

Constraints and Complexities of Information and Analysis in Humanitarian Emergencies

Evidence from South Sudan

A FEINSTEIN INTERNATIONAL CENTER BRIEF 

Daniel Maxwell, Peter Hailey, Jeeyon Janet Kim, Erin McCloskey, and Maria Wrabel

1. Introduction

Responding to the current crisis in South Sudan is one of the world's most challenging humanitarian operations. The country has been unstable since its independence from Sudan in 2011, with conflict—primarily between the Sudan People's Liberation Army (SPLA) and the Sudan People's Liberation Movement in Opposition (SPLA-IO)—driving insecurity. The conflict escalated in December 2013 and spiked again in July 2016. These increases led directly to displacement and a rapid deterioration in the food security, health, and nutritional status of the affected populations. In February 2017, the Government of the Republic of South Sudan (GRSS) declared a famine in two counties in Unity State, based on an analysis conducted by the Integrated Phase Classification Technical Working Group (IPC-TWG). The “2018 Humanitarian Needs Overview: South Sudan” estimates that almost 1.1 million children under five and 672,500 pregnant women suffer from acute malnutrition, with a July 2017 report showing eight out of nine states assessed with global acute malnutrition (GAM) rates above 15 percent, the emergency threshold (UNOCHA 2017).

1.1 Integrated Phase Classification Analysis in South Sudan

South Sudan uses the Integrated Phase Classification (IPC) analysis to determine the severity of food security and nutrition crises and to compare results across different geographic units of analysis—and

across dissimilar contexts to enable the impartial allocation of resources. IPC analysis relies on the current status of four main indicators: changes in livelihoods, the prevalence of food insecurity, the prevalence of malnutrition, and the crude mortality rate. The IPC was developed in Somalia in the early 2000s and is used in some 35 countries around the world. Since 2017, a team of researchers from the Feinstein International Center at Tufts University and the Centre for Humanitarian Change in Nairobi has been examining the IPC system to better understand the constraints—both technical and political—to the analysis of famines and extreme emergencies.

When the current food security crisis emerged in South Sudan following conflict and displacement beginning in December 2013, renewed attention was paid to the quality of data and analysis of the crisis. In 2014, as the crisis worsened, the General Support Unit (GSU) for IPC set up the Emergency Review Committee (ERC), to review data quality and the rigor of analysis in the event that Phase 5 (famine) might be an outcome of IPC analysis in South Sudan. See Figure 1 for the number of people in IPC Phases 3–5 in 2014–18.

1.2 Impacts of Conflict on Food Security

Figure 2 depicts the mean IPC phase classification at the county level from 2009–17 aggregated to the state level and the onset of violent conflict in the Greater Upper Nile region of the country. Figure 3

represents the same information for the Greater Equatoria region. In both cases, the onset of violent conflict triggered a rapid deterioration in general food security status across the region. Although the advent of violent conflict was more sporadic in Greater Bahr al Ghazal, the same trend was noted there as well.

2. Challenges and Constraints of Food Security Analysis in South Sudan

While progress has been made in improving the IPC process in South Sudan, several key constraints and challenges emerged from this study. This section details these constraints.

2.1 Missing or Poor-Quality Data

Critical data have frequently been missing or inconsistently available throughout the course of famine analysis in South Sudan. This includes a lack of up-to-date population estimates and displacement data; concerns over the quality and representativeness of nutrition data; and general exclusion of health, gender, WASH (water, sanitation, and hygiene), and protection data from the IPC process. Further, the sheer magnitude of the crisis and limited capacity inhibit data quality, and currently no formal protocols for validating and excluding low quality food security data are in place. Therefore, an ongoing challenge during analysis is dealing with poor-quality data.

A lack of mortality data has proven to be the most persistent concern. For example, in mid-2014 the TWG conducted an analysis—reviewed by the ERC—that seemed to hint that famine was occurring but did not have data to reach that conclusion: Mortality data were missing. The problem persisted. In January 2016, it emerged that the Office of the Deputy Humanitarian Coordinator (ODHC) had undertaken a mortality study on its own, without the participation (or even knowledge) of the IPC-TWG, the GSU or the ERC. It showed mortality to be well above the famine threshold, although the primary causes of death were violent conflict and drowning, not malnutrition and disease. This raised further

questions about which mortality causes should be considered as relevant in determining IPC phases.

