment of an UNMISS temporary operating base in Leer County. At the time of writing, many highly vulnerable people had yet to be reached. Given the depth of losses and dislocation at the HH level, humanitarian assistance and protection will need to be sustained at scale for at least the duration of 2016. It will take time, money, stability and a favourable enabling environment to (re-)establish full operational capacities and for the requisite services and supplies to reach these highly vulnerable communities, not only to save lives but also to recover livelihoods.

Meanwhile, the IPC continues to warn of the risk of famine for certain populations in Unity State. Recall also that it was not until mid-December 2015 that the situation stabilized enough for humanitarian assistance to restart, well after the October 2015 warnings issued by the IPC calling for immediate assistance to avert a “concrete risk of famine”. Given the analysis of the crisis impacts on
Crisis Impacts on Households in Unity State

HHs in Unity State presented in this report and other sources, the question should be considered if this risk became (or still is) a reality for some populations.

Famine declaration or not, HHs experienced extreme suffering. Shocks – death, dislocation, the burdens of hosting others who flee and abduction – prompted half of the HHs to send at least one person on the difficult and often dangerous journey to a POC. This survey suggests that HHs used the POC as a late coping strategy. Whilst “correlation does not equal causation,” it is worth noting the comparatively higher number of shocks experienced by HHs that also elected to send at least some of their number to the POC. Further, the mortality reported by all HHs in the survey sending anyone to the POC was 1.5 times greater than other HHs surveyed. It is unclear if all whom were sent to a POC successfully arrived.

By the end of 2015, the population of the Bentiu POC neared 140,000 people drawn from a wide area. The contributions by humanitarians and peacekeepers in saving the lives of these highly individuals in this POC (and other POCs elsewhere in South Sudan) are to be commended. As the survey documented, there were dramatic consequences for those who could not find safe refuge in Unity State.

More Analysis Needed
It is incumbent on humanitarians to collect and review evidence of vulnerability in order to ensure that humanitarian action is principled. The humanitarian principle of impartiality dictates that assistance and protection be extended on a prioritized basis to those who are most vulnerable. This analysis has sought to use gender analysis as a powerful tool for understanding vulnerability, albeit with unavoidable limitations on more specific age disaggregation.

All too often, however, gender analysis is reduced to counts of beneficiaries by sex or given a score as the “gender marker” in humanitarian projects. What is required is not these practices that “insert” gender into documents but rather a shift in humanitarian engagements that “asserts” the primacy of gender, age and other socially constructed identities as the drivers that ensure impartial humanitarian response.

It is standard practice in the humanitarian world to prioritize groups based on assumptions of vulnerability, such as young children at risk of malnutrition, pregnant and lactating women and the elderly. This survey has demonstrated that such assumptions are necessary but not sufficient in the context of Unity State. For example, given patterns of drowning, the vulnerability of young girls hiding in the swamps is of deep concern. Given the patterns of abductions, the vulnerability of women is disconcerting. Additional gender analysis is needed to look at the full range of gendered vulnerabilities, not just those that are expected. For example, HHs that had at least one member in a fighting force reported some of the highest mortality in the HHs surveyed. The survey found that some men, including those that travelled alone or in groups, turned to the POC for protection. Given the analysis of mortality, especially violent death, and the gendered nature of recruitment, it is surmised that the men and boys who elected to travel to the POC perhaps did so because they chose not to be a soldier, rebel, criminal or corpse.

Given the patrilineal societies of Unity State, a closer look at the fate of women who are divorced is needed. We posit that, given extensive cattle raiding, many of these HHs no longer possessed the cattle that women brought into the HHs at the time of marriage, making them potentially vulnerable to divorce (especially if they have not yet had children).
In order for a broader base of information and analysis to be developed, improvements are needed in the enabling environment for humanitarians in South Sudan so that humanitarian action is as evidence based as is maximally feasible. Analysis should estimate excess mortality, document the composition of surviving HHs and analyse the changing nature and sequencing of coping strategies as HHs became increasingly stressed. Two years into the crisis, it is problematic that basic information still has not been systematically generated regarding how many people have died in key areas as a result of conflict and its multiple implications. The issue of a lack of evidence regarding morbidity and mortality needs to be addressed by health partners as a matter of urgency.

This survey serves as an example of the type of information and analysis that can be conducted wherever there are willing and able personnel on the ground, even when humanitarian access is formally denied. The approach should cause institutions, agencies and others to reflect on the ways that data can be collected in dangerous and remote locations, such as characterized parts of Unity State during the survey period. The cost and effectiveness of relying on (supervised) networks of personnel in situ should be compared to the need for dedicated air assets, teams, and UN security clearances that are usually required for assessment missions, especially those involving international staff.

