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Acronyms

ALRMP Arid Lands Resource Management Project (Kenya)

CH Cadre Harmonisé

CILSS Comité Permanent Inter-État de Lutte Contre la Sécheresse au Sahel (Permanent Interstate Committee for Drought Control in the Sahel)

DFID Department for International Development of the United Kingdom

DISK Data and Information Subcommittee of the KFSSG

EWEA early warning, early action

FAO Food and Agriculture Organization of the United Nations

FEWS NET Famine Early Warning Systems Network

FRC Famine Review Committee

FSIN Food Security Information Network

FSNAU Somalia Food Security and Nutrition Assessment Unit

FSNMS Food Security and Nutrition Monitoring System

GAM global acute malnutrition

GRSS Government of the Republic of South Sudan

GSU General Support Unit

HHS Household Hunger Scale

HNO Humanitarian Needs Overview

HRP Humanitarian Response Plan

IDP internally displaced person

INT Integrated Needs Tracking system (South Sudan)

IPC Integrated Food Security Phase Classification

KFSSG Kenya Food Security Steering Group

LEAP Livelihoods, Early Assessment, and Protection

LIAS Livelihood Impact Analysis Sheet

MCLA multi-cluster location assessment

MQSUN Maximizing the Quality of Scaling up Nutrition

NDMA National Drought Management Authority (Kenya)

NDRMC National Disaster Risk Management Commission (Ethiopia)

MUAC mid-upper arm circumference

NGO non-governmental organization

PIN population in need

PHEM Public Health Emergency Management

PSNP Productive Safety Net Programme

R2P Responsibility to Protect

SAM severe acute malnutrition

SMART Standardized Monitoring and Assessment of Relief and Transitions

SPLA Sudan People's Liberation Army

SPLA-IO Sudan People's Liberation Army in Opposition

SPLM Sudan People's Liberation Movement

TWG Technical Working Group

UN United Nations

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund

UNOCHA United Nations Office for the Coordination of Humanitarian Affairs

USAID US Agency for International Development

VAM Vulnerability Assessment and Mapping

WASH water, sanitation, and hygiene

WFP World Food Programme

1. Introduction

This study considers the constraints on data collection and analysis in extreme food security emergencies in countries with a high risk of famine. In many contemporary crises, good quality data are not always readily available. Analysis procedures have built-in processes for ensuring the validity and reliability of data. But there is relatively little emphasis on analyzing what data are missing, why, where and when the data are missing, and what can or should be done about missing and poor-quality data. And there is little attempt to analyze the ways in which data collection or analyses processes are undermined or influenced by political factors rather than (or in addition to) being guided by the evidence. These problems are especially pronounced where there is a high risk of famine.

Much of contemporary food security analysis, and virtually all of the contemporary analysis of famine, has been consolidated under the rubric of the integrated phase classification tool (IPC). IPC has become an invaluable analytical tool and process in areas of the globe where acute food security crises remain a problem. Evidence on food consumption, malnutrition, and mortality is collected and analyzed under the auspices of IPC at least twice a year in nearly all countries in the East Africa region (or Cadre Harmonisé in West Africa) and some thirty other countries worldwide. While IPC was not specifically designed to be the main tool for analyzing famine, it has assumed that role. Recent experience in several countries has demonstrated limitations in the availability of high-quality data. And more critically, these analytical processes are subject to considerable external influences and pressures that have little to do with the promotion of good analysis and much to do with political considerations (Bailey 2012, Maxwell and Majid 2016, Maxwell et al. 2018a and 2018b, Hailey et al. 2018, Buchanan-Smith et al. 2019).

Broadly speaking, states and governments don't want to admit that crises have deteriorated to the point of widespread malnutrition and death under their administrations (neither do armed-opposition groups such as al Shabaab in Somalia, or Ansar

Allah in Yemen). Donors likewise may have political objectives but may also be surprised that even after funding a major humanitarian effort, humanitarian conditions continue to deteriorate. For humanitarian actors, famine is the dramatic manifestation of response failure (Maxwell and Majid 2016). Lurking in the background is the age-old humanitarian dilemma of sovereignty: is it the sole right of sovereign states to declare crises (and famines) within their own boundaries? What is the role and obligation of the international community? The consensus that seemed to be developing around the "responsibility to protect" (R2P) doctrine in the early-to-mid 2000s has distinctly fallen apart, and the serious decline of the multilateral institutions that underpinned not only R2P but humanitarian action broadly is now a major concern (Fiori 2019). Agencies are often caught between waiting for a government or an "official" process to declare an emergency and the humanitarian imperative to push ahead with a response. All of this leads to considerable pressure on data collection and analysis processes—both within IPC and well beyond—that the system has been extremely challenged to handle.

The word "famine" has both human and political connotations. Humanly, it means large numbers of people going hungry—to the point of increased severe malnutrition, disease epidemics, and excess death. It means the destruction of livelihoods—to the point of destitution. And it frequently means a breakdown of institutions and social norms. Politically, above all it means a failure of governance—a failure to provide the most basic of protections. The word retains the power to shock—for both good and bad. On the one hand, mention of "famine" awakens humanitarian actors to the fact that a serious food/nutrition/health crisis has been ignored or under-funded: the risk of famine in Somalia, South Sudan, Nigeria, and Yemen prompted the US Congress to allocate an additional \$990 million in 2017 (Oxfam 2017), despite budgetary uncertainty and great pressure to reduce—not increase—foreign assistance budgets. On the other hand, both states and agencies are reluctant to use the word "famine"

(Howe and Devereux 2007, de Waal 1997, Lautze and Maxwell 2007). This is not a recent phenomenon: O'Grada (2015) and Dikötter (2010) both note the cover-up of information about the "Great Leap Forward" famine in China from 1958–62 (in which humanitarian agencies were not present). Noland and Haggard (2005) make the same point about the North Korean famine of the mid-1990s (in which at least some humanitarian agencies were present but had very different objectives from those of the North Korean regime). And Banik observed about India, "There appears to be a general consensus among successive ruling parties in India that the term 'starvation', like 'famine,' must be avoided at all cost" (Banik 2007, p. 301).

Research questions

This study came to largely similar conclusions about the impact of the word "famine," but the point of this study was not just to establish the extent of the intrusion of politics into humanitarian analysis but also to suggest better ways of managing these intrusions (ridding the humanitarian information system of political interference is simply not a realistic goal). This report synthesizes the main findings and recommendations from six country case studies: Somalia, South Sudan, Northeastern Nigeria, Yemen, Ethiopia, and Kenya. The individual cases are analyzed in detail elsewhere. Four main questions drove the research:

- In the analysis of famine or food security/nutrition crises, what data were available for analysis? Where do such data come from? What are the chronic "gaps" in data and why?
- 2. What are the constraints or influences on information collection and on the analysis of humanitarian emergencies resulting in severe food insecurity, malnutrition, and disease? How are these constraints manifested?
- 3. How is missing information or information with low reliability managed in analysis frameworks, and what is the impact of missing information (e.g., missing mortality data)?

4. What would improve processes for managing the political interference in the analysis of severe humanitarian emergencies look like? What good practice emerges?

This report is organized as follows. It briefly reviews the research methodology and then reviews the literature on the central question of the research: the political influences on the processes of data collection and analysis of famines and extreme food security and nutrition crises. The main section provides a summary overview, across six case studies, of the politics of information and analysis in famine-risk countries. The final section summarizes the main findings and concludes with policy recommendations that grow out of the findings.

Objectives

The overall objectives of this study were to understand the constraints to robust and independent collection and analysis of information in famines and food security crises and to suggest methods to ensure independent and objective analysis of humanitarian emergencies. Considering all six case studies for this review, the specific objectives were the following:

- 1. Assess data collection processes in food security crises and identify the key constraints to their completeness, independence, rigor, and reliability in famine-risk countries.
- 2. Assess the process of analysis to understand any pressures or influences on it.
- 3. Document good practice in managing influences on data and analysis.
- 4. Synthesize findings from country case studies to develop global recommendations to protect the independence, objectivity, rigor, and reliability of humanitarian assessment information.
- 5. Engage with policy makers, information system managers, humanitarian leaders, and donors to take up the findings of the study to improve the independence, objectivity, rigor, and reliability of humanitarian information for decision-making.

¹ For the individual case study reports, see https://fic. tufts.edu/research-item/the-constraints-and-complexities-of-information-and-analysis/.

2. Methodological note

This report synthesizes comparative case studies examining the availability and quality of information and the independence, rigor, and quality of analysis in six countries. Case studies include the famine-risk countries of Somalia, South Sudan, Ethiopia, Nigeria, and Yemen and a comparative case of a government-led information and analysis system in Kenya. Four of these were selected because they were most at risk of famine in 2017–18; two more were added to provide a stronger evidence base on East Africa. The questions that drove the research were noted in the introduction.

Each country case study included a comprehensive desk review and a series of key informant interviews with a wide range of stakeholders. A team from the Feinstein International Center and the Centre for Humanitarian Change conducted interviews, either in person or via Skype. Respondents oversee or are directly involved in information collection and analysis processes, including the IPC process, government-led systems, Famine Early Warning Systems Network (FEWS NET) analyses, and analyses by a variety of UN agencies and NGOs. The respondents included both the producers and users of such information: government staff, donor agency staff, and staff of UN agencies and international and local non-governmental organizations. The researchers in-

quired about the technical aspects of data collection and analysis processes to identify potential gaps that might be addressed by quick donor action in advance of the next IPC analysis. These interviews were conducted between mid-2017 and late 2019. Interviews were conducted in-country in Somalia, South Sudan, Nigeria, and Kenya but had to be conducted remotely for Ethiopia and Yemen. After the initial analysis, a series of meetings with key stakeholders was conducted to check for missing information or misinterpretation of the findings.

For all key informant interviews, respondents were identified purposively, either on the basis of their positions and engagements with the data collection or analysis processes, or via snowball sampling based on earlier interviews. Interview notes were coded using Nvivo Version 11.4.2 (and in some cases manually). An iterative coding approach was developed with codes determined both deductively from study instruments and inductively from transcripts and expanded over time with additional case studies. Emergent themes were then used to draft the initial outline of the case study reports, with coded information categorized and synthesized accordingly.

Over the course of completing the six case studies, 339 key informants were interviewed (Table 1). During each interview, detailed field notes were

Table 1.	Interviews	by case s	tudy and	total
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Country case	Case Study Date	Interviews	Respondents	Re-interviews
South Sudan	6/2017-4/2018	52	56	2
Nigeria	11/2017-2/2018	50	58	3
Somalia	4/2018-8/2018	48	62	2
Yemen	11/2018-4/2019	62	78	6
Ethiopia	10/2019-12/2019	24	34	-
Kenya	10/2019-12/2019	26	43	-
Global	1/2020-3/2020	7	8	-
Total		269	339	

taken, marking phrases and terminology used by respondents to capture their narrative. Questions were open ended to avoid leading interviewees to particular responses.

This synthesis report is based on a re-analysis of case study reports and interview notes. A meta-analysis of the case studies identified and described key themes that cut across all or some of the cases. Where necessary, original interviews and analysis notes were reviewed. Common themes in good practices were noted, and several new good practices emerged. Given that nearly two years had elapsed from the time of the first case study (South Sudan) and the synthesis analysis (early 2020), 13 informants from the earlier case studies were re-interviewed to ensure that changes were taken into account. (Kenya and Ethiopia were done in late 2019, so no respondents were re-interviewed for those cases.) Additionally, a small number of global key informants (8) were interviewed for the synthesis.

The Tufts University Social, Behavioral, and Educational Research Institutional Review Board granted clearance for the overall research program on May 31, 2017, renewed on May 25, 2018, and renewed again on May 24, 2019.

Given the emphasis on the analysis of famine, much of the content of the case studies—and hence this synthesis—addresses the question of Integrated Phase Classification (IPC) analysis. This study is not (and was not intended to be) an evaluation of IPC—either generally or in any case-study country.² It is a specific study based on the questions outlined above and motivated by the need to base humanitarian response on the most rigorous and most independent analysis possible. And the findings and recommendations have application well beyond IPC processes.

Strengths and limitations of the methodology

The methodology has several strengths: First, it reflects the actual experiences of the technical staff

involved in the collection, analysis, and presentation of information regarding famine, food insecurity, and humanitarian crises—the very people who experience and have to live with the influences or attempts to influence their data collection processes and analysis. Second, it is open ended in terms of sampling, following a string of informants or a "story line" to its logical conclusion. Third, it is comparative, so that generalizable findings can be detected across multiple cases. And fourth, it is broadly representative of the most serious cases related to famine risk (the Kenya case being the outlier, but a useful comparator nevertheless).

There are also several limitations: First, the number of cases is limited to six, and they are focused on famine risk or food insecurity. The issue of influencing or manipulating humanitarian information clearly affects more than just this one sector, but for the reasons stated above, this is where the political influences may be the most salient. Second, key informant interviews have to rely on what the informants tell the interviewer, creating the possibility that some informants may not be giving accurate information. For this reason, multiple interviews were held with a variety of key informants in the same constituencies (governments, donors, agencies, etc.), and findings were triangulated to ensure a high degree of confidence in the findings. Third, there are limitations to interviewing remotely, as in the case of both Yemen and Ethiopia. These include less depth to the discussion, inability to build rapport with the respondent, and sometimes poor telecommunications or technical difficulties that hamper a discussion. The team was not granted visas to Yemen, and budget and time constraints did not allow in-person interviews in Ethiopia. A further limitation to the Ethiopia study was that none of the requests to current government staff for interviews were answered, so the study had to rely on former government officials and others to understand current government views.

² Such a study was conducted by FAO. See Buchanan-Smith et al. (2019).