2.2 Technical Capacity

Security and access constraints often prevent those with technical and logistical training from collecting data. The quality of the data collected by partners with minimal technical and logistical capacity is often questioned, as they are not necessarily taught to probe and verify responses. Also, those with the most experience have limited time to engage in the IPC analysis and decision-making process due to other responsibilities and few support staff. Important analytical choices are therefore left to less-experienced colleagues. Even if more training was offered for local and national partners, interviewees noted that training does not always compensate for lack of experience, and high turnover means that those with experience do not necessarily stay. Additional constraints for government staff include a lack of transportation and computers.

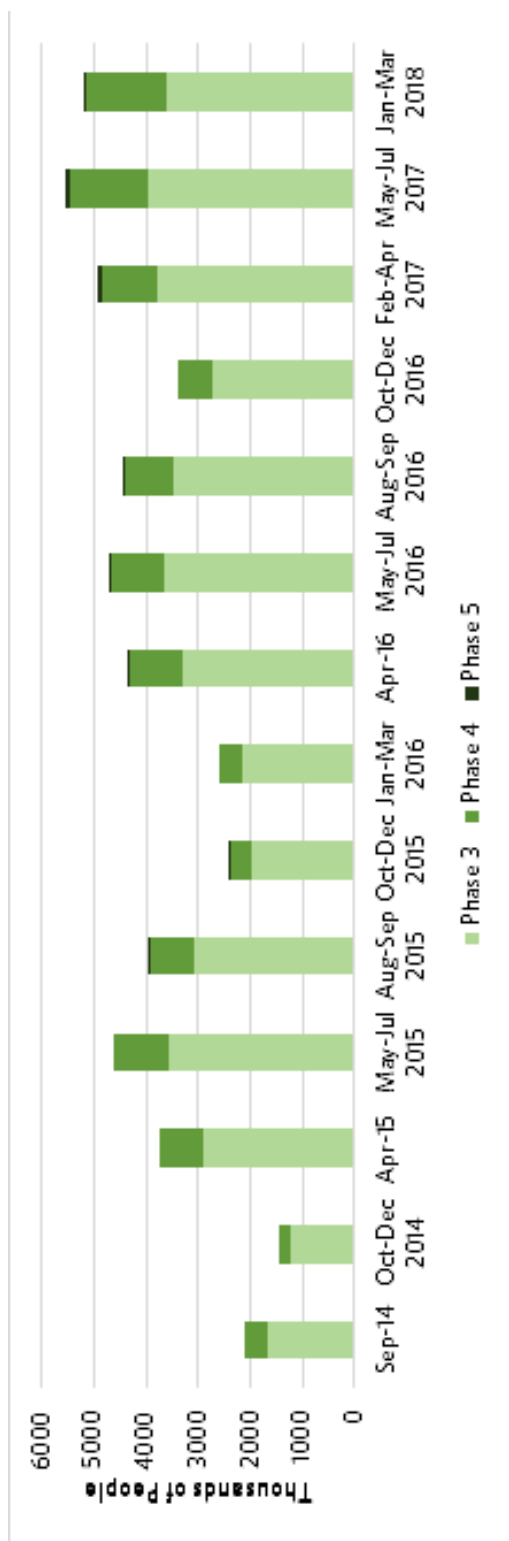
2.3 Data Collection and Analysis

Coordinating data collection to align in terms of timing and geographic coverage has presented a challenge to IPC determinations, particularly in 2014–16. Also, using administrative areas as the units of analysis misses the opportunity of using livelihood zones or zones of population movement in extreme circumstances. Relying on administrative boundaries to encompass widely variable populations or a population moving across administrative boundaries can be inappropriate.

2.4 Early Warning and “Hotspots”

Currently no in-country early warning system exists in South Sudan that can identify localized hotspots in a way that is timely for both response and the deployment of data collection assets to fully assess and understand the situation. Hotspots are often identified during the IPC analysis. The lack of early warning and weakness of current IPC projects has been identified as the weakest link in the food security analysis process. The Ministry of Humanitarian Affairs and Disaster Management set up an early warning system in 2017 that, though

Figure 1: Numbers of People in IPC Phases 3-5 (2014-18)



Figures
in
Thou-
sands

Phase 3	1,680	1,215	2,886	3,578	3,067	1,964	2,174	3,293	3,637	3,468	2,724	3,763	3,979	3,601
---------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