The issue of capacity in South Sudan is often cited as a challenge for data projects. However, aside from the analysis, training of the enumerators and technical backstopping (functions conducted by international staff) the survey was carried out by South Sudanese. The survey instrument was tested and adapted based on their feedback, their contextual knowledge and their access to local communities. This resulted in powerful data that might otherwise not have been captured. Future attention should be given as to how to empower South Sudanese, especially those locally based with their communities, to be more engaged in analytical field work.

Summary of Recommendations

1. The Government of South Sudan, donor nations, OCHA’s Central Emergency Response Fund and all people of good will should robustly support humanitarian operations in South Sudan by providing resources for all humanitarian partners, including those in the 2016 Humanitarian Response Plan for South Sudan, valued at USD 1.3 billion.

2. The Government of South Sudan, other authorities and all groups that have taken up arms are urged to facilitate the unhindered work of humanitarians, including ensuring that all roads and rivers are safe for the transport of goods and staff, removing authorized and unauthorized “taxation” points on road and river networks, eliminating bureaucratic impediments to rapid humanitarian action (notably the proliferation of administrative units associated with the increase from 10 to 28 states), desisting from interference in the advocacy work by humanitarians, etc.

3. Specialists working in the health field should, with utmost haste, conduct mortality surveys in crisis-affected areas of South Sudan in order to more accurately estimate Crude Death Rates.

---

39 Others have drawn this same conclusion for some time now. See, for example, AFP, “50,000 and not counting: South Sudan’s war dead”, 15 November 2014. http://reliefweb.int/report/south-sudan/50000-and-not-counting-south-sudans-war-dead.
4. Whilst capitalizing on the dry season for increased deliveries of humanitarian supplies by road, humanitarians also should increase all available means of transportation, including fixed and rotary wing aircraft, to rapidly expand the provision of humanitarian assistance and protection in Unity State. Humanitarian action must be implemented at scale for the duration of 2016.

5. Authorities, traditional leaders, faith-based groups and others are encouraged to work to reduce sources of trauma, fear, suffering and mistrust among communities. Notwithstanding the welcome but still nascent peace process in South Sudan, humanitarians and peacekeepers alike should further their efforts to ensure that all those who need protection are supported, including in the POCs as well as in people’s home areas. Conditions in the POCs should be improved until they approximate minimum humanitarian standards.

6. Recognizing that the responsibility for protection of civilians lies primarily with the Government, all parties to the conflict should ensure the rights of all civilians in line with International Humanitarian Law and end grave violations against children.

7. The IPC, including the IPC Emergency Review Committee, should (re-)consider all available quantitative and qualitative evidence in areas with HHs currently classified as IPC 5 “Catastrophic Food Insecurity”.

∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞
### Methodology

1. If you are staying with or in a community, survey 20 per cent of the households, or as many as possible if you have more time.
2. Try to capture a range of the types of households in the community, for example, female-, child- and male-headed, IDPs, host families, families that have stayed together, and families that have separated.
3. If you are on the move or passing through communities, collect data from as many households as you feel comfortable with or is feasibly possible.
4. If you are at a treatment center, try to include the survey in with the standard intake questions.
5. Collect data from household heads.
6. Before collecting the data, confirm that the household has not been asked these questions within the last month.
7. Do not take any unnecessary risks to obtain this data.

---

### Household Information

**End of Last Rainy Season (2014)**

<table>
<thead>
<tr>
<th>Head of Household</th>
<th>Age</th>
<th>Male or Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Members</td>
<td>Under 5 years old</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>6 years old and over</td>
<td>Male</td>
</tr>
</tbody>
</table>

**End of This Rainy Season (Now)**

<table>
<thead>
<tr>
<th>Head of Household</th>
<th>Age</th>
<th>Male or Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Members</td>
<td>Under 5 years old</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>6 years old and over</td>
<td>Male</td>
</tr>
</tbody>
</table>

Has the household changed location since last year? Yes or No

**Reasons for Household Change**

<table>
<thead>
<tr>
<th>Reason for decrease (insert number of people)</th>
<th>Under 5 years old</th>
<th>6 years old and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Moved to POC</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Moved to other areas</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Separated while fleeing</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Died - Natural causes</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Died - Violence</td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>Died - Drowning</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>Abducted</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Recruited to armed group</td>
<td>N/A</td>
<td>48</td>
</tr>
<tr>
<td>Divorce</td>
<td>N/A</td>
<td>50</td>
</tr>
<tr>
<td>Unknown</td>
<td>52</td>
<td>53</td>
</tr>
</tbody>
</table>

Note: Died of natural causes includes sickness, disease, old age, hunger, snake bites, etc.