3. Background

After the first decade in recorded history in which no famines occurred, famine recurred with a vengeance in Somalia in 2011 (Maxwell and Maiid 2016). In 2016–17, four countries appeared on the famine-risk watch list. According to the 2019 "Global Report on Food Crises," some 113 million people were subjected to food security crises in 53 countries in 2018. These numbers have remained above 100 million since 2015 (FSIN 2019). Perhaps more critically, the Food Security Information Network (FSIN) reports that roughly 65 percent of those people are in only eight countries: four in the East African region (Ethiopia, Sudan, South Sudan, and Somalia), two very close by (the Democratic Republic of the Congo and Yemen), Nigeria, and Syria. The common factor across all of these countries is violent conflict. Five of these countries were included in this study.

Case studies: Countries and information systems

This study reviewed humanitarian information and analysis from six countries. This section very briefly reviews the humanitarian information system in each, as well as global information systems operating in each. Table 2 provides a summary of the cases. This section describes the countries in the order in which the case studies took place.

South Sudan. South Sudan became the world's newest country in 2011. Two and a half years later, in December 2013, a war broke out between the followers of the president and those of the vice president after a power struggle in Juba. The Sudan People's Liberation Army (SPLA) rapidly split into factions along largely ethnic or clan lines, with the followers of the vice president forming the SPLA-In Opposition (SPLA-IO). For the ensuing year and a half, the conflict centered on the Greater Upper Nile region, but other regions were eventually dragged in.

South Sudan had several information systems prior to the war, and IPC analysis had been introduced even before independence. By the time of the war, IPC analysis principally relied on food security information from a WFP-led Food Security and Nutrition Monitoring System (FSNMS) and SMART surveys for detailed nutrition, mortality, and health information. However, the analysis became much more politicized after the war began. Political interference reached a peak in 2016–17, with some types of information routinely absent, some reports quashed by the government, staff harassed—particularly in the aftermath of the declaration of famine in early 2017—etcetera.

IPC initiated an Emergency Review Committee—subsequently renamed the Famine Review Committee (FRC)— in 2014 to review the information coming from South Sudan any time populations were found to be in IPC Phase 5 or when the risk of famine was high. Although formed to review the information and analysis from South Sudan, the remit of the FRC was made global, and it has reviewed famine analyses from all of the countries in this study with the exception of Kenya. From the outset, however, FRC analysis was constrained by lack of data and the perception that political influences significantly determined the outcome of the analysis.³

Nigeria. Nigeria is Africa's most populous country. Although it is often subject to political instability, it had not been considered a humanitarian case until about 2014-15 when the displacement caused by the Boko Haram insurgency in the northeast became so serious that neither the government in Abuja nor the international humanitarian community could continue writing it off as a local problem. No international assistance was directed to the crisis in 2013, and less than \$100 million a year was allocated in both 2014 and 2015—but international aid was nearly half a billion US dollars by 2016 and over a billion in 2017 when the case study was conducted. Retrospectively, the finding was that a famine was likely to have been occurring in mid-2016 when the military recaptured towns previously held by Boko Haram that harbored large displaced populations.

³ The experience in South Sudan led to this study. In full disclosure, both authors of this report serve on the FRC and experienced the analysis of the South Sudan crisis—as well as the other original case studies—firsthand.

Table 2. Case study countries

Country	Years of crisis	Main drivers	Famine?	Information system
South Sudan	2014-present	Conflict	Confirmed (2017)	IPC, REACH
Nigeria	2015-present	Conflict	Likely (2016)	Cadre Harmonisé
Somalia	2011-12, 2016-17	Drought, conflict	Confirmed (2011) Averted (2017)	FSNAU (IPC, "dashboard")
Yemen	2014-present	Conflict, eco- nomic collapse	Averted? (2018)*	IPC
Ethiopia	2011, 2015-18	Drought, local conflict	Averted (2016)	NDRMC (government), IPC, numerous other
Kenya	2011, 2017	Drought	No	NDMA (government), IPC

^{*} The formal IPC analysis showed no famine occurring at the height of the crisis in November 2018. The Famine Review Committee (FRC) took issue with some of the conclusions of that analysis. The dispute could not be resolved so the FRC response was published as a "minority report" or dissenting viewpoint.

In Nigeria, as in other West African countries, the dominant form of analysis is the Cadre Harmonisé (CH). Nearly identical in format to the IPC, CH has its own governance and accountability structure housed in the regional intergovernmental body CILSS (Permanent Interstate Committee for Drought Control in the Sahel). CH analysis was introduced in 2015 in response to the worsening situation in the northeast. Significant constraints on access meant that information was not collected from the worst affected areas, and the independence of analysis was not always clear. The retrospective finding of a likely famine was by FEWS NET, not Cadre Harmonisé, and led to some recrimination from the government at the time (Maxwell et al. 2018b).

Somalia. Somalia was the birthplace of IPC analysis, so has the longest history of engagement with this kind of analysis and has a different institutional arrangement for data collection and analysis. One single institution leads it—the Somalia Food Security and Nutrition Analysis Unit (FSNAU), so one actor dominates, and it is not the government. FSNAU is a project managed by FAO on behalf of the humanitarian community, but intended to be an independent unit. Somalia was the site of the worst famine

of the twenty-first century, in 2011. However, lack of information and early warning were not the reasons for the delayed response, but rather the absence of key players, blocked access by armed groups, and restrictions imposed by international aid donors (Maxwell and Majid 2016).

In addition to the IPC process, by 2016, FSNAU had introduced a new data amalgamation tool—the early warning/early action "dashboard." FEWS NET and FSNAU collaborate closely, and in the 2016-17 crisis, their information did bring about a much earlier response than in 2011. Famine did not revisit Somalia in 2016–17. By 2018, the Federal Government of Somalia had gained significantly more capacity, credibility, and legitimacy than the fledgling Transitional Federal Government in 2011. By 2018, both the government itself and the donors that support it were clamoring for greater control over the information and analysis process. Political factors—from the government, donors, and humanitarian agencies—were all certainly influencing the system, but in general, it was less subject to political interference than in other case studies (Hailey et al. 2018).

Yemen. Since 2014, Yemen has been caught in a civil war between the internationally recognized govern-

ment and Houthi rebels who captured the capital, Sana'a, in late 2014. The war has also seen substantial international engagement. When the case study was conducted (late 2018), the humanitarian situation was probably at its worst moment of the then four-and-a-half-year-old war. The Yemeni riyal was collapsing into hyper-inflation (FEWS NET 2018). The liquidity crisis meant the central bank had no way of extending credit to traders to import food and Yemen is a net food importer even in the best of times. The Saudi-led coalition was attacking and destroying food production and livelihood-supporting infrastructure, undermining both food supplies and people's ability to purchase food (Mundy 2018). Wages were not being paid. The ports were under attack and there were substantial delays in the import of both commercial food and humanitarian food aid. All these factors were putting extreme pressure on people's ability to access adequate food (Maxwell et al. 2019). A truce negotiated in December 2018 probably prevented a slide into outright famine, but by then a quarter of a million people were caught in famine conditions, and Yemen had earned the title of the "world's worst humanitarian crisis."

IPC was introduced in 2011 and continues to be the dominant mode of analysis, although a multi-cluster location assessment (MCLA) was also introduced to help assess non-food needs. A famine-risk monitoring system (FRM) was put in place to closely monitor conditions in the 45 most vulnerable districts. The analysis in late 2018 was highly fraught, with accusations of data manipulation, outdated information, blocked access, intimidation of field teams, and highly skewed results. The formal analysis showed no famine, but some of the conclusions were questioned by the FRC, and the dispute was never resolved. Conditions appeared to have improved slightly by the time of the 2019 analysis—but it was only able to reach 29 districts, so at least 15 of the most hard-hit districts were not re-analyzed.

Ethiopia. In 1984-85, Ethiopia was famously the scene of a major famine that formed a generation's view of what constituted famine and what famine looked like. A smaller famine hit eastern Ethiopia in 1999-2000, and substantial food security crises were contained at a degree of severity short of famine in 2002-03, 2005-06, 2007-08, 2011, 2015-16, and 2016-17. More recently, Ethiopia has also been

affected by widespread local conflict, which has displaced a substantial number of people. Ethiopia has an established national food security information system that provides data to construct the annual humanitarian response, and since 2006 the information system has been linked first and foremost to the Productive Safety Net Program (PSNP). The National Disaster Risk Management Commission (NDRMC) has responsibility for the government information system, although numerous other information systems exist. These include, but are not limited to, the Livelihoods, Early Assessment and Protection (LEAP) tool, the Livelihood Impact Analysis Sheet (LIAS), and the Public Health Emergency Management (PHEM) system. SMART surveys add quantitative nutrition information.4

In 2018, IPC was introduced, and a large-scale survey was conducted to feed into IPC analysis in 2019. FEWS NET operates in Ethiopia and a number of NGOs have their own information/early warning systems. All of this adds up to an information "eco-system" that appears overcrowded and, in some cases, redundant or even competitive. Despite all the different systems, however, there is still a lot of controversy over the number of people projected to be in need, which is the outcome that most systems strive to achieve.

Kenya. Kenya is not considered a famine-risk country, and has not suffered from famine in recent times, but is subject to periodic drought in the arid and semi-arid lands (ASAL) areas of the country. Long experience with drought-related crises led to the formation of the Arid Lands Resource Management Project (ALRMP) that monitors the food security situation under the Kenya Food Security Steering Group (KFSSG). This body has overseen an early warning and seasonal assessment system since the 1990s. In 2011, the ALRMP became the National Drought Management Authority (NDMA), a government-funded body with both early warning and oversight of the national mechanisms built up in the aftermath of the 2011 drought emergency (the National Drought Contingency Fund and the Hunger Safety Net Programme).

A relatively permissive operating environment, government leadership, and good relations with donors

For a more in-depth description of these, see Maxwell and Hailey (2020).

have combined to prevent each of the large-scale drought emergencies in the past four decades from sliding into the kinds of humanitarian disasters seen in neighboring countries. However, malnutrition in the range of 30 percent or higher is common. IPC analysis has long been part of the system, and in 2019, Kenya's system became fully IPC compliant. It is generally not considered a high-risk country for famine—although it is seriously threatened by a desert locust infestation at the time of writing, a reminder that a variety of hazards continue to lurk.

Information Systems. As already implied, the IPC system dominates the analysis of famine and extreme humanitarian emergencies in South Sudan, Somalia, and Yemen, with the practically identical CH system in place for Nigeria and government-led national systems in Kenya and Ethiopia. Kenya has long used an adapted version of IPC analysis, but in 2019 the Kenyan system was brought into compliance with IPC standards (Kenya continues to use its own system for early warning). Ethiopia has the longest-standing national system, dating back to the 1980s. After relying on other methods for decades, IPC was introduced in Ethiopia on a pilot basis in 2018, and a major IPC analysis was undertaken in 2019. Government plays a role in convening or leading the analysis, including IPC and CH analysis, but it varies by country.

But there are other systems of famine analysis beyond IPC/CH. FEWS NET, a USAID-funded project specifically intended to provide early warning information, exists in all the case countries (though it is severely constrained in Yemen). In Somalia, the FSNAU leads the IPC process and collaborates closely with FEWS NET. In other countries, the relationship may be more independent (like many humanitarian and information agencies, FEWS NET is a member of the IPC partners that oversee IPC development and implementation).

IPC analysis is described in detail elsewhere (IPC Partners 2019), but given its centrality to the current study, it is worth noting briefly that IPC analysis is based on information from a number of sources (typically FSNMS or similar surveys for food security and SMART surveys for nutrition and mortality information). FSNMS surveys are typically, but not always, led by WFP; SMART surveys are managed by the Global Nutrition Cluster, but may be conducted

by NGOs. Thus, the information collection process is fairly centralized. In theory, information from other sources may be incorporated, but information from other sources is frequently disqualified for failure to meet IPC's reliability requirements.

At the core of IPC analysis is a reference table that aggregates information about food consumption, nutrition, and mortality outcomes into categories of severity—the "phases"—ranging from Phase 1 (no acute food insecurity) to Phase 5 (famine) with degrees of severity increasing from Phase 2 (stressed) to Phase 3 (crisis) and Phase 4 (humanitarian emergency). The intention is that analysis follows a technical consensus process based on the convergence of evidence—different kinds of evidence from various sources—to produce the classification system just described. It is then transcribed by color coding to a map of the affected area or country and translated into a "population in need" figure for food insecurity. IPC includes projections—providing a current snapshot and a forecast three and six months into the future.

In Somalia, in addition to the IPC process, an early warning/early action "dashboard" was introduced to compile predictive indicators on a monthly basis. In South Sudan recently, a somewhat similar initiative called the Integrated Needs Tracking system was introduced. In Yemen, a multi-cluster location assessment provides additional information. Long-standing government-led systems are still in place in Ethiopia (relying on various methods and two seasonal assessments) and Kenya (relying on sentinel sites for early warning and biannual seasonal assessments).

Recently, some actors are trying alternative approaches to forecasting or predicting food security and nutrition outcomes through econometric or computational modeling (MERIAM 2019), improved remote sensing, use of other publicly available data (Lentz et al. 2019), or artificial intelligence (World Bank 2019). While early results are encouraging, the extent to which these approaches are either more sensitive to rapidly changing situations on the ground or able to overcome the political influences of existing methods remains to be confirmed. These are all international initiatives with varying degrees of buy-in from national authorities, but all rely on existing data collection systems—and therefore are vulnerable to the same set of political influences.

4. Politics and information: Evidence from previous studies

"Public health information available in humanitarian crises is, in general, inadequate and ... its application is [often] secondary to reasoning and incentives of a political nature, thus contributing to the recurrent failings of humanitarian action." 5

Famine has always had political consequences. In perhaps the most infamous contemporary case, the famine in Ethiopia is 1984–85 was deliberately kept out of view by the governing regime because it coincided with celebrations of the tenth anniversary of the overthrow of Haile Selassie (Desportes et al. 2016, Burg 2008). Retrospective analysis of the 1984 famine shows clear signs that some kinds of information were being suppressed—particularly about conflict (Vaux 2001) but also about forced migration and the extent of the crisis itself (Clay and Holcomb 1985). The reason was clearly political: the famine of 1972-74 was the triggering event (if not the underlying cause) for the overthrow of the Haile Selassie government. The regime was very aware of the political consequences of failing to prevent famine, so kept it out of the public eye as much as possible.