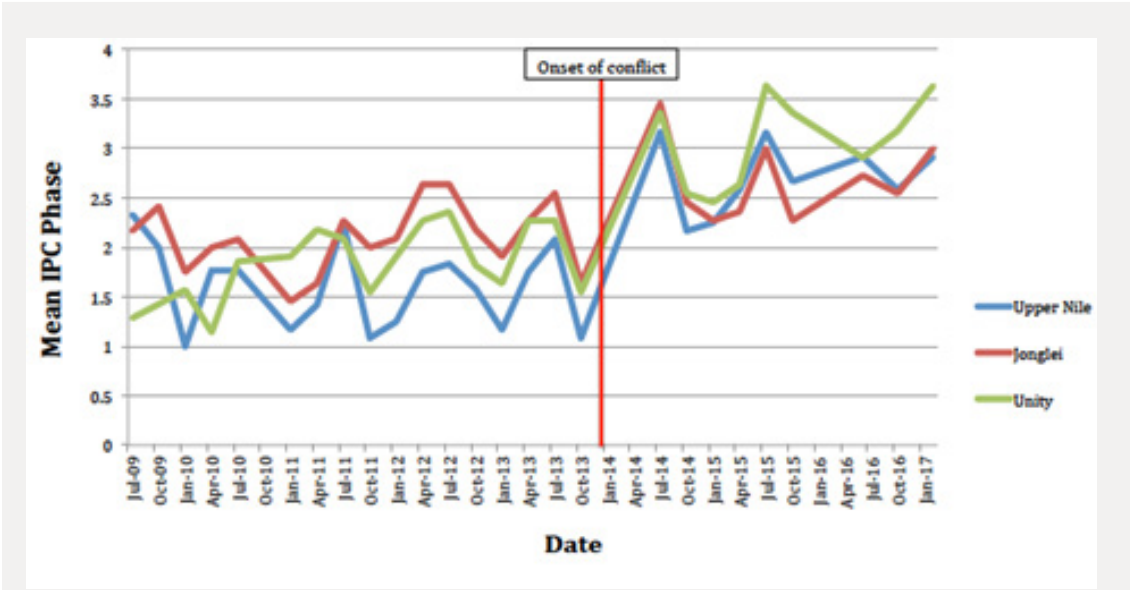
Phase 4	414	245	861	1,036	835	415	440	1,000	1,023	928	676	1,074	1,457	1,526
---------	-----	-----	-----	-------	-----	-----	-----	-------	-------	-----	-----	-------	-------	-------

Phase 5	0	0	0	0	27	41	0	5	20	29	0	102	89	19
---------	---	---	---	---	----	----	---	---	----	----	---	-----	----	----

Total Phases 3-5	2,094	1,460	3,747	4,614	3,929	2,420	2,614	4,298	4,680	4,425	3,400	4,939	5,525	5,146
------------------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