---

**Reasons for increase (insert number of people)**

<table>
<thead>
<tr>
<th>Reasons for increase (insert number of people)</th>
<th>Under 5 years old</th>
<th>6 years old and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Birth</td>
<td>56</td>
<td>57</td>
</tr>
<tr>
<td>Marriage</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Relatives joining family</td>
<td>60</td>
<td>61</td>
</tr>
<tr>
<td>Others joining family</td>
<td>64</td>
<td>65</td>
</tr>
</tbody>
</table>

Are there any children in the household that have been separated from their parents?

Yes or No

How many?

Males: | Females:
Annex 2. IPC Update, October 2015

CALL FOR IMMEDIATE HUMANITARIAN ACTION TO PREVENT FAMINE IN SOUTH SUDAN

3.9 MILLION PEOPLE ARE IN NEED OF URGENT ACTION TO SAVE LIVELIHOODS AND LIVES AND TO PREVENT FAMINE

Based on the IPC Country Results

HOW MANY & WHEN

- Currently, 3.1 million are in Crisis (IPC Phase 3) and 810,000 in Emergency (IPC Phase 4) and of extreme concern are 36,000 people estimated to be Catastrophe (IPC Phase 5) requiring urgent humanitarian assistance.
- Famine is not declared at this time in areas highly affected by conflict due to limited evidence available. There is a concrete risk of Famine occurring between October and December 2015 if urgent humanitarian access and assistance is not provided in the most affected areas.

WHERE

- The worst affected areas are 4 counties in the area highly influenced by conflict in Unity State (Loser, Ceiit, Koch and Mayandit Counties).
- The other states of concern are the other two conflict-affected States of Jonglei and Upper Nile in the Greater Upper Nile.

WHO

- The most affected populations are the Internally Displaced Persons (IDPs) who are dispersed and the host communities affected by the on-going conflict.

WHY

- This complex emergency in South Sudan is caused by high underlying vulnerability and severe effects of the conflict and displacement compounded by limited humanitarian access resulting in loss of livelihoods, income, assets, inadequate food access, market disruption, high prices, and unsustainable coping.

According to the IPC GSU Real-time Quality Review (RTQR) Report:

RISK OF FAMINE

- The IPC GSU RTQR corroborated that available food security and nutrition evidence indicate a very critical situation that may escalate to famine conditions if humanitarian assistance does not reach the highly affected populations during the period of October to December 2015 in areas most affected by conflict in Unity.
- There is a great concern that famine may exist in the coming months but it may not be possible to validate it at that time due to lack of evidence as the result of limited access to the affected areas and populations.

Actions Needed

- Urgent humanitarian access and assistance to those 860,000 people classified in IPC Phase 4 and 5 to save their lives and livelihoods and to prevent escalation into famine.
- Urgent action required for the 3.1 million classified in Phase 3 Crisis to protect livelihoods, reduce food consumption gaps and reduce acute malnutrition.
- Vigilance is required in monitoring the evolving situation and updating the IPC Analysis (Oct → Dec).
- It is imperative that more data is available to support real-time updates, especially nutrition and mortality data.
- An IPC Global Emergency Review Committee (ERC) will be activated to support the SS IPC Technical Working Group real-time IPC update and the potential declaration of Famine.

The South Sudan IPC Process and next steps

- South Sudan IPC Country Analysis: The South Sudan IPC Technical Working Group (SS IPC TWG) led the IPC analysis and consultations involving more than 70 members from State and National Levels.
- IPC GSU Real Time Quality Review: IPC Global Support Unit (GSU) carried out a real-time external and independent review of the analysis findings for the worst affected areas of Unity State, in collaboration with the South Sudan IPC Technical Working Group.
- Final SS IPC TWG IPC Results: The results were validated by South Sudan IPC TWG and were officially endorsed by the Government of the Republic of South Sudan through a Cabinet Resolution. The IPC results are available on the IPC website at: http://www.fao.org/oss-data/detail/forum/update-map-detail/en/336447/

For more information Contact: IPC Global Support Unit Cindy.Holleman@fao.org

IPC Global Partners