The humanitarian community has long been aware of shortcomings in how information is used to respond to crises (Buchanan-Smith and Davies 1995). One of the underlying reasons was that decision makers (both national governments and donor agencies) didn't fully trust the information. Another was political disagreements between donors and governments. These insights continue to be relevant to the question of the politicization of information and analysis. Various works over the intervening 25 years have touched on the theme of the politics of information and analysis, but few prior studies have focused specifically on it in the context of famine and extreme food security crises.

Many studies note the power of the word "famine" (Devereux 2007). Famine not only connotes an extreme crisis of food insecurity, malnutrition, and death; it also connotes a failure of governance and of humanitarian action (Maxwell and Maiid 2016). And sometimes it connotes a deliberate or inadvertent crime (de Waal 2018). With increasing recognition of the linkage between conflict and famine, the United Nations Security Council passed Resolution 2417 in May 2018 that condemns both the use of starvation as a weapon and the denial of humanitarian access in conflict. Being able to predict and analyze famine in real time continues to be an urgent need—until such a time as famine is finally eliminated as a contemporary threat. Given the connotations of the word, there is significant pressure not to use it, to cover it up, or to cast it as something else. This review has demonstrated that these pressures can come from multiple actors. Technical staff are often left to deal with these pressures, and it is little wonder that technical teams find it difficult to navigate the pressures applied by more powerful political forces to interpret, spin, and present famine or near-famine crises to governments, donors, humanitarian agencies, affected communities, the media, and the general public. Several key areas of concern arise from the literature: the politics of information gathering, influences on the analysis process, and the politics of numbers.

The politics of information gathering

Numerous factors—some blatant and some subtle—put pressure on the independent assessment and information collection of famine or near-famine

⁵ Colombo and Checchi (2018), p. 214, emphasis added.

emergencies, particularly in conflict crises. These include direct interference, minders, intimidation of field teams, limiting or prohibiting access, creating real and imagined security obstacles, and bureaucratic hindrances. They occur across geographic contexts, types of crisis, and all sectors of humanitarian information, collection, and analysis. They come from several sources: governments who do not want the depth of a crisis to be exposed, donors who do not wish to investigate deeply the impact of counter-terrorism restrictions or who expect to see "results" from the money devoted to humanitarian response over the previous period, or agencies who also want the analysis to reflect the impact of programs. Managing influences includes the ability to understand where they are coming from and what the motivations behind them are.

A recent report on Yemen notes, "Data collection in Yemen is extremely challenging. UN agencies and NGOs are working creatively to overcome significant barriers—interference, conflict and tough geography—to provide evidence to scale up the response" (ACAPS 2019, p. 1, emphasis added). This interference—in Yemen and other contexts characterized by violent conflict and at high risk for famine—takes many forms. Thomson (2009) outlines ways that authorities, both state and nonstate actors, can intimidate, influence, or otherwise undermine research that might challenge a politically preferred narrative. These vary from officials "milling about" during attempts to independently interview victims to intimidating respondents or openly misleading researchers. Sriram (2009) notes interference against field workers that ranges from direct security threats (kidnapping and attacks) to mundane forms of bureaucratic interference (withholding permission for field work and visa or travel restrictions). While both Thomson and Sriram are referring to basic research, their observations regarding independent field-data collection and analysis apply equally to humanitarian assessment and analysis. Many authors stress that while some of the constraints to good information collection are technical in nature, many remain extremely political (Ball and Ronkainen 2017, Crisp 1999, Altay and Labonte 2014).

Influences on the analysis process

Numerous factors influence how analysis is conducted and the outcomes or outputs of that analysis. These include constraints on access—and in particular on how inaccessible areas (and therefore areas not surveyed) are depicted on maps or other graphic representations of the analysis. These influences may be flagrant or subtle, and some may amount to "self-censorship" on the part of analysis teams. External influences include fear of the word "famine" and its political implications. Under-estimating the severity of the crisis, so as not to raise the wrath of powerful parties with a stake in the outcome of analysis, is the usual form of self-censorship. The "powerful party" in these cases tends to be the government of the affected country, or armed opposition groups within the country. But influences might also come from donors and humanitarian agencies. And "government" means many different things in a multi-layered state such as Ethiopia where government bodies play a role in at least five different administrative levels; or in the case of Somalia, which has similar structures at both the federal and federal-member-state levels. The influence of "government" depends on who the actors are and what level of administrative or technical authority they have and varies from subtle pressure to an outright blocking of analyses or reports.

The politics of numbers

Pressures to inflate or decrease numbers are practically endemic in famines and humanitarian emergencies. The evidence suggests that numbers are often inflated where resource allocation is concerned, but may be decreased—at least for certain categories, notably populations in IPC Phase 5—in the analysis of famine or extreme emergencies (including the so-called Phase 4+). Given the pivotal role that the IPC plays in some countries regarding Humanitarian Needs Overview (HNO) numbers, a major impact of the politicization of IPC or other food security/nutrition information is highly likely to be transmitted to the overall humanitarian response. But this concern goes beyond just the numbers of people affected by

a crisis. Additional concerns have arisen regarding the IPC specifically that are further outlined below.⁶

Referring to the politics of numbers in Ethiopia, Desportes et al. (2016) refer to Goffman's (1959) metaphor of a "front stage" and a "back stage" to differentiate between versions of information. The "official" version of information and action is on the "front stage" (Desportes et al. 2016, p. 49). The more nuanced and realistic version of the situation is hidden on the "back stage," where action remains privy only to the holder of the information. "The main challenge identified by respondents in the backstage area was not logistics but information—the lack of it, its distortion and its political use." The implication for information is that an official version of the situation includes production statistics, current status of populations, numbers in need, and projections for the immediate future. Another version exists that more accurately reflects reality but cannot be spoken about publicly (Haan et al. 2006). This has obvious ramifications if the assessment of decision makers is that the "official" figures are incorrect.

A recent study on Yemen highlighted the issue of numbers and the politicization of data collection, disaggregation, and dissemination. The public system for information and analysis in Yemen has significantly deteriorated as a result of the war and is politicized, resulting in reporting that over-estimated the severity of the cholera epidemic of 2018 and the number of people affected (Bhutani et el. 2018). The report noted the use (with regard to the specific question of famine) of terms like "on the brink of" or "pockets of" to suggest that things could be much worse, but reliable data on which to base an actual assessment of the situation was absent. The report noted that humanitarian agencies rely on "using data from politically-motivated parties to inform their reports are not upfront about potential political biases" (ibid., p. xi). The report went on to note that agencies are often not even aware that the information on programs are politically biased (ibid.).

Conclusions

Despite all the problems enumerated, food security and nutrition information systems in general have been improving over the years. Referencing the 2005 crisis in the Sahel, Glenzer noted that humanitarian information systems in famine-risk countries were. at best, an institutionalized form of partial success: some lives are saved and some livelihoods protected, but the whole system only kicks into gear when some lives have been lost and some livelihoods destroyed (Glenzer 2009). What Glenzer generously called a "partial success," Levine et al. (2012) termed a "system failure." However, lack of information was not the reason for the late response to the famine in Somalia in 2011 (Maxwell and Majid 2016). Choularton and Krishnamurthy (2019) reviewed the accuracy of FEWS NET forecasts in Ethiopia between 2011 and 2017 in terms of food security outcomes by IPC classification. They found that predictions matched subsequent assessment of food security outcomes 78 percent of the time.

A recent evaluation of IPC (Buchanan-Smith et al. 2019) noted that field teams are often not able to manage the politics noted above—hence the need to study these major influences. This review shows the myriad ways in which information and analysis can be undermined for political reasons. However, a couple of major gaps remain. First, we need to better understand how information managers and analysts—trained as technical staff—can be better empowered to counter or at least manage these influences in the pursuit of an independent and rigorous analysis of famines and humanitarian emergencies. Second, we need to understand how the systems themselves can be improved to reduce political or other external influences. Populations at risk of famine live in conflict-affected areas. Conflicts are by definition political: in this era of misinformation and the deliberate undermining of factual analysis, we need to strengthen evidence-based analysis as the basis for decision-making.

Maxwell et al. 2018a and 2018b, 2019 and Hailey et al. 2018. Note that none of the studies referenced in this report, with the exception of Buchanan-Smith et al. (2019) was intended to be an evaluation of the IPC. Many of these concerns would likely be raised with any famine or extreme emergency analysis procedure. They are raised in the context of IPC only because it is the dominant means of contemporary famine analysis.

5. The politics of information and analysis: Evidence from six cases

This section synthesizes the main findings across the six case studies. It is divided into subsections on data and data collection, analysis and analysis processes, specific ways in which either of these processes can be politically influenced, and finally, good practice for managing the influences.⁷

Data and data collection

Patterns emerged across the six case studies where issues of data and means of data collection give rise to problems. Many of these are technical problems, and most have technical solutions. However, addressing the technical solutions is frequently subject to political constraints, and, as will be repeatedly stressed, interpretation of findings is most open to political pressures precisely at the point that technical problems with the data exist.

Table 3 summarizes the key issues relating to data and data collection practices and notes the country case studies in which these issues arose. The narrative following provides brief examples of the kinds of issues encountered with each of the categories in Table 3.

Missing data. Various types of data were frequently noted as missing when analysis was conducted.

The three categories of data most frequently missing—at least for a substantial proportion of the areas analyzed—included mortality data (South Sudan, Nigeria, Yemen, Kenya); baseline and updated population data (all country cases); displacement data (Ethiopia, Nigeria, South Sudan); and nutrition data (almost all cases). Mortality is the most politically charged kind of information, and in many cases its absence was the direct result of technical analysts fearing to tread in a politically sensitive area. At one point in South Sudan, the gap in information on mortality was so obvious, and data collection teams were so intimidated with regard to collecting the information, that at least one mortality study was conducted without the participation of the IPC team (and without the knowledge of the government). That study showed mortality levels well above famine thresholds, although most of the deaths were caused by fighting, not necessarily by malnutrition and disease (OCHA 2016). The author of the report was shortly forced to leave the country. This was perhaps the most flagrant example of the political risks run by those attempting to independently analyze the issue of mortality—whether related to famine or to violence—during the war. But mortality data were also missing from other analyses. The lack of mortality data makes any judgement of famine a matter of speculation. Therefore direct statements about the existence or threat of famine cannot be made without it.

Population information is crucial to turning assessment data (which estimates prevalence and rates) into actual numbers of people who require assistance—the "population in need" or PIN number that governments, donors, and humanitarian agencies await at the end of an analysis process. But population information is almost universally subject to significant doubt in extreme emergencies. Places that

In the case study reports, key points were footnoted with references to specific key informants. Here, the number of references quickly becomes unmanageable. As a result, unless otherwise noted, points in this section refer exclusively to the more detailed analyses taken from the six case studies. The use of footnotes or parenthetic references to either the case study reports or to specific case study interviews has been dropped because they would simply overwhelm the narrative with large and repetitive citations.

Table 3. Data and data collection issues, by country case study

	South Sudan	Nigeria	Somalia	Yemen	Ethiopia	Kenya
Missing data	Χ	X		X	Χ	Χ
Limited sectors of data	X	Χ	Χ	X	Χ	X
Uneven data quality and reliability	X	Χ		X	X	Χ
Challenges of timing, frequency, and coordination	X	Χ		X	X	X
Units of analysis that may risk skewing findings	X	Χ	X	X	Χ	
Poor ability to identify hotspots (EW)	X	X		Χ	X	
Use of qualitative data	X		Χ	X	Χ	X
Data focused on outcomes rather than on drivers/causes	X	X		Χ	X	X
Lack of data sharing	Χ	X	Χ	Χ	Χ	Χ

are frequently subject to violent conflict, and thus to population movements, in most cases also have not recently had a proper census. Thus, while the absence of population figures can be a minor irritant to data collection (primarily around the representativeness of sampling), it becomes a major problem in turning assessment results into practical plans. Numerous highly trained people are working on this problem, but the lack of baseline data is a significant constraint.

Of course, in conflict (all case studies except Kenya) people are displaced and levels of displacement significantly affect population figures by location. In some cases (Somalia), relatively good information now exists on the numbers of displaced. In other places (Ethiopia), it is highly politically contentious to assess the displaced population. "Trapped" or besieged populations are less understood. For example, at the time of the Nigeria case study, while the number of displaced people was known, considerable political controversy swirled around numbers people

trapped inside Boko Haram-controlled territory in Borno state in northeast Nigeria.

Often nutrition data were missing from the analysis, not because there were no data but because the existing data did not meet the relatively high standards for nutrition analysis (for example, nutrition information collected as part of food security assessments or surveillance or, in some cases, mass screening exercises). In some cases, the data were too dated. In other cases, the cost of covering large areas with many SMART surveys was not prioritized, or was subject to access restrictions.

Finally, across all cases, food security and nutrition information dominate other sectors of information. While IPC or CH analyses are explicitly about food security and nutrition conditions, health and WASH insecurity are both drivers and outcomes of food insecurity. Analysts in many case studies noted how much more complete analysis could be with the

addition of health and WASH indicators—a topic addressed elsewhere.8

Data quality and reliability. Data quality is variable across different cases and between sectors. Nutrition data have been standardized by SMART methodology, which has clear data quality requirements, standards for enumerator training, and field checks. Food security data are more mixed. Standards for quantitative survey sampling are very clear, but standards for enumerator training and field checks are frequently not met in the field. Specific countries do not adhere to some standard methods and measures. For example, until recently, Ethiopia used a different threshold for measuring severe acute malnutrition by MUAC compared with other countries. Newer technical manuals (for example IPC Technical Manual Version 3.0) address some of these concerns. Ensuring that new technical guidance helps to address problems in the field is a subject of much current work.