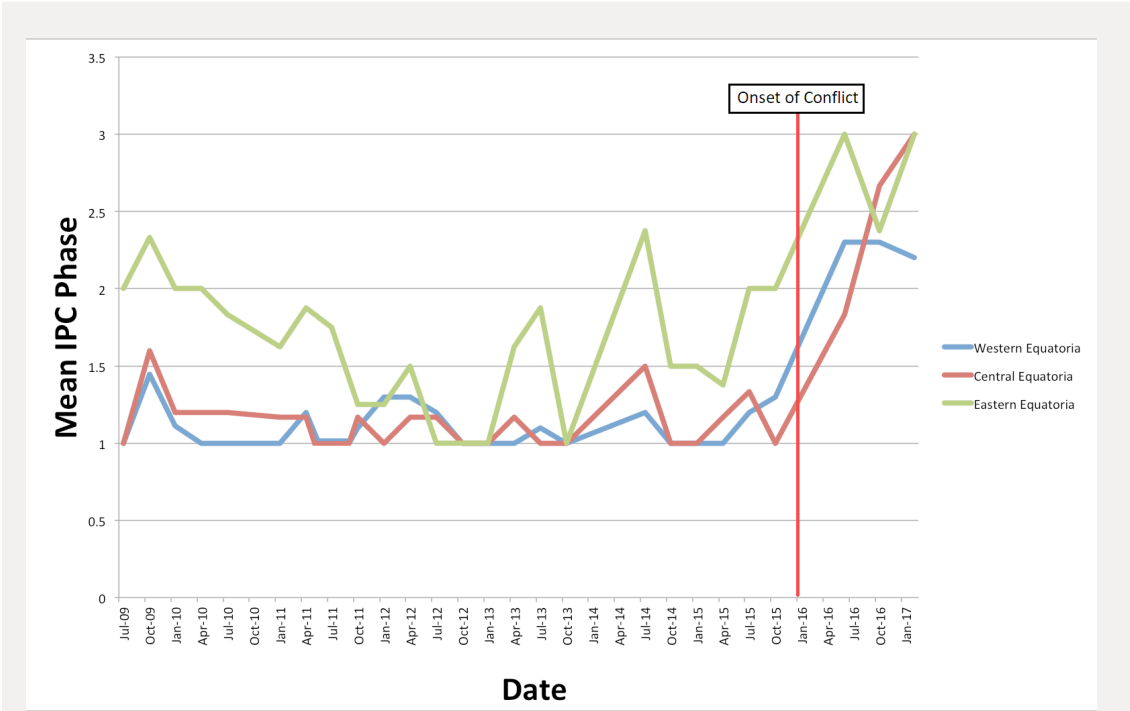
Source: South Sudan IPC-TWG

Figure 2: Onset of Conflict and Impact on Food Security: Greater Upper Nile Region



Source: South Sudan IPC Technical Working Group, Author

Figure 3: Onset of Conflict and Impact on Food Security: Greater Equatoria Region



Source: South Sudan IPC Technical Working Group, Author

limited in its capacity, is able to publish some information that otherwise might not be. Efforts have also been made to build on REACH methods to begin a nationwide early warning initiative.

2.5 Leadership and Management

The Government of the Republic of South Sudan leads the overall process, but technical leadership is often not clear. This is a major constraint to collaborative, neutral, and transparent data planning, collection, and analysis, which sometimes opens the door to external influences. Some organizations are perceived to be controlling the process but not providing leadership. This has sometimes led to arguments resulting in voting rather than consensus. A fragmented process therefore undermines analysis, performance checks, and coordination. Finally, the sense is that learning is not adequately incorporated into the process, limiting improvement opportunities.

3. Security and Contextual Challenges

3.1 Access and Security

Ongoing insecurity in South Sudan limits or delays access: Gaining security clearance from both the government and opposition can take a long time and sometimes isn't possible, particularly in hotspots—areas most affected by conflict or displacement. Limited infrastructure also prevents access to more remote areas. This combination of access issues means that the analysis likely underestimates the food security, nutrition, and mortality outcomes, as most data reflects only the more-secure areas. Several respondents also noted that lack of access is often used as an excuse for not having collected data.

3.2 Conflict and Conflict Analysis

Though conflict drives most of the food insecurity, malnutrition, and mortality outcomes, inclusion of conflict analysis in the IPC process is very limited both in South Sudan and in the IPC tool in general. Some respondents also noted that areas with no fighting received less attention in the analysis than

those with conflict. For example, Northern Bahr al Ghazal State may have been close to having famine conditions in 2016. However, the IPC never particularly highlighted this as the state was not experiencing active fighting. This focus, or lack thereof, may distort findings and classifications.

4. Influence on the Analysis

4.1 Threats to Independence

A number of threats to an independent and objective analysis emerged from key informant interviews. Some of these were depicted as subtle and not always easy to fully understand; others were not subtle at all. For example, in 2015–16, the UN instructed the Humanitarian Country Team to be more cautious in its language, resulting in subtle pressure on the TWG. Later, messages from UN or GRSS officials indicating that the crisis had calmed down and that early recovery could begin signaled to the TWG what it could or could not say. This often resulted in a slowdown of the response to IPC processes, or a failure to reach firm conclusions.

More overtly, the GRSS issued a press release on October 22, 2015, warning against the use of “irresponsible” language after the BBC reported that the UN had noted at least 30,000 people were “facing starvation” in South Sudan. In August 2016, an IPC analysis took place outside the country; disagreements with the government over the update resulted in it never being released, though the update reportedly did not indicate famine. After the famine declaration in February 2017, several members of the GRSS staff were removed from their jobs. Although they were eventually reinstated, these events, combined with more-subtle influences, caused people to worry that if their analysis suggested famine, the political consequences of the analysis might be unpleasant, to say the least.