In some cases, data quality is limited by the limited technical capacity of field teams. Teams must be recruited locally, employment is temporary, and the pool of talent may be limited. Short training timelines and pressure to keep the assessment process to deadline often results in lower-quality training and therefore lower-quality data. Emergency assessments are urgent and time bound, but deliberately allocating more time for training and recruiting more supervisors would improve this issue.

A significant concern regarding data quality in the analysis of famine or extreme emergency revolves around the very limited time assessment teams often have to collect information in situations of very constricted access due to insecurity. New guidance notes have been developed specifically for this kind of situation. But this also raises the question of using qualitative data (see below). It is frequently unclear what to do with data that do not meet reliability standards—sometimes they are discarded, other times used but with the caveat about low reliability. This raises the question of how "representative" data actually are of the context being assessed. Not all affected populations can be accessed, and even when they can be, coverage may be influenced by political factors. Current data quality checks don't necessarily assess "representativeness."

⁸ See Maxwell and Hailey (2020).

Timing, frequency and coordination of data collection. A consistent challenge is the timing and frequency of data collection. In some cases, the timing of data collection and the timing of analysis are so different that data is outdated by the time it is analyzed (Yemen, Ethiopia, South Sudan), and especially between when it is collected and when the analysis is actually made available for programmatic usage. Food security information tends to be collected on a seasonal basis—at least in the bimodal rainfall areas of East Africa. In some cases, nutrition surveys are conducted for programmatic reasons or on a seasonal timetable dictated by expected peaks in acute malnutrition. These often do not align with the seasonal logic for food security, making it difficult to align the results into a timely statement of conditions. This is particularly the case where data sources are combined into one analysis, as is the case for

the IPC and CH.

And in all cases, it was difficult to coordinate data collection by units of analysis—with one set of information representing an Admin 1 or 2 (state or district) unit of analysis but another set representative of an Admin 2 or 3 unit. This is particularly an issue for SMART surveys, which use a more intensive survey methodology and thus do not have the resources (time and people) to cover a very large number of Admin 1 or 2 areas at the same time. This is a technical matter, but where data don't align—and without adequate technical guidance on how to manage this situation—political factors find large spaces for influencing data interpretation. This is not to suggest that all data has to be collected at the same time (having massive data collection operations going on all at once creates problems of its own), but it does suggest that better coordination is needed.

A related issue is that the timing of assessments linked to seasonality or other context-specific factors might not produce information at the time it is needed for annual humanitarian deadlines. Recent efforts to amalgamate needs assessments into a global overview of needs—and in particular the OCHA-led HNO process—is an important innovation for the impartial allocation of resources globally. However, in several cases, this amalgamation effort put significant pressure on national assessment processes. While the HNO process, leading to Humanitarian

Response Plans (HRPs), is the most widely applicable, other instances were noted.

Poor ability to identify hotspots. Data collection aimed at country-wide, seasonal current-status assessment—particularly in protracted crises—is not a good way to identify rapidly deteriorating situations. Country cases that lack an adequate early warning system were often relying on current-status assessments in this way (South Sudan, Nigeria, Yemen). Several country cases were actively developing new and different means of early warning or tracking "hotspots" at the time of the case studies. The FSNAU in Somalia has been developing its early warning/early action "dashboard" since 2016, a compilation of indicators intended to give predictive information, updated on a monthly basis. The Integrated Needs Tracking (INT) system in South Sudan is similar but based more on real time needs monitoring rather than early warning per se, but with similar objectives of trying to identify rapidly deteriorating situations in near or near real time. In Yemen, a famine risk monitoring system identified 45 (out of 330) districts for closer monitoring. In Kenya and Ethiopia, long standing government-led early warning systems are in place, but both have experienced challenges relating long-standing practices to contemporary analysis methods, including the introduction of IPC protocols.

Even with improved attempts to identify and verify "hotspots" in real time, challenges remain, including confusion about the difference between current-status assessments, early warning, and real-time monitoring and the use of all these tools to project the numbers of people in need. Some of the constraints are technical, but concerns about access, missing data, and data quality can have political roots as well. A more in-depth analysis of these issues can be found elsewhere (Maxwell and Hailey 2020).

Use of qualitative data. With few exceptions, all contemporary data-collection and analysis protocols are oriented towards the use of quantitative data, and even those that rely on qualitative data collection (such as Household Economy Analysis) turn the data into numbers for quantitative analysis. Given the need to generate information such as PIN figures, this reliance on quantitative information is expected. However, in reality qualitative information pervades the analysis—including analyses that are explicitly

tied to quantitative data—but no guidelines exist for how qualitative information should be collected, how it can be validated, or on what basis it can or should be included in the analysis. Sometimes "qualitative information" that amounts to no more than hearsay can sway an analysis, while at the same time, carefully collected and validated qualitative information is thrown out because it can't be verified by existing guidance and can't be quantified. The criteria for what is acceptable and what isn't is all too frequently political, rather than a robust assessment of the reliability and validity of the information. But this is much more than a technical issue related to qualitative methods—it is frequently a means of shifting an analytical discussion for political reasons. The lack of clear guidance on the acceptability of qualitative evidence means that political influence, rather than evidence, becomes the basis for analytical outcomes.

Data on outcomes only versus data on drivers/ causes. Where IPC and CH analysis dominates, the emphasis is foremost on the collection of outcome indicator data (food security status, malnutrition, and mortality, as well as livelihood assets and coping strategies in complete analyses). For current-status assessment, this is the most important information, but the dominance of this kind of analysis has tended to relegate data on causal factors to a secondary (and sometimes quite diminished) place in the analysis. This in turn has implications for things like projections and early warning—and indeed projections are among the most politicized of the outcomes of these analyses.

A major constraint to good analysis is the absence of good information on conflict and conflict dynamics (reiterating the point made above that in all these cases, with the exception of Kenya, conflict is one of if not the major driver of food insecurity and poor nutritional status). This constraint will be addressed below in the section on analysis, but suffice it to note here that conflict analysis depends on having access to good information, and good information about conflict is frequently missing—often conflict is simply mentioned as a "contributing factor" and not much more is said.

Data sharing. Across the board, agencies are reluctant to share data. In some of the country cases (South Sudan, Nigeria, Yemen) the lack of access to food security datasets in real time has led to major

disagreements between parties to the analysis over how outcomes like food security should be interpreted. In most cases, an agreed protocol exists for the sharing of nutrition datasets—once data have been vetted and the initial report written. However, in Yemen, unlike all the other cases, there is no protocol for nutrition data transparency and data sharing—in fact, at the time of the case study, the authorities expressly forbade people outside the country from reviewing nutrition and mortality data. 9 So nutritional data from Yemen were not being subjected to the same independent data quality and plausibility checks as data from other crisis-affected countries. While framed as a sovereignty issue, political objectives were clearly behind keeping data out of the hands of external analysts.

Reluctance to share data in real time exists for a number of reasons. Whoever controls the data controls the narrative, which is obviously to the advantage of the agency collecting the data. Indeed, in some cases, the level of competition among information systems can be intense, and maintaining control of data provides an edge in the competition. Some respondents noted the fear of another party interpreting the data differently—and thus publishing contradictory findings and recommendations. This is also partly a fear that, given the often extremely difficult circumstances under which data are collected (resulting in less than perfect data quality), the agency collecting the data will be attacked over methodological rigor if the data are shared. But some of it arises from just not wanting the "story" to get out in any other form than the one that the agency collecting the data (or the government authorizing the data collection) wants to tell.

A number of ad hoc arrangements for data sharing in the field have been worked out case-by-case (see below under good practice).

Analysis

Several patterns emerge across the six case studies related to issues of analysis and analytical proce-

The research team now understands that, as of early 2020, an agreement has been reached that will allow nutrition data to be reviewed outside of Yemen, but it remains unconfirmed whether any party actually has. dures. Again, while some of these are technical problems, frequently political constraints either manifest as a technical problem or constrain the ability to address the technical problem. However, it is in the analysis that some of the real political constraints begin to appear.

Table 4 summarizes the key issues relating to analysis and analytical practices and notes the country case studies in which these issues arose as concerns. As with the data section, the narrative following provides brief examples of each of the categories in the summary in Table 4.

Participation/transparency. IPC analysis is intended to be a consensus process, led by government. But in some cases, some parties may be excluded—usually smaller and local agencies. In other cases, the processes may not be as participatory as intended. Where governments attempt to control the analysis and the narrative coming out of it, some parties may be excluded. Cases of this exclusion have been noted in South Sudan, Somalia, and Kenya. Ironically, in Somalia where IPC was invented and where arguably the most complete data and highest technical capacity for analysis can be found, many partners complained that they felt excluded from the analysis because of the length of the process or the location where it occurred (although recently attempts have been made to open up the process in Somalia to include a broader range of actors). In Kenya, the analysis was mostly managed by a small group within the KFSSG (the Data and Information Sub-committee of the KFSSG, or DISK).

Managing a participatory analytical process can be difficult—it is effectively a coordination task added to an already difficult analysis task. When compounded by attempts to undermine or control the analysis for political purposes, it can overwhelm technical staff charged with leading the process. This can often lead to the decision to limit participation, which in turn will limit the number of contentious issues that have to be managed. On the other hand, the original reason for the consensus process in IPC was to ensure that the process was not taken over by a single interest party or group. Having many parties at the analysis table ensured that all the data were considered and that the best technical analysis would result. A final concern about transparency relates to the process of data cleaning—which is often

Table 4: Analysis issues, by country case study

	South Sudan	Nigeria	Somalia	Yemen	Ethiopia	Kenya
Limited participation/ transparency	Х	Χ	Χ	Χ	X	Χ
Concerns about leadership	X	Χ		X	Χ	
Limited capacity	X	Χ		X	Χ	
Consensus-based analysis	X	Χ	X	X	X	X
The "loudest voice in the room" problem	Χ	X	Χ	Χ	Χ	Χ
• The "Goldilocks" solution	Χ	Χ		X	Χ	
 Uncertainty in the P4/P5 division 	X			X		
Emphasizing outcomes before causes	Χ	X	Χ	Χ	Χ	
Clarifying purpose of analysis	Χ	Χ	Χ	X	Χ	Χ
Risk of false negatives	X	Χ	X	X	Χ	
Doubts about numbers of people in need	X	Χ		X	X	
Unanswered questions in the analysis	Χ	X		Χ	Χ	

done by only one agency or a small group in some cases, a process often not clearly documented for other partners to see.

Leadership. Across all these countries, the intent of almost all parties involved in information and analysis systems is that such systems should be government-led. Regardless of whether information systems are government owned and led (as in Ethiopia or Kenya), are IPC/CH partnerships at least nominally convened by government (South Sudan, Nigeria, Yemen), or were set up as independent units (Somalia), almost all parties agree that information systems should be government-led. One view is that anything less than this amounts to undermin-

ing national sovereignty and borders with the worst neo-colonial tendencies of the humanitarian community. However, this must be balanced against international agreements such as the responsibility to protect. In fact, the way that the leadership of these systems plays out is highly variable.¹⁰

In Somalia—the most straightforward case—the FSNAU was set up as an independent analysis unit in the 1990s, when there was little in the way of a Somali state. Since 2013, however, Somalia has had a functioning central state—and one that has received

Indeed, fears about the way in which systems are led, particularly in conflict emergencies in which governments are party to the conflict, was one of the factors that led to this study.

considerable backing from the same donors that set FSNAU up as an independent unit. While FSNAU has long been prized by the humanitarian community for its independent analysis, at the time of the case study, significant pressures were brought on FSNAU (and FAO, under whose auspices FSNAU operates) to move some or all of its operations under government control. But the issue of government ownership was very unclear, given the number of different ministries and the relatively weak role of the federal government vis-à-vis the Federal Member States in Somalia.

In other cases, government-led processes (such as IPC/CH processes in South Sudan, Nigeria, and Yemen) can be fraught with difficulty. This includes relatively technical issues—such as a poorly managed coordination structure—but in extreme cases, it can make an independent analysis difficult to impossible. This will be explored in greater detail in the next section, but government-led systems have resulted in entire analyses being quashed or kept from publication, groups being expelled from the analysis, and subtle efforts to sway determinations away from outcomes that might reflect badly on the government (or in the paraphrased words of a number of respondents, "tarnish the reputation of the state"). Government-led systems in Kenya and Ethiopia function differently but have their own issues as well when reputational risk to the government arises, for instance, during elections.

Capacity. A closely related issue is that of capacity. As a rule, in the humanitarian system, staff members are selected and promoted to lead information collection and analysis based on their technical skills and experience, since this is seen as a technical task. In fact, the best leaders of these processes from the humanitarian agency side *have* to be technical experts *with* the ability to direct different tasks in order to manage political processes, encourage widespread participation, and ensure the whole process remains evidence-based and independent. Some individuals have this combination of capacities, but this combination of technical and diplomatic skills is unusual in a single person.

Nevertheless, when the issue of "capacity" arises, it almost always revolves around technical training, assumes that training is for newcomers to the process, and is often oriented towards government

staff. In many cases, this is appropriate—some of the methods and approaches may be new to government staff. And across all cases (with the exception of Kenya and to some extent Ethiopia) both government and humanitarian agency staff experience high turnover. And technical guidance is constantly being updated, requiring even the most experienced analysts to upgrade their skills regularly. Capacity, or the lack thereof, is therefore a constant challenge in terms of both technical and "soft skill" capacities. These "soft skill" requirements are beginning to be addressed, but there is much room for improved capacity.

Consensus-based analysis. Perhaps one of the most important aspects of IPC analysis is the notion that humanitarian analysis should be a technical consensus: the best analysts in a country garnering the best data, working together to hammer out their best analysis of a complex situation that threatens people's right to basic needs. Sometimes the process works that way, but in many observed cases, it does not. We will discuss several key issues here, and additional observations on the process of consensus analysis will be discussed in the next section.

The first issue is the attempt of powerful actors to control the analysis, labeled as the "loudest voice in **the room**." This phenomenon was observed in nearly every consensus process. In short, some members assert their authority over a consensus-based process and overtly influence the outcome by being "loud." This may be based on the political power of the agency represented (South Sudan, Nigeria, Somalia, Yemen) or on the reputation or experience of the individual (examples in all cases). In some cases, an influential member may be able to pull a consensus process back on track if it is going astray, but more frequently powerful actors influence the analysis towards a particular outcome that is more suited to their purposes—facilitated by gaps in the data, poor-quality data, and uncertainties about how to use qualitative information.

The second issue is the tendency, partially influenced by the "loudest voice" issue, towards less risky outcomes to the analysis. Risks are inherent in any kind of analysis, but the risks in famine analysis are fraught: there are both humanitarian risks and political risks. The first risk is to humanitarian agencies.

A frequent accusation is that big agencies are simply trying to protect their reputations, their budgets, and their privileges, but they are also trying to protect pipelines vulnerable populations against shortfalls. The second risk is angering a host government: almost without exception, governments do not like to hear the terms "disaster" or "emergency" without very strong evidence, and none like to hear the word "famine"—this was found to be true across all cases. The third risk is that agencies need to manage expectations and reputation vis-à-vis donors. Note that the one party for whom these analyses take place—affected populations—do not have a voice at the analysis table. These pressures come to bear on consensus processes leading to an outcome that has been labeled the "Goldilocks solution" or a politically negotiated outcome to the analysis that is "just right"—that is, all parties can live with it, even if it does not agree with the evidence (for some specific examples, see next section) and does not serve the affected population.

A final issue with consensus-based analysis is the uncertainty of the dividing line between IPC Phase 4 and Phase 5. Thresholds for malnutrition and mortality are population indicators; they do not specify which phase particular households are in. The only indicator that separates Phase 4 and 5 is the Household Hunger Scale (HHS) and this frequently gives rise to contested data and highly contested interpretation: when pressure exists to reduce the proportion of the population in Phase 5, the easiest approach is to raise concerns about the accuracy of the HHS data. This had notable consequences in Yemen and South Sudan but is potentially an issue in all cases. In Yemen and South Sudan, results showing populations in Phase 5 were simply deleted from the analysis by authorities. The issue of differentiating between Phase 4 and Phase 5 has been extensively reviewed elsewhere.12

Emphasizing outcomes (rather than causes). The amount of time allocated to—and the heavy empha-

sis in the IPC approach on—categories of outcome information (current status on the prevalence of food insecurity and malnutrition, the current crude mortality rate, etc.) means that frequently in-depth analysis of the factors causing these conditions is minimized. The analysis of causal factors is conducted only after current-status information is assembled and analyzed. This in turn makes early warning analysis on this kind of information difficult. Projections, which are as close to early warning information as IPC produces, were frequently inaccurate in countries where no separate early warning system exists. The inaccurate projections are due in part to the political difficulties in conducting any in-depth analysis of conflict—even though conflict was clearly the major driver of food insecurity and malnutrition (particularly in Nigeria, Yemen, and South Sudan).

Clarity of purpose in a complex analysis. As implied above, the first purpose of IPC analysis is to provide an accurate assessment of current status regarding food security and nutrition. Early warning is a different function—warning governments, donors, and humanitarian agencies about deteriorating conditions that might lead to humanitarian crisis conditions in the future so that these conditions might be mitigated or at least preparations for response can begin early. FEWS NET has long been associated with this kind of analysis. How early warning is done—and the extent to which the analysis of early warning information might be politicized—has given rise to attempts to predict future conditions by purely predictive data, compared to the standard methods of scenario analysis. Recent efforts to improve rapid response to worsening conditions have focused on real-time monitoring rather than on traditional early warning (Somalia and South Sudan). Similarly, IPC analysis has focused not only on current assessment but also projections—or not only depicting population by phase classification in the current time frame but also attempting to predict future populations by phase classification (two to three months out and four to five months out). All of this information—raw information about various early warning factors such as predicted rainfall, food price trends, crop and livestock pests, etcetera—is available, sometimes in confusing combinations and volumes. This often leaves decision-makers confused about both current conditions and future risks. Efforts towards consoli-

¹¹ Based on the 19th century English folktale about a little girl who inadvertently enters the home of three bears while they are away, and finds the porridge, bed, and chair of the parent bears too extreme (too hot, too cold; too hard, too soft) but finds baby bear's amenities to be "just right."

¹² See Centre for Humanitarian Change (2019).

dating these systems are emerging. However, strong institutional imperatives to protect already existing systems or mandates do not lead to the rationalization of systems.

In some cases, competing systems and actors operate in the same country. This is especially the case in Ethiopia and to a lesser degree in other countries. In some cases, this is because donors are not satisfied with existing sources of information and so have invented new ones. This leads to increasing complexity in the system.

The risk of false negatives: rigid methodology and high requirements for data reliability. IPC analysis has means of judging the reliability of data and rules for whether data can be admitted into the analysis. Several case studies (South Sudan, Yemen, Nigeria) noted that the information requirements for the determination of famine, and the rigor required of the data, set a very high bar for any actual declaration. The requirements to declare a famine include the unambiguous and simultaneous breaching of thresholds in three sets of indicators (food insecurity, malnutrition, and mortality) in a given location and period. Meeting these requirements is often impossible given the obstacles to unobstructed data collection and independent analysis. While there are valid reasons for requiring rigorous and reliable evidence for a famine declaration, these requirements all safeguard against the likelihood of a false positive: determining a famine when in fact no famine is occurring. However, this configuration of requirements does little to safeguard against the opposite error of a false negative: failing to declare a famine when one is actually occurring. Indeed, over recent cases of famine or near-famine conditions, much of the evidence has not been of sufficient rigor and reliability to make firm statements.

Numbers of people in need. One of the key outputs of these analyses is the number of people in need of emergency food assistance. As is clear from the above, these numbers are highly subject to political pressures—with analysis teams pressured to both increase and decrease the numbers, depending on the circumstances. The numbers of course, have a major impact on Humanitarian Needs Overviews (HNOs) and other donor requirements in situations where other sources of information are scarce. This number has a major influence on resource allocation, the

ability of agencies to intervene, and governments' claim of legitimately protecting their citizenry. The people-in-need number is also sometimes used as a bit of "score-card"—with declining numbers reflecting well on the investment in the humanitarian response plan just completed (or even, in one case, on the state of the conflict).

Unanswered questions in the analysis. Perhaps the most confounding problems arise when an expensive and difficult-to-organize analysis does not address or explain the situation at hand. For example, the central technical conundrum in the Yemen IPC analysis of 2018 was that the country had been in a severe humanitarian crisis—dubbed "the worst in the world" by the UN under-secretary general and emergency response coordinator—for four years, and the food security situation had been in Phase 4 for some time, bordering on Phase 5 in a number of locations. Yet malnutrition was not particularly extreme and mortality was very low—even zero in some cases. What caused the incongruence between the nutrition and mortality data and the other food security data is not clear. Some observers suggested that the incongruence was caused by deliberate tampering with the data. Others suggested it reflected the fact that some of the data was badly out of date and not collected in the hardest-hit areas. Others suggested that the data were accurate, and people in the crisis-affected areas were surviving by sharing the little they had.

The data and the analysis couldn't address this conundrum and suggest that focusing solely on food security and nutrition outcomes was actually an obstacle to good analysis. In this case, in the absence of corollary data on health and WASH outcomes as well as information about maternal buffering or social cohesion—it was impossible to explain the nutrition or mortality outcomes or come to hard conclusions on how serious the food insecurity actually was. And it was primarily the nutrition and mortality outcomes that drove the IPC classifications downwards, but it was the food security information that determined the numbers in need of food assistance (and therefore to some extent, the HNO numbers), leaving the analysis open to being swayed by various political positions. This central analytical conundrum in Yemen still hasn't been addressed sixteen months later.

Table 5. Political constraints and influences, by country case study

	South Sudan	Nigeria	Somalia	Yemen	Ethiopia	Kenya
Lack of access (and how it is depicted)	X	X	X	X	X	
Missing information (especially mortality)	X	Χ		X	Χ	
Political interference: government, agencies, donors	X	Χ	Χ	X	Χ	X
Concerns about numbers in need	X	X		X	Χ	Χ
Self-censorship	X	X		X	Χ	
Right-skewed but truncated population distributions	X			X		
"Speaking outside the consensus"		X				X
Independence and impartiality		Χ	X	X	X	

Constraints and influences

The preceding two sections provide an overview of the key issues relating to data collection practices and analysis that emerge across the six cases. Table 5 summarizes the key political constraints and notes the country case studies in which these issues arose as concerns. As with the previous sections, the narrative following provides brief examples of each of the categories in the summary in Table 5.

Access. As noted in the section on data, a major constraint on data collection—and frequently the reason for missing data—is difficulty accessing field sites where the worst affected populations are. Access was an absolute constraint in Nigeria and in al Shabaab-controlled areas in Somalia. Although access constraints for the most part in South Sudan and Yemen are not binding or permanent (that is, at times, visiting most places in these countries is possible) the occasional flare-ups in the conflict and especially the delays in getting permissions often meant that the analysis of a given situation was incomplete—and the depiction or mapping of incom-

plete analysis was another way in which the analysis could be influenced. Conflict-related displacement in Ethiopia is often in sites that are difficult to access. Although in general, access problems are not considered as serious in Ethiopia as in some of the other country cases. Kenya has some restrictions on access in the northeastern most counties, but again, not as constraining as in other countries.

One major concern is the way in which inaccessible areas are depicted or mapped. Frequently in conflict crises, either security or political constraints limit access to certain areas (see next section). When this happens, there is no standard means of analysis. Sometimes no attempt is made to analyze, and the area is mapped in a way that shows it has not been analyzed because of access constraints (usually by being colored grey). This has occurred in South Sudan. In Yemen, inaccessible areas have been given the same classification as adjacent areas, which may misleadingly under-classify the area, given that accessible areas by definition have access to humanitarian assistance, whereas inaccessible areas do not. In Somalia, key informant interviews are the main source of information on al Shabaab-controlled areas—which are mapped the same way they would be if based on survey data. On nutrition maps in Somalia, inaccessible areas are clearly left as white (indicating no access) whereas the food security maps are always colored by severity classification. Like other countries in civil war, access in Yemen was a huge constraint to representative and independent data collection. Some areas were simply not accessible, and these were most frequently the hardest hit areas. Yet the whole map is colored.

Depicting inaccessible areas on the Cadre Harmonisé maps in Nigeria was the subject of considerable debate. Some wanted to extrapolate to inaccessible areas from places that had been assessed (likely under-estimating the severity of the crisis there). Others wanted to leave these areas unmarked on the map, which would have made clear how much area was not under the control of the federal Nigerian government forces—an area of considerable contention in the Nigerian context. (Like other studies, little conflict analysis was permitted in CH discussions in Nigeria.)

A second concern is about the reason for denial of access. Delays in permissions or outright denials might, of course, be due to genuine security concerns, or they may simply be an excuse to disallow information collection in sensitive areas. Respondents reported this excuse at the time of the case study in South Sudan (though access constraints have lessened more recently because the active fighting has declined), and respondents strongly suspected it in the Yemen case study.

Missing information. Many of the same concerns about access constraints apply to missing information. Missing information may be a way of hobbling analysis. All parties clearly understand, for example, that without mortality data, nothing can be said about famine. So, if the political pressure is to prevent concrete talk about famine, one certain way of ensuring this is to prevent collection of mortality data (South Sudan); or to argue that mortality data must be collected in such a rush that it is of insufficient rigor and reliability (Nigeria). Other pieces of information that were frequently missing—such as population, displacement, or other categories of humanitarian outcomes—made analysis more difficult but weren't an absolute constraint in the same way that mortality data were.

Of course, missing—or severely limited—information about causal factors was a problem across all case studies, particularly regarding conflict. But conflict was considered distinctly "political" information in several cases (Nigeria, South Sudan, Yemen, Ethiopia) and thus for the most part very difficult to bring into "technical" analyses such as food security, particularly in analyses involving government partners (agencies may analyze conflict for their own security purposes and incorporate it into in-house analysis).

Political interference. In some cases, political interference may be direct and flagrant; more frequently it is subtle and difficult to detect and counter. While the most frequent source of interference is from national governments, it can also come from humanitarian agencies or from donors. Overt government interference included reports being quashed, analyses being stopped, and individuals being threatened with deportation (if international) or removed from their jobs (if national government employees). In South Sudan, the final outputs of any analysis of famine or extreme food insecurity had to be reviewed by the Food Security Council and the Council of Ministers. On at least one occasion, the report was quashed altogether by the Minister of Agriculture. On many occasions, changes to reports were required. The national government technical staff involved in the famine declaration were fired from their government jobs—though reinstated after the intervention of other government bodies. South Sudan may have the most flagrant interference, but less flagrant cases—denial of movement, interminable delays in approvals, etcetera—were reported in other countries as well.

Influences on the "number in need." The other major source of interference from government is over the numbers of people in need—a figure so highly politicized in some contexts that there is simply no question that it is a politically-negotiated, not evidence-derived, number. Ethiopia is probably the most extreme case with regard to the politics of numbers, but it is contentious in many cases. And of course, without detailed knowledge of the behind-the-scenes politics, it is difficult to determine if the numbers are being pushed upwards (usually in search of greater resource allocation) or downwards (usually to minimize the extent of a crisis and

improve appearances to domestic and international political stakeholders). In the Nigeria case study, several respondents noted that the government (in early 2018) was strongly making the case that "the war against Boko Haram is over" (so was interested to push the number of people in need downward), and therefore the Cadre Harmonisé analysis of food security needed to show that the situation had improved.