4.2 Consequences

These external influences had several consequences. For example, they have resulted in significant self-censorship, the outcomes of which are unclear in humanitarian terms. They also helped to drive a delay in determining the difference between Phase 4 and Phase 5, including passing responsibility

from the TWG to the ERC to make a determination. Agencies not involved in the process complained that it was insufficiently transparent. Several of these agencies vehemently (and publicly) disagreed with the famine declaration in February 2017, undermining its credibility and further pressuring the TWG in subsequent analyses to not make decisions with imperfect data.

All of these processes led to an attempt to portray possible Phase 5 situations as being as close to famine as possible without actually using the term, including frequent use of the phrase “elevated risk of famine” (EROF) or categorization of a small proportion of a population as being in Phase 5. This has resulted in some odd distributions of population by phase classification. Figure 4 gives some examples of distributions that might be expected. For example, in theory, population distributions mapped by IPC category could be left-skewed if most people were in good current food security status (8a); “quasi-normally” distributed, or somehow evenly distributed around a central tendency or mean IPC classification in a crisis of moderate severity (8b); or right-skewed in a severe crisis, with increasing proportions of the populations in each higher phase (8c depicts this situation in Leer County for the actual famine declaration in February 2017). The population distributions in Figure 4 all come from actual classifications by the South Sudan TWG.

The distributions on the right side of Figure 4 (d, e, and f), however, depict increasing proportions of the population in each higher phase, until Phase 5, which shows none—hence a sort of “right-skewed but truncated” population distribution. This happened with many cases in 2015–16. And indeed this continues in some areas (for example, in Northern Bahr al Ghazal in 2017). That the distribution would be right-skewed but then truncated at Phase 5 makes little sense. When queried, respondents noted that this might represent two different phenomena: One was a fear of using Phase 5 or “famine,” but the other was a tendency to “overload” Phase 4. There is no supporting evidence for the latter, but the point was noted by several respondents

Some changes to the IPC process have been made to address the above influences. For example, as a result of the quashed 2016 report, those driving

the IPC process decided to change the release mechanism of the report from the Ministry of Agriculture to the National Bureau of Statistics. This enabled the IPC reports to be received as any other statistical or factual report, with less interference in their publication.

5. Lessons Learned: Managing the Constraints

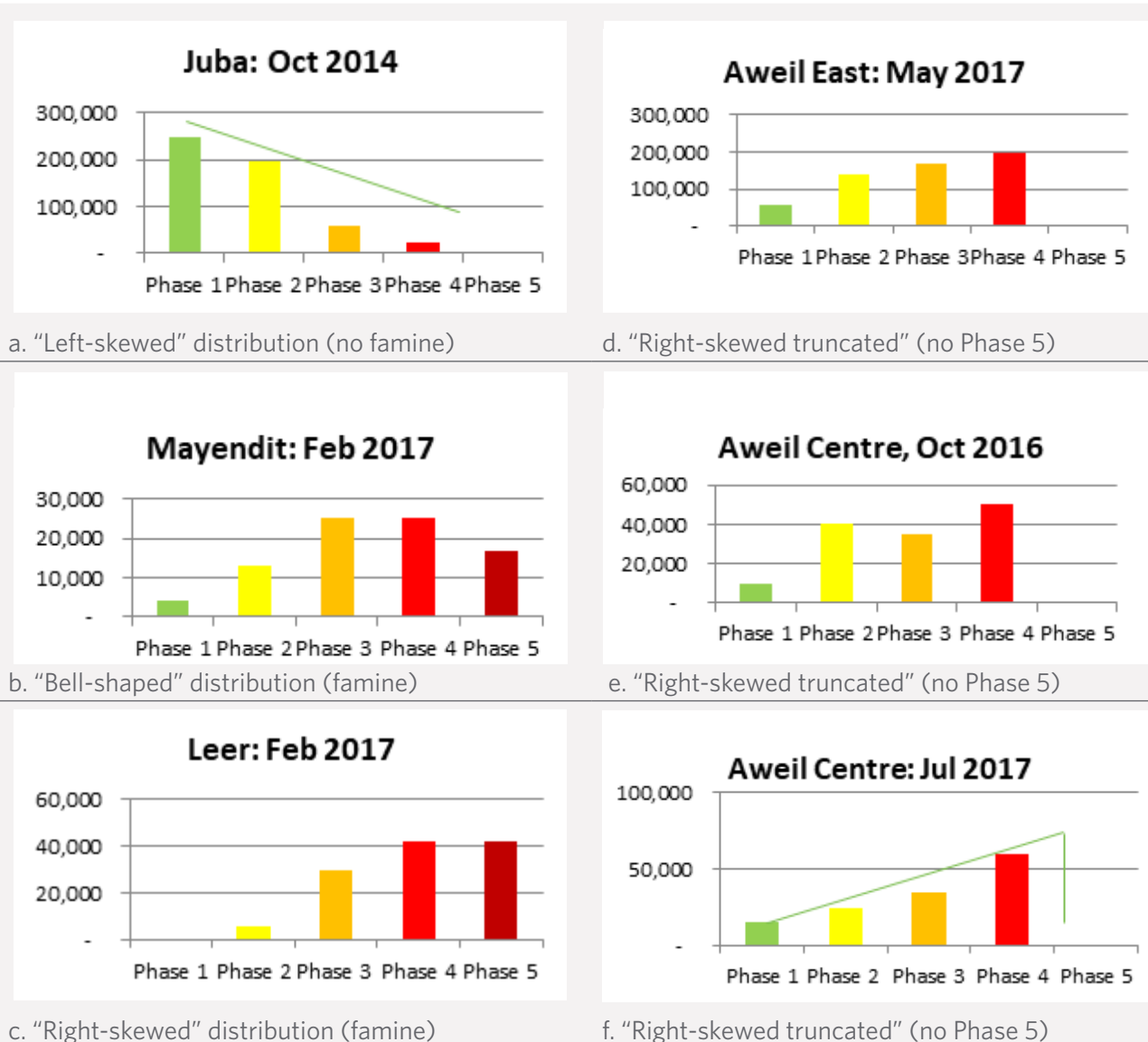
This review has identified several areas in which the IPC process can be strengthened, both in South Sudan and in general. The recommendations for action below are categorized into (1) those dealing with the governance of IPC and analytical process and the need to better manage external influences on the analysis and (2) those dealing with technical considerations.