Similar efforts were noted in the South Sudan case. but here the pressure was to indicate less severe situations rather than fewer people in need. After the famine in 2017, it became increasingly difficult to note (or even discuss) populations in Phase 5, even if their magnitude was well below famine thresholds. But in the Ethiopia case, respondents noted that sometimes pressure at the local level pushes the numbers of affected people up, in the hope that additional resources will be forthcoming. Other times, number are pushed up at the local level because local officials know that their estimates will be revised downwards at higher levels of government. Therefore, they deliberately over-estimate the numbers at the local level in effort to end up at a "reasonable" level of resource allocation.

Agencies too, sometimes have interest in the numbers, because resources are tied to the reported number of people in need. This usually doesn't result in flagrant attempts to manipulate the numbers, but many respondents noted a general sensitivity about numbers even in humanitarian agencies, and towards at least the maintenance of budgets if not increases. Donors on the other hand, may be skeptical of numbers and may push back on analyses. Donors may also expect to see some impact from *last year's* response investment reflected in the numbers of a current analysis. For example, at the time of the Somalia case study, in early 2018, the donor community strongly exuded an expectation that the post-deyr IPC analysis show a major improvement, to demonstrate the impact of the \$1 billion plus put into the 2017 Humanitarian Response Plan. Analysts were aware of all these pressures in all the case studies. Even while doing their best to produce independent analyses, these pressures have influence. As noted in the Nigeria case study report, "If the outcomes of the Cadre Harmonisé don't improve, donors will question the impact of the ongoing response—perhaps endangering future programs. On the other hand, if Cadre Harmonisé outcomes improve too much, it would support the conclusion that the crisis has abated and be a reason for scaling back the response" (Maxwell et al. 2018b, p. 29).

Self-censorship. Perhaps the most insidious way in which these pressures manifest themselves is through self-censorship on the part of analysis teams. In some reported cases, they began to change the analysis to deflect criticism or push-back from political authorities. Some were intimidated by people with "the loudest voice in the room," as noted in the previous section (who usually have the strongest political connections); some did simply for self-preservation: these teams not only have to think about the data in front of them, but also of future access to the field for assessment, future streams of funding, their own security, and their own sanity. These are very difficult situations in which to have a purely evidence-driven analysis, hard as people might try. Self-censorship manifests in various ways.

In some cases, self-censorship leads to delaying data collection, revising schedules or protocols, or not pushing back very hard on denials of access (South Sudan). Teams may simply avoid extremely sensitive areas or topics of conversation in the analysis (Nigeria, Yemen). Or they may not push back with evidence to the contrary when it comes to numbers—particularly if dealing with armed groups. There are several additional ways in which self-censorship is manifested, and several responses to it. The first has to do with the "Goldilocks" phenomenon discussed in the previous section. Other responses have to do with speaking out: either through issuing minority reports in consensus driven processes or by speaking outside the consensus.

Left-skewed but truncated population distributions: A "Goldilocks" response? There are a variety of negotiated outcomes to analyses, some of which could be said to be searching for the outcome that everyone can live with. The most graphically evident case of apparent self-censorship in this regard is the so-called left-skewed but truncated distribution of population by IPC category (referred to by some field analysts as "over-loading Phase 4"). Populations in

Please note that the "skewness" of these distributions was mis-labeled in earlier reports. It is actually the directionality of the tail that defines skewness, not the

IPC Phase 3 are deemed to require food assistance, though not as urgently—particularly in a resource constrained situation. Phase 5 implies famine or famine-like conditions for some households, which raises political problems with governments. A compromise "consensus" is often to put a large part of a population into Phase 3 and Phase 4, but none in Phase 5.

While there is no expectation that the numbers of people in need are normally distributed across IPC phases, the graphs on the left side of Figure 1 (a, b, c) give examples of distributions that might be expected. For example, under relatively "normal" conditions (1a), a "right-skewed" distribution might be expected, with declining proportions of the population in each higher phase. In a crisis situation, you might expect some kind of "central tendency" across several phases (1b depicts what this looks like with a small proportion of the population in Phase 5). In very severe situations, you might expect a "left-skewed" distribution with increasing proportions of the populations in each higher phase (1c depicts this situation—as it occurred in Leer county in South Sudan in early 2017—Figures 1a to 1c are all actual population distributions from South Sudan).

The distributions on the right side of Figure 1 (d, e, and f) depict increasing proportions of the population in each higher phase, until Phase 5, where there is no population noted. This gives a "left-skewed but truncated" distribution of the affected population. This was first noted in South Sudan with regard to several cases in 2015–16 but continued even afterward (Figure 1).

In theory, population distributions could be expected in any of the depictions on the left side of Figure 1 (right skewed, demonstrating some kind of central tendency, or left skewed), but, a priori, it is highly unlikely that the distribution would be left-skewed but then truncated at Phase 5: the only feasible explanation is that extremely well-targeted food assistance is going only to the absolutely most vulnerable—a situation well-known *not* to exist in South Sudan (Maxwell and Burns 2008).

bulk of the data. Earlier reports had this backwards, so referred to this phenomenon as "right skewed but truncated" distributions. Apologies for the error.

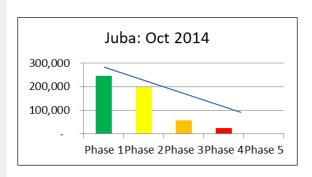
When queried, respondents noted that this might represent one of two phenomena: One was a fear of using Phase 5 or "famine," the other was a tendency to "overload" Phase 4. These amount to the same thing, but can be done for different reasons (see above). Over a four-year period (with two analyses per year for 86 counties, nearly 700 data points) a few dozen examples of this kind of distribution were identified (6 or 7 percent of cases). In Yemen, in one analysis of 330 districts, nearly half of the districts (158) were found to have a "left-skewed but truncated" distribution at a time of high famine risk (a handful of examples are depicted in Figure 2).

This is the kind of data-quality check needed for standardized analysis. Of course, in the absence of alternative or comparative data, nothing can be said except that this is a highly unlikely distribution, and extremely unlikely that, even if a few cases exist, they would not exist in half of the districts analyzed. At a minimum it would suggest the need for a re-assessment of the data to look for biases that might result in this kind of distribution.

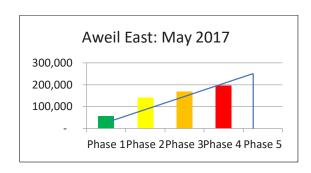
Speaking outside the consensus. Some cases were noted in which a party to the analysis either issued a separate analysis or registered a minority opinion within a consensus-based process. In general, this is considered "speaking outside a consensus analysis." It may be the only means of escaping self-censorship but often requires considerable courage on the part of an individual or team. CH analysis had not suggested that a famine occurred in Nigeria. However FEWS NET analyzed the rapid assessments and mass screenings that took place in the first weeks after the towns of Bama and Banki were recaptured and concluded that a famine was likely occurring among IDPs clustered in those towns at the time they were recaptured by the army—and that famine was likely continuing inside the Boko Haram-controlled territory (FEWS NET 2016). This raised the issue of analysts "speaking beyond the consensus"—both CH and IPC analyses are intended to be consensus processes. There is no specific guidance about what happens when a party to the analysis seriously disagrees with the analysis and has credible evidence to back up its disagreement. One way of dealing with the issue is noted below under lessons learned.

Threats to independence and impartiality. Many influences pose constraints to the independence and

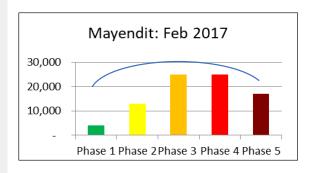
Figure 1. "Left-skewed/truncated" distributions of population of selected counties, by IPC phase classification (South Sudan, various years)



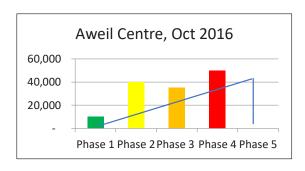




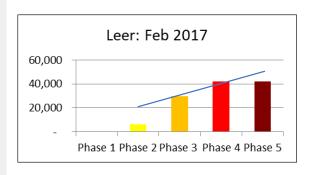
d. "Left-skewed truncated" (no Phase 5)



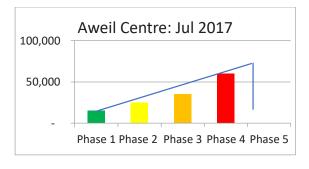
b. "Bell-shaped" distribution (famine)



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



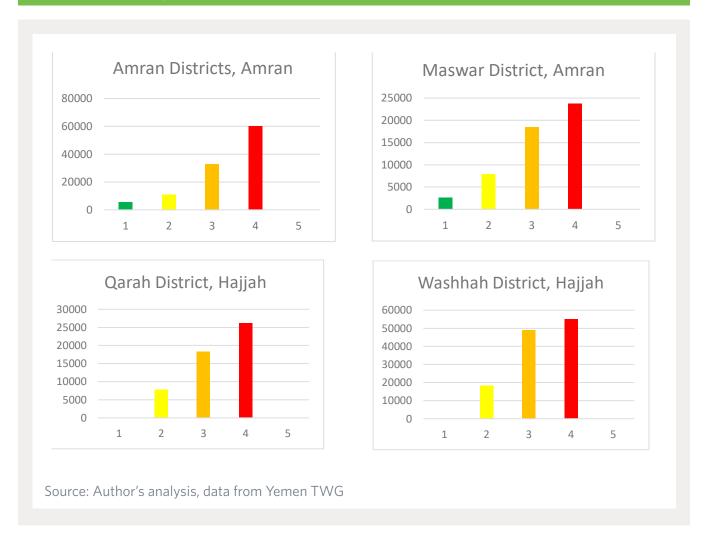
c. "Left-skewed" distribution (famine)



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

Source: Author's analysis, data from South Sudan TWG

Figure 2. "Left-skewed/truncated" distributions of population of selected districts, by IPC Phase Classification (Yemen, 2018)



impartiality of humanitarian analysis, particularly in famine or near-famine situations. The purpose of current-status analysis is to identify need and compare the severity of needs impartially among dissimilar crises globally. To the extent that the independence and reliability of such analyses are undermined, all parties are potentially worse off in the medium term (though some may avoid problems or damage to reputations in the short term). The threats to independent and impartial humanitarian data analysis comes from nearly all quarters—governments and armed opposition groups, donors and agencies, and in some cases local government or representatives of affected communities. In many cases, even the word "famine" is forbidden or strong-

ly discouraged; even terms like hunger or starvation when applied to individuals or very small groups can be politically very sensitive. In all cases, the attempt to influence resource allocation also means influencing the analysis—and both analysis and data collection processes can be subject to this influence. Committed individuals and teams are doing their best under trying circumstances to protect the independence and integrity of analysis, but they are often fighting an uphill battle in many of these contexts. In some cases, humanitarian assistance has become part and parcel of the war economy or even formal military strategy, making the task of independent and rigorous analysis more difficult. In all cases humanitarian aid and humanitarian information

systems like IPC are operating in a highly political environment that pervades all actions and decisions. It is only by being aware and putting in place mitigating actions that humanitarians can aspire to being independent and impartial.

At least some of these processes—notably IPC and CH—have twin objectives. One the one hand, they are intended to be consensus processes that build capacity for an analysis that is locally owned and government-led; on the other hand, they are expected to provide rigorous and independent analyses of famine and food security crises in contexts where government is one party to the conflict (or in the case of Yemen, to analyze collaboratively with two competing authorities that are *both* parties to the conflict). Even within a county where the government is not at war many different levels exist, with differing objectives. And of course, donors and agencies have differing objectives and priorities.

Skilled and committed individuals and teams are working on these problems, and some good practice and emergent possibilities for mitigating or managing these pressures have been noted (and even suggested) in the course of this study. The next section briefly reviews the most salient ones.

Lessons learned: Emerging good practice to manage political influences

One of the key objectives of this study was to help build the most independent, impartial, and rigorous analysis of famines and extreme humanitarian emergencies in order to improve the prevention, mitigation of, and response to, such crises. While it is important to identify the threats to independent and impartial analysis, it is also important to review and assess the good practices that emerge from the evidence across the six case studies.

Table 6 summarizes the main good practices and notes the country case studies in which these practices were being tried. As with the previous sections, the following narrative provides brief examples of each of the categories in the summary in Table 6.

Improving capacity. This study observed that political influences are the most flagrant where the data collection and the technical capacity of analysis teams are the weakest. Therefore, it makes sense to focus on strengthening capacity. This observation applies both to data-collection and analysis teams within international and local humanitarian agencies as well as within government. Team capacity building is already happening in many ways: new versions of technical guidelines are being developed and rolled out (notably Version 3.0 of the IPC Technical Manual), new organizations have appeared in recent years devoted specifically to capacity building (ACAPS, REACH), and established organizations are developing new initiatives to improve information and analysis (UNOCHA, World Bank, etc.). But these efforts face obstacles: staff turnover is high, motivation for participation in capacity building may be mixed, and inevitably new challenges arise for which capacity and technical guidance do not yet exist. For government partners, in addition to technical capacity building, much work is to be done to build the skillset around consensus building, ensuring participation, and other "soft" skills. Likewise, more effort is needed to ensure buy-in for the outcomes of analysis. Under some circumstances, greater consultation with authorities on the outcome of the analysis have paved the way for greater acceptance of "unpopular" findings. But this consultation doesn't always have the intended impact.