5.1 Governance Recommendations

1. Develop more dedicated, empowered, and inclusive leadership, management, and coordination functions for the IPC.

To buffer the technical process from the political use of evidence, the highest levels of government, UN agencies, and donors must be more involved in steering and maintaining an overview of the IPC process. Regional staff engaging in the analysis can be helpful in shielding local or in-country staff from political pressures. Further, the process would be strengthened by an investment in defining, developing, and building the capacity of IPC leadership. Finally, several organizations and individuals have committed to and are invested in the TWG work; however some key members of the TWG appear to be less so. Leadership of key agencies and organizations should be strongly encouraged to commit their most appropriate and capable staff members to the process. Expanding membership of the TWG to include food security and nutrition clusters, and including OCHA at agreed steps of the process, could strengthen coordination, ownership, communication, and use of the IPC analysis.

Figure 4: Distribution of Populations in IPC Phases



a. "Left-skewed" distribution (no famine)

d. "Right-skewed truncated" (no Phase 5)

b. "Bell-shaped" distribution (famine)

e. "Right-skewed truncated" (no Phase 5)

c. "Right-skewed" distribution (famine)

f. "Right-skewed truncated" (no Phase 5)

Source: Authors' analysis, data from IPC-TWG

2. Develop a clear approach to communication, consultation, and transparency in country prior to and after the release of the final IPC analysis.

An analysis without a communications strategy has led to unfortunate outcomes in the past—future efforts should involve communications specialists as early as possible (even before the validation process). This would involve transparent and joint communication through the analytical, validation, and dissemination phases. The IPC-TWG should

aim for maximum transparency within a carefully managed process that builds ownership of the results and minimizes the risks of full transparency. Such a process would allow for adequate time between the validation of the classification and the official dissemination of the findings. One clearly identified good practice from South Sudan was that the chairperson of the National Bureau of Statistics currently briefs political leaders before releasing the report, so they are not blindsided. (But note that this is a briefing not a consultation.) The final IPC report is

treated the same way that any other statistical report would be. This system ensures that the government knows that donors are confidentially getting the same information that the government gets.

5.2 Technical Recommendations

1. Resource and revitalize the capacity of IPC actors and institutions.

More opportunities for training should be provided for agency and government staff, with particular attention to local non-governmental organizations (NGOs). Several government technical department staff are among the strongest food security analysts in South Sudan. A considered reinvestment in their capacity and resources to support the IPC process would enable a better-quality and more widely-owned IPC analysis. Finally, capacity must also be improved for projections and early warning. This could be achieved by linking status assessments with more-traditional early warning mechanisms (i.e. determining a baseline and engaging in scenario-based tracking of predictive indicators) or by developing a specialized early warning system to lead this process and build capacity of the TWG.