Clarifying the role of government. The role of national governments in humanitarian information systems varies. The normative view is that governments should lead these processes, and international donors and agencies should support the capacity and leadership of national governments. Indeed the initial purpose of the IPC/CH process was both to provide a consensus analysis and to build the capacity of government to lead that consensus. This becomes a significantly more complicated issue in cases where national governments are parties to conflicts that are at least partially causing the emergency. Even when government is not directly involved in a conflict that is driving famine risk, the evidence is that different levels of government may try to increase or decrease the numbers in need, or in other ways undermine or subvert an analysis, depending on political objectives. So important questions remain: Is government

Table 6. Lessons learned, by country case study

	South Sudan	Nigeria	Somalia	Yemen	Ethiopia	Kenya
Improving capacity (analysis teams and government)	Χ	X	X	X	X	X
Clarifying the role of government	Χ	X	Χ	Χ	Χ	
Sharing data	X	X	Χ	X	Χ	X
Clarifying the purpose of the analysis	Χ	X	Χ	X	Χ	
Broadening participation		Χ	Χ	X	Χ	Χ
Building buy-in and support at higher levels	Χ		X	X		
Picking allies	X		Χ	X	X	
Improvising new ways to analyze						
Relying on "two sets of books"	Χ				X	
Making use of ex-post learning sessions	Χ				X	
Speaking outside the consensus		X			Χ	X
Improving causal analysis/use of qualitative information		X	Χ	Χ	Χ	
Integrating the analysis	X	X	Χ		Χ	X
Trying new technology?	?	?	?	?	?	?

one party among equals? Is it the convener? Or does government always have the final say—the veto power? These are not technical questions or an issue of capacity, but ultimately must be addressed to protect independent analysis and must have the buy-in and support of all parties. But clearly the relationship with government needs to fit the context (Buchanan-Smith et al. 2019).

Sharing data. Without exception in the case studies, at least some parties were disaffected and seri-

ously crippled in their analysis because data were not shared. Nearly all parties have a policy of "data transparency" but they don't specify a time frame—sometimes it can be months or years before a data set is available for public use (if ever), by which time its usefulness for humanitarian analysis has declined to little more than retrospective analysis. Most countries have agreed upon means for sharing nutrition data, but many do not have agreements for sharing food security or other kinds of data.

Various interim arrangements have been worked out for at least some modicum of data sharing in the field. After contentious disagreements in South Sudan, for example, staff from various organizations agreed to work together on real time analysis. In other cases, donors have brought pressure on agencies to share data. Better data transparency and sharing of raw data among various partners in the analysis would mean that the analysis could be crosschecked. This may not be in the short-term interests of some parties (who have an interest in controlling a specific narrative) but would be in the long-term interests of all because it would strengthen observers' trust in the analysis.

Clarifying the purpose of the analysis. This study reviewed a variety of forms of analysis. Inevitably, because of its influence over the distribution of resources, current-status analysis such as IPC or CH has become the most common form. Early warning (EW) serves a different purpose and relies on somewhat different data. Real-time monitoring (RTM) to inform short-term changes between largescale current-status assessments is another form of information. Both EW and RTM are critical for the identification of "hotspots," which periodic analyses like IPC have limited ability to identify. All of these inform future projections. Data requirements and the inter-operability of indicators and information sources overlap to a great extent, but the roles of different kinds of analysis—as well as how that analysis is to be used—need to be clarified. An over-arching framework is helpful, but the specifics must be applied in each case.

Broadening participation. Leveling the playing field to broaden participation is of paramount importance because most of these processes are built on consensus. The 2019 evaluation of the IPC Global Strategic Programme (Buchanan-Smith et al. 2019) showed that the collective/consensus-based nature of IPC analysis is its greatest asset. However, sometimes this nature also allows political influences to affect the results of the analysis because technical teams can't manage these politics very well. Ensuring a wide base of participation, and ensuring that not only the specialized or large agencies have a "voice" in the process, can actually counter-balance the "loudest voice in the room" or other consensus-busting phenomena described above.

In the same vein, it is imperative that nutrition working groups are fully integrated into IPC processes, especially as nutrition and mortality hotspots usually are not the same as food security hotspots.

Building buy-in and support at higher levels.

Technical managers of data collection and analysis agencies and teams already have enough problems on their plates. Adding the task of single-handedly managing all the issues raised here is clearly asking too much. Everyone in the humanitarian community—including governments, but especially including UN agencies, NGOs, and donors—benefits from their constituencies trusting that they are using rigorous, independently analyzed evidence. So, where political challenges need to be managed, having the buy-in and support at the higher levels of the humanitarian system is essential. This includes agency leadership at the country level, but also the UN Humanitarian Country Team (HCT) and, where necessary, executive leadership of agencies (including donor agencies) at the global level. It is incumbent on agency leadership to support this effort. This means support for negotiating access, for accountability, for the independence of the analysis, and for protecting analysts against unpopular but evidence-based outcomes of the analysis. It may be up to technical managers to begin to build this support, but mitigating political influences in the analysis is too important to be simply tacked onto the jobs of mid-level technical managers. In contentious IPC or CH analyses, having support or presence from the GSU team throughout the analysis process has proven helpful—a finding also supported by the evaluation of the IPC (Buchanan-Smith et al. 2019).

Picking allies. No government, humanitarian agency, or even armed group is a monolith. Experience indicates that one can carefully build alliances even in bodies with whom you expect disagreement around the inputs or results of humanitarian analysis. This may also involve building support for a controversial outcome to an analysis (especially a famine declaration) before going public with it.

Improvising new means of analysis. Despite efforts to continuously improve technical processes related to both data collection and analysis, inevitably situations arise for which existing means of analyzing or even describing a situation are inadequate. Some room must be left in the process for improvisation.

Improvisation is viewed as the enemy of "rulesbased" analysis, because by definition improvisation is outside the rules. But given the fluid and extremely dangerous contexts in which some data collection and analysis occurs, some flexible space has to be maintained even in heavily rules-driven analysis. An example was a famine analysis improvisation that expressed a well-founded fear that famine might be occurring, even though strictly following the "rules" meant that no definitive statement could be issued. Another example was labeling a situation as "elevated risk of famine." Another was the "two-step process" in which "step one" was the rules-based analysis and "step two" was the expert opinion of the analysts. Other examples include the attempt to devise rapid assessment methods for situations of extremely limited access, 14 or conducting analyses outside of the usual timetable of seasonal analysis. Or attempts to address access constraints through greater use of remote sensing, Delphic processes, or other innovative means such as the "Area of Knowledge" surveys pioneered by REACH.

Relying on "two sets of books." In Ethiopia in particular, but to a lesser degree in other contexts, some analysts (and some donors) openly admit that they maintain two sets of figures—one that is "official" and can be talked about publicly and the other private, but which contains one's best estimates as to "real" figures. In many ways, this is a hindrance to good analysis—the "official" figures should be the "real" figures. But where political pressures distort official figures, keeping a second "set of books" may be the only way to try to retain some sense of reality. Openly keeping two sets of books might endanger individuals, but might eventually pull the "official" and the "real" together into the same set of data and thus the same analysis, especially if it is clear that donors are doing it.

Making use of ex-post learning sessions. In some countries, regular sessions have been instituted to evaluate the independence and rigor of the analysis process once the actual process is complete. This provides opportunities to learn from and help correct technical mistakes and overcome political influences. To date, several countries have conducted exercises like this as an inter-agency team (including South

Sudan, Ethiopia, and Kenya). Some individual units and agencies practice this a lot.

"Speaking outside the consensus." Despite all the intent towards a consensus analysis (again, particularly with regard to IPC/CH), "speaking outside the consensus," while annoying to some, is actually important under some circumstances. In Nigeria in 2016, after the federal Nigerian Army recaptured several garrison towns in Borno State, humanitarian conditions were horrific. Initial assessments pointed to the possibility that famine had been occurring in those towns, where large numbers of IDPs had congregated. By the time that proper assessments could be mounted that met the minimum requirements for reliability (sample size, sampling strategy, etc.) to qualify for a CH analysis, four to six weeks had passed, and conditions had improved significantly, because humanitarian agencies had been responding to the affected population. Thus, the CH (consensus) analysis found no sign of famine. However, FEWS NET went back to the original assessment data and noted that, while it could not be proven, it was highly likely that famine conditions had been prevailing at the time the towns of Bama and Banki were recaptured by the army, and therefore it was equally likely that famine conditions were still prevailing in Boko Haram controlled territories. It was in the process of reviewing the evidence for this analysis that the "two step" innovation to the analysis process mentioned above was invented—by the "first step" (IPC/CH compliant) no conclusion could be reached because the data didn't meet the reliability requirements, but the "second step" (convergence of the preponderance of available evidence) strongly pointed to the likelihood of famine. At a minimum, some kind of alternative is required to consensus-based analysis processes in the event that they are undermined by external influences.

Improving causal analysis/use of qualitative information. Much of current analysis relies heavily on outcome data and virtually entirely on quantitative data. Although IPC/CH analysis considers contributing factors, the list doesn't vary much: climatic/environmental factors (drought and flooding), market factors (prices, sometimes terms of trade or purchasing power), and conflict, which is often given little more attention than a mention. Better incorporation of qualitative information—about the context

See the Famine Guidance Notes in Version 3 of the IPC Technical Manual.

but especially about drivers or contributing factors—improves the analysis. Statistical information on outcomes (food security, malnutrition, mortality) is critical to classification of severity, which is the first outcome of current-status analysis. But other kinds of analysis discussed here (early warning, real-time monitoring, and projecting future status) require different kinds of information—particularly causal information.

IPC/CH has rigorous standards for quantitative data reliability, but no such guidance exists for what constitutes reliable qualitative information. Despite the lack of quality control over qualitative data, as noted above, such data are routinely introduced into analyses, and they sway outcomes. Much better guidelines are needed to better incorporate qualitative information into analyses. And finally (and perhaps most problematically), incorporating conflict analysis into the process would improve projections so that better prevention and mitigation efforts could be launched. Failure to incorporate conflict analysis makes the analysis of outcomes more subject to political influences.

Integrating the analysis (across sectors). IPC analysis, FEWS NET information, and other forms of analysis considered here were originally intended to inform food security and nutrition responses. In practice these outputs inform a much broader range of response plans and have implications for assessing needs well beyond the food and nutrition sectors. The numbers in the Humanitarian Needs Overview (HNO) document in many countries depend heavily on IPC outcomes—and HNO numbers in turn shape the Humanitarian Response Plan (HRP). To both improve food security and nutrition response and serve this broader function, analyses need to broaden to cover other sectors or outcomes (especially health

and WASH information) and collect better information of some drivers (especially conflict and displacement). Information systems for these sectors are woefully under-resourced. While this can hardly be blamed on systems that were invented to assess food or nutrition insecurity, it does mean that these mechanisms may have to be tailored differently—not only to cover a broader range of immediate needs, but *also* to provide a broader analysis of causes of food security and nutrition outcomes.

Trying new technology? To many observers, if humans are the source of political interference, analysis that has less human participation might be less political, more accurate, and more trustworthy. This has led to several attempts to automate analysis and rely more heavily on public sources of data. New technologies involving remote sensing, satellite imagery, computational modeling, anthropometry by body photography, and artificial intelligence are all competing to improve humanitarian analysis, including the analysis of food security crises and famine. These approaches certainly should be incorporated into existing analysis processes. Many are equally if not more data hungry than current approaches are, and some kinds of data are never going to become available from remote sensing or "scraping" the internet. New technologies may be highly extractive or introduce biases of their own (such as cell-phone ownership, for example). So new technologies are additional tools for improving analysis, but not necessarily a panacea, and they would likely bring with them some new (political) issues that would require resolving, particularly concerns about data privacy. New technologies and automated processes can certainly address some of the issues of political interference and are a possible area to explore.

6. Conclusions

Major progress has been made in the past decade and a half in building evidence-based responses to famine and extreme humanitarian emergencies. Much of this has been accomplished by improving, streamlining, and regularizing methods of data collection and analysis. There is little doubt that the level of rigor, reliability, and validity of humanitarian information is much greater today than it was 10 to 15 years ago, to say nothing of the difference with the "windscreen assessment" days of the 1980s. Nevertheless, numerous parties have an interest in shaping, influencing, and sometimes blocking or suppressing information about these emergencies.

These parties certainly include national governments and armed non-state actors, but also include donors, humanitarian agencies, or in some cases even the leaders of affected communities. Different parties have different rationales, and all must be understood. Influence on humanitarian analysis takes many forms but can be broken down into attempts to influence or limit data collection; attempts to control, limit, or shape the analysis; attempts to block or delay reports; and attempts to "spin" the communication of the results of analysis in ways that distort the findings.

The analysis—and especially the declaration of famine—is extremely fraught with politics. No party wants to hear the word "famine" invoked: to national governments it implies a failure of governance, it "tarnishes the reputation of the state," and offers opposition politicians or armed opposition groups major fodder with which to attack the current government. To donors and humanitarian agencies, it implies a failure of humanitarian response and, very likely, a failure to heed early warning information. To local communities, it can be a failure to adequately look out for vulnerable members of the community, etcetera. The observation in this study has been that the closer to famine an analysis comes, the more difficult the politics become.

Famine analyses such as IPC or Cadre Harmonisé are exercises in assessing need and classifying the current and projected severity of a crisis. They can also

be expected by some parties to serve as a "report card" on the previous year's humanitarian response plan (HRP) or even a statement on the overall status of a conflict. This places additional political strain on an already fraught analysis process.

To think that the analysis of such crises can take place in a completely independent and influence-free environment is unrealistic. Far more practical is the search for better methods to manage the politics, rather than trying to erase them altogether. And it is not reasonable to expect that staff who are expert analysts in food security and nutrition are necessarily able to also manage political tensions. Higher-level leadership within the humanitarian community must provide the space for technical experts to do their job. In other words, political tensions with government officials need to be defused, addressing these tensions should be the task of UN or agency leadership. Leaving this to technical staff will only undermine their ability to conduct good technical analysis. If the tensions are between agencies, again these should be worked out at the leadership level—not at the level of technical staff.

The politics of influencing humanitarian information and analysis are the most difficult to control when the technical quality of the data is the weakest. Weak data can be a constraint even with good analysts. Likewise, low technical capacity of analysis teams, even with relatively good data, can also be a big opening for politicization of the results.

In the declaration of famine or other extremely severe emergency, a balance must be struck between the fear of a false positive (declaring a famine or emergency when there actually isn't one—or it isn't that serious) versus the fear of a false negative (failing to declare a famine or emergency when there actually is one). Current systems tend to prioritize safeguarding against false positives. However, the risk of a false negative is much higher in humanitarian terms—potential loss of lives, livelihoods, and dignity.

Humanitarian information systems are intended to produce both current-status information ("hard"

data about events that have already happened and people already in need) and early warning information (probabilistic information about risks and hazards and people likely to be in need). Many systems confuse or fail to distinguish between these two types of information. The former is critical to the impartial allocation of resources, which can be subject to updates in allocation. The latter is critical for anticipating crises and is most useful if acted upon in a timely manner. Recently, several attempts have been made to introduce real-time monitoring mechanisms in addition to large-scale needs assessments and early warning systems. All of these are legitimate components of humanitarian information and analysis systems, but each plays a separate—and complementary—role.

Building systems that guarantee the broadest participation in data collection and analysis is a key safeguard against political influences. But the greater the participation is, the more difficult the coordination. The broader the inclusion of disparate sources of data and information, the greater the constraints are on ensuring data quality and reliability. Trade-offs are inevitable, and the nature of these trade-offs may also determine the extent to which information and analysis can be influenced. As a result, data collection, analysis, and reporting is becoming concentrated in the hands of a relatively small group of analysts, who, for the most part, work for a relatively limited number of agencies.

The role of national governments in assessing humanitarian needs to be clarified. As noted above, the normative view tends to be that governments should lead these processes, and indeed in some countries, government-led processes have remained largely independent of political influences. But these systems work much better at the lower end of the spectrum of severity than when famine is a serious risk.

Famine and extreme emergencies have multiple causes, but conflict is the common thread among causes of contemporary famine. Conflict was a significant cause of food security crises in all but one of the countries studied (the country least at risk of famine or extreme emergency). In all other countries, conflict was a major causal factor and, in at least three cases, it was the main cause of famine or crisis. Information on conflict is frequently either missing completely or else relegated to a brief mention as a

"contributing factor." However, considering that conflict information or analysis is also the most highly politicized, it is the most problematic to include. This relates directly to the issue of government leadership, particularly in cases where a government is party to a conflict (but even in situations in which conflict is not the major driver, parties in an analysis may be reluctant to try to include it).

Missing information is a major constraint to humanitarian analysis. Limitations on access to the affected areas are the major cause of missing information. However, sometimes other constraints may also limit information. These include bureaucratic delays and, in some extreme cases, intimidation and self-censorship. All of these are frequently related to conflict and/or political interests. Rigid methodologies or overly bureaucratic adherence to rigid methodological criteria can also result in information gaps.

Famine analysis is dominated by food security and nutrition information. However, given the predominance of the analytical processes for famine and food security crises, these types of information tend to dominate humanitarian analysis more generally. In general, information on health, WASH, displacement, and other sectors or outcomes is less available. Where such information is available, uncertainties exist on how to use it in the analysis.

IPC and CH analysis (in particular) is intended to be driven by technical consensus. Controversy arises when that technical consensus proves illusive, or when some participants deem the consensus to have been driven by the interests of one or more parties to the analysis rather than by the data or analytical protocols. This raises the issue of holding "consensus" processes accountable, and "speaking outside the consensus" which is always controversial (but sometimes necessary). The process of technical consensus has to continue, but a better understanding of what "consensus" means must be built: it does not mean "unanimity"; nor does it mean a conclusion forced by the most powerful party to the analysis. And the system needs to incorporate a means of dissent—and a process to resolve disputes.

System learning is evident in these analytical processes—particularly where it is specifically fostered. This is constrained by high turnover in the staff who collect data in the field and/or conduct the analy-

ses—but in many ways high turnover and other constraints only emphasize the need for system learning and documentation.

Humanitarian information systems are dominated by quantitative data and quantitative analysis processes. However, in the most extreme cases, such data may not be available or may be available in such a limited sample size, or collected in such non-random ways that quantitative analysis is severely limited. However, to date very little capacity exists for the collection and analysis of qualitative information in such circumstances, few guidelines exist for assessing the quality of qualitative information, and indeed the utilization of qualitative information and analysis is highly variable—and especially vulnerable to political manipulation.

7. Recommendations

Over the course of this study, it is clear that data collection and the analysis of that data for humanitarian planning and response purposes has improved substantially over the past decade. Data collection and analysis teams do an excellent job under trying circumstances. But it is also clear that this excellent work is sometimes undermined by unwanted political influences, and nowhere more so than when the risk—or reality—of famine is the result of the analysis. While doing away with politics around the question of famine is probably impossible, recommendations emerged from this study that could improve analysis by reducing the influence of political and other nonevidence-based influences on data collection, analysis, and interpretation. These recommendations are relevant to the most extreme cases of famine and famine risk. They may also apply to crises of lesser severity. This study has been ongoing for over two years, with specific efforts made in each country case study to provide detailed feedback to all stakeholders in the assessment and analysis process: government, UN agencies, local and international NGOs, information agencies and units, and donors. Over the course of the study, leaders of data collection and analysis processes have already begun to implement some of the recommendations. Many of these practices still need to be strengthened, so have remained in the recommendations section of the study.

This study focused on famine risk, so while it was intended to review data collection and analysis methods of all types in famine-risk countries, it inevitably focused to some degree on the IPC/CH process and methods. However, to reiterate a statement made at the beginning of this report, this study was not an evaluation of the IPC. The purpose of this study was to address the specific problem of political or other nonevidence-based influences undermining humanitarian assessment and analysis.

The following recommendations are grounded in the conviction that the purpose of humanitarian assessment and analysis is to give all actors the most accurate, independent, and up-to-date information about humanitarian conditions possible; no secondary purpose can be allowed to supersede this primary purpose.

- 1. Ensure that the humanitarian imperative prevails in humanitarian analysis. IPC/CH analysis embraces the twin objectives of building sustainable capacity for a local, government-led analysis and providing an independent, rigorous analysis of the humanitarian conditions. Under most circumstances this is appropriate and unproblematic. However, in extremis (that is, in famine conditions) these two objectives may not be compatible, and if not, means must be established to ensure the independence of the analysis takes precedence. Clarifying assurance of independent analysis is imperative, particularly in situations in which governments are party to conflicts that drive famine or extreme food insecurity. Unquestionably this is a fraught process: over-riding government preferences can result in whole operations being stopped, but independent analysis is directly linked to the "responsibility to protect" commitments of the international community and to UN Security Council Resolution 2417 of 2018. Ultimately, the process must be accountable to affected populations.
- 2. **Promote honest reporting—regardless.** This may be uncomfortable for some data collection and analysis teams who do not want their outputs to be perceived as less than perfect, and it may be uncomfortable for some elements within host governments. But without exception, the decision-makers interviewed who rely on humanitarian information want honest reporting, including an honest assessment of the weakness or gaps in the data and the analysis. Much clearer documentation and reporting of data gaps, quality issues, and decisions made to deal with these gaps is needed. The limitations of the data and the analysis should be reported in an honest and transparent way and in such a way that those using the analysis can understand the implications. This will require humanitarian leaders to promote and protect a culture of honesty from the top to the bottom of the process. It will

- also require monitoring by an independent body and possibly links to funding.
- 3. Treat humanitarian data as a public good. At present, much of the data on which humanitarian analysis depends are kept private by the agency collecting them and only made public after their effective shelf life for current analysis has expired. To facilitate the most transparent and trustworthy analysis, data must be made available in real time for independent inspection and analysis. The Global Nutrition Cluster already does this (except in Yemen). Reasonable compromises with food security data have been made in some cases—for instance the way data cleaning and analysis was made a shared task in South Sudan—and these can serve as a model. This release of data depends on a careful sequencing of data cleaning and joint analysis. Detailed documentation of data cleaning and the analytical decisions made are important and should be included.
- 4. **Beware of the "Goldilocks" solution.** Strong circumstantial evidence shows that certain outcomes to extreme analysis are more "acceptable" than others. Pressure is strong not to put populations in famine but to keep funding. In short, this means that IPC Phase 4 is often an "accepted compromise" in the analysis. This does not mean that every time a Phase 4 outcome is reached, it is wrong. But it does mean that analysis teams need to be critically self-aware of the symptoms of "Goldilocks" outcomes to analyses. Development of analytical tools—such as examining population distributions across phases as described above—is part of this solution. However, analytical teams might need to allocate time to specifically consider this issue by examining the various political pressures that create the need to find a negotiated or "Goldilocks" outcome and to documenting how the analysis has mitigated these pressures.
- 5. **Build in the protections to prevent erroneous analytical outcomes.** To date, whether by design or default, most of the protections built into the analytical processes help to prevent false positives (that is, protecting against falsely identifying famine when actually there is no famine). From a humanitarian perspective, *false negatives*

- (failing to identify famine when one is actually happening) may be a greater danger, but protections against false negatives are far fewer. Several attempts have been made to find a solution to this problem—all involving wording analytical outcomes to explain a situation where data are inadequate to classify a famine, but where the strong probability of famine exists, and where the situation should be treated accordingly. The IPC in close collaboration with donors should identify and codify an approach to solving this dilemma.
- 6. Engage senior agency leadership to counteract influences. Implementing all of the above recommendations requires strong leadership. This includes UN and non-governmental agency leadership, humanitarian country teams, donors, and governments. The leadership and engagement of data collection and analysis teams is important, but higher-level leadership is critical. In famine-risk countries the UN Humanitarian Country Team should have a briefing from technical leaders as a standard component of meetings to address ongoing issues such as access, undue pressure in the analytical process, and disagreements within the consensus-based processes. Draft analytical reports should be made available to a select number of senior decision-makers prior to release to allow a joint approach to dealing with political pressures on the findings of the reports.
- 7. Strengthen existing technical capacities:
 - a. **Invest in better data quality and analysis.**Where the data quality is the lowest and the analytical capacity is the weakest, the external (political) influences are likely to be the most pervasive. Continuous strengthening of the technical capacities for data collection and analysis, and institutionalizing this capacity, is a high priority. Strengthening technical capacity is necessary to improve the system, but it will not reduce political influences on its own.
 - Build better data quality checks. The Global Nutrition Cluster has standard protocols for enumerator and supervisor training and field checking, data quality checks, plausibility

- checks, and other means to cross check the reliability and validity of nutrition data. There is no reason why the rest of the analytical community cannot do the same. However, this cannot be done until information working groups, clusters, and IPC/CH technical working groups arrive at a consensus on methods and indicators. Quality checks should include an assessment of the representativeness of the data. Progress has been made in recent analyses. This process needs to be documented and incorporated into every analysis.
- c. **Broaden the analysis.** An unintended consequence of the adoption of the Integrated Phase Classification has been to focus the analysis of crises mainly on the severity of the crisis (how "bad" are the current-status indicators like food insecurity, acute malnutrition and mortality?). This leaves out other important dimensions, including the magnitude of the crisis (how many people affected, total mortality rather than just mortality rate); the longevity of the crisis (the temporal dimension); and the geographic specificity of the crisis (the spatial dimension). Analysis should focus on the four dimensions.
- d. **Strengthen analytical leadership.** Managing these analyses is not just a matter of technical expertise. Substantial facilitation, leadership, and management skills are needed to lead a "technical consensus" approach. Investment in good soft skills for leading analysis processes may be as important as investing in the analytical skills. Some interference in data collection and analysis is subtle and difficult to detect, and the required facilitation and leadership skillset includes the ability to nimbly detect and navigate both implicit and explicit influences.
- 8. **Distinguish more carefully between outcomes** and causal factors. Analysis guidelines and practice must differentiate more clearly between current-status information and early warning information, and greater capacity still needs to be built for the latter. While everyone likes "hard numbers," programs and especially early action interventions have to be based on probabilistic

- forecasts. Current status and projections are related but different kinds of information, and they result from very different kinds of analysis.
- 9. Broaden (meaningful) participation in the analysis and build in processes to counter "forced" **consensus.** One important way to counteract political pressures and to ensure that the "loudest voices in the room" don't control the analysis process is to guarantee the genuine participation of all. Some smaller agencies, and especially local agencies, feel a lot of pressure to conform to the "loudest voices." Consensus-based analysis processes need a built-in governance mechanism for resolving serious disagreements—a multi-layered escalation process by which serious disagreements can be resolved. The process also needs an agreed mechanism for "minority reports," or "speaking outside the consensus," if the disagreement cannot be resolved or if a party is certain that political influences are still overriding evidence-based conclusions. To some degree, the IPC Famine Review Committee is intended to play this role, but is not always able to.
- 10. **Broaden the range of outcome data analyzed.**At the moment, data outcomes emphasize just food security, malnutrition, and mortality. A full analysis needs a broader range of data, including health, WASH, displacement, and protection (if the intent is to keep it to outcomes).
- 11. **Develop a more flexible approach to analysis and planning.** Adapt data collection activities to needs, to hotspots, and to crisis dynamics. The inflexible "behemoth" approach to data collection developed in the past three to four years is often not fit for the purpose of identifying needs in a fast-moving complex emergency.
- 12. Clarify the use of qualitative methods and data. The misuse of "qualitative" information is often one means of undermining an analysis for political purposes. Clear guidelines should be developed that include criteria for collecting and screening qualitative information, incorporating qualitative analysis methods, and developing mixed methods approaches to analysis.

Humanitarian food security and nutrition analysis in general has improved markedly over the past decade. Nevertheless, this study highlights a number of ways in which an evidence-based analysis of contemporary humanitarian emergencies, including famine, continue to be influenced by political and other nonevidence-based factors. Humanitarian actors who lead these analyses, those who fund them, and those who rely on them to make decisions

about the impartial allocation of resources (whether government staff, donors, or humanitarian agencies) must all work together to ensure that continuous improvement includes these recommendations to better manage and minimize the influences underlying independent and rigorous analysis.

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