2. Negotiate an all-parties agreement on data transparency and data quality checks in the food security data analysis process.

Agreement on recording steps taken in data cleaning and availability of cleaned data for independent or, preferably, joint analysis can help build trust and ownership in the IPC analysis. A transparent common data quality scoring system has proven to be an extremely effective tool for nutrition stakeholders to present a united front in their analysis of nutrition status. For food security, statistical tests (as used in nutrition plausibility checks) may not be immediately possible in South Sudan; however, simple pre-agreed quality checks are possible and have already been discussed.

3. Build a better “rapid assessment” tool for instances in which security and access are such that a full SMART survey or food security assessment are not possible.

Lessons learned in South Sudan in particular have resulted in good progress in developing tools for

these extreme circumstances at the global level, and these have been incorporated into the soon-to-be-released IPC Manual V3.0. Given the significant impact that access and security have on the availability and quality of data for IPC analysis in South Sudan, the South Sudan TWG should request further technical support to prepare tools to fill gaps in methods to collect data in extreme circumstances.

4. Include a broader range of evidence in the IPC analysis, such as qualitative data and data from health, WASH, and other sectors.

Practice should be reviewed to identify better ways to fund other types of data collection, incorporate results, and maintain a consistent approach across various areas of South Sudan. Standardized guidance is needed on how to rate the reliability of qualitative data and how it can be used in an analysis. Encouraging a greater involvement of the other relevant clusters in contributing qualitative and quantitative data to the analysis would strengthen IPC outcomes and relate them better to cluster response plans.

5. Recognize that this is a conflict emergency and build conflict analysis into IPC analyses and especially IPC projections.

In the absence of conflict analysis, seasonally based assumptions predominate. However, in many key areas of the country critical levels of food insecurity are not strongly linked to seasonality (otherwise, the famine would have been in June or July, not February!). If “conflict analysis” is considered too politically charged, at least the analysis of protection needs should be included.

6. Develop a better way to identify “hotspots” to prioritize assessment resources for the periodic IPC analysis.

The lack of a pan-territorial early warning system is a major constraint on the analysis. In addition to an early warning methodology, a system is needed to track the likely occurrence of those hazards in a systematic and pan-territorial way.

7. Develop systematic and regular lessons-learned processes.

Trust between IPC stakeholders and confidence in the evidence-based process are both the essence and the most fragile part of the IPC. Formalized processes for discussing and incorporating lessons learned after each IPC analysis should be developed.

8. Consider using more flexibility in timing and sequencing of assessment rounds.

In South Sudan, context, access, and security change at a high tempo. Collecting data, disseminating the analysis, and adapting the response to the findings take time. In the meantime, the situation can drastically change and render the evidence out of date.

Current analysis takes place countrywide biannually and is based on seasonal assessments. Future analyses could prioritize changing contexts or focus more on analysis in particular areas.

9. Clarify the mortality question.

The issue of which causes of mortality to include in the IPC analysis goes beyond the South Sudanese context. This issue was raised in South Sudan through the ODHC mortality study in 2016, as well as subsequent surveys that show that death from conflict-related causes is high. The history of famine is rife with examples of death both from starvation

and disease and from violence—all in one event, and with many of the same causal factors. If civilians are being killed in conflict, it is unclear why there is a need to distinguish what killing is related to food security and what killing is being accomplished by other means. Saying that analysis is only concerned with food security is not only to ignore a major causal factor, it sanitizes the whole analysis of political implications.

6. Methodological Note

The study was comprised of a background desk review, key informant interviews, and a series of private meetings with key stakeholders to test initial findings. The team conducted some 52 interviews, with a total of 56 informants. This brief summarizes the findings for IPC analysis in South Sudan and lays out a condensed version of the main report, which can be found at fic.tufts.edu and whatworks.co.ke.

References

UNOCHA. "2018 Humanitarian Needs Overview: South Sudan." November 2017. https://reliefweb.int/sites/reliefweb.int/files/resources/South_Sudan_2018_Humanitarian_Needs_Overview.pdf

©2018 Feinstein International Center.
All Rights Reserved.
Twitter: @FeinsteinIntCen
fic.tufts.edu

Tufts
UNIVERSITY

FRIEDMAN SCHOOL OF
NUTRITION SCIENCE AND POLICY

Feinstein
International Center

