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Constraints and Complexities of Information and Analysis in Humanitarian Emergencies

Evidence from Yemen

A FEINSTEIN INTERNATIONAL CENTER PUBLICATION 

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Acronyms

ACLED Armed Conflict Location and Events Database

CFSS Comprehensive Food Security Survey

CMR Crude Mortality Rate

CSO Central Statistics Organization

EFSNA Emergency Food Security and Nutrition Assessment

FAO Food and Agriculture Organization

FEWS NET Famine Early Warning Network

FRC Famine Review Committee (formerly ERC)

FRM Famine Risk Monitoring

GAM global acute malnutrition

GSU General Support Unit

HNO Humanitarian Needs Overview

HRP Humanitarian Response Plan

ICG International Crisis Group

IDP internally displaced person

IFRR Integrated Famine Risk Reduction

IPC Integrated Food Security Phase Classification

KSA Kingdom of Saudi Arabia

MCLA Multi Cluster Location Assessment

MOPHP Ministry of Public Health and Population

MOPIC Ministry of Planning and International Cooperation

NGO non-governmental organization

SAM severe acute malnutrition

SLC Saudi-led coalition

SMART Standardized Monitoring and Assessment of Relief and Transitions

TFC therapeutic feeding center

TPM third-party monitor

TWG Technical Working Group

UAE United Arab Emirates

UN United Nations

UNDP United Nations Development Programme

UNHCT United Nations Humanitarian Country Team

UNICEF United Nations Children's Fund

UNOCHA United Nations Office for the Coordination of Humanitarian Affairs

USAID US Agency for International Development

WASH water, sanitation, and hygiene

WFP World Food Programme

1. Introduction

Yemen is located on the Arabian Peninsula bordered by Saudi Arabia to the north, the Red Sea to the west, the Gulf of Aden and Arabian Sea to the south, and Oman to the east. It is one of the poorest countries in the region (UNDP Yemen n.d.). The modern-day Republic of Yemen is a relatively new state. It was established in 1990 when South Yemen merged with North Yemen after years of strife (BBC News 2018b). With an estimated population of 28.7 million people (July 2018 figures), over 60 percent of those living in Yemen are under 25 years old, with an average life expectancy of 66.2 years (Central Intelligence Agency 2018).

Since 2014, Yemen has been engaged in a civil war between the Houthi group and supporters of Yemen's internationally recognized government. The conflict has its roots in the failed political transition following the Arab Spring, which forced longtime authoritarian president Ali Abdullah Saleh to hand over power to his deputy, Abdurabuh Mansur Hadi, in 2011 (BBC News 2018a). Once in office, Hadi struggled to manage a variety of issues, including attacks by al Qaeda in the south, military officers who continued to be loyal to Saleh, unemployment, food insecurity, and corruption. The Zaydi Shiite fighters known as *Huthisor Ansar Allah* or Partisans of God (known informally as the Houthis) began as a theological movement that preached peace and tolerance in Yemen in the 1990s (Al Batati 2015). In 2004, however, the group picked up arms and declared war on the government. Government forces then killed Hussein Badr al-Dine al-Houthi, the founder of the Houthi movement, and since then, Yemeni government forces and Houthi groups clashed periodically until a ceasefire agreement was reached in 2010 (Al Batati 2015).

Thousands of supporters of the Houthi movement protested in Sana'a, calling for the government to step down in August of 2014. The Houthi movement demanded greater political representation, while the government called for the Houthis' withdrawal from Sana'a and cessation of hostilities in other provinces (Al Batati 2015). The Houthis did not comply and instead took control over the strategic port city of Ho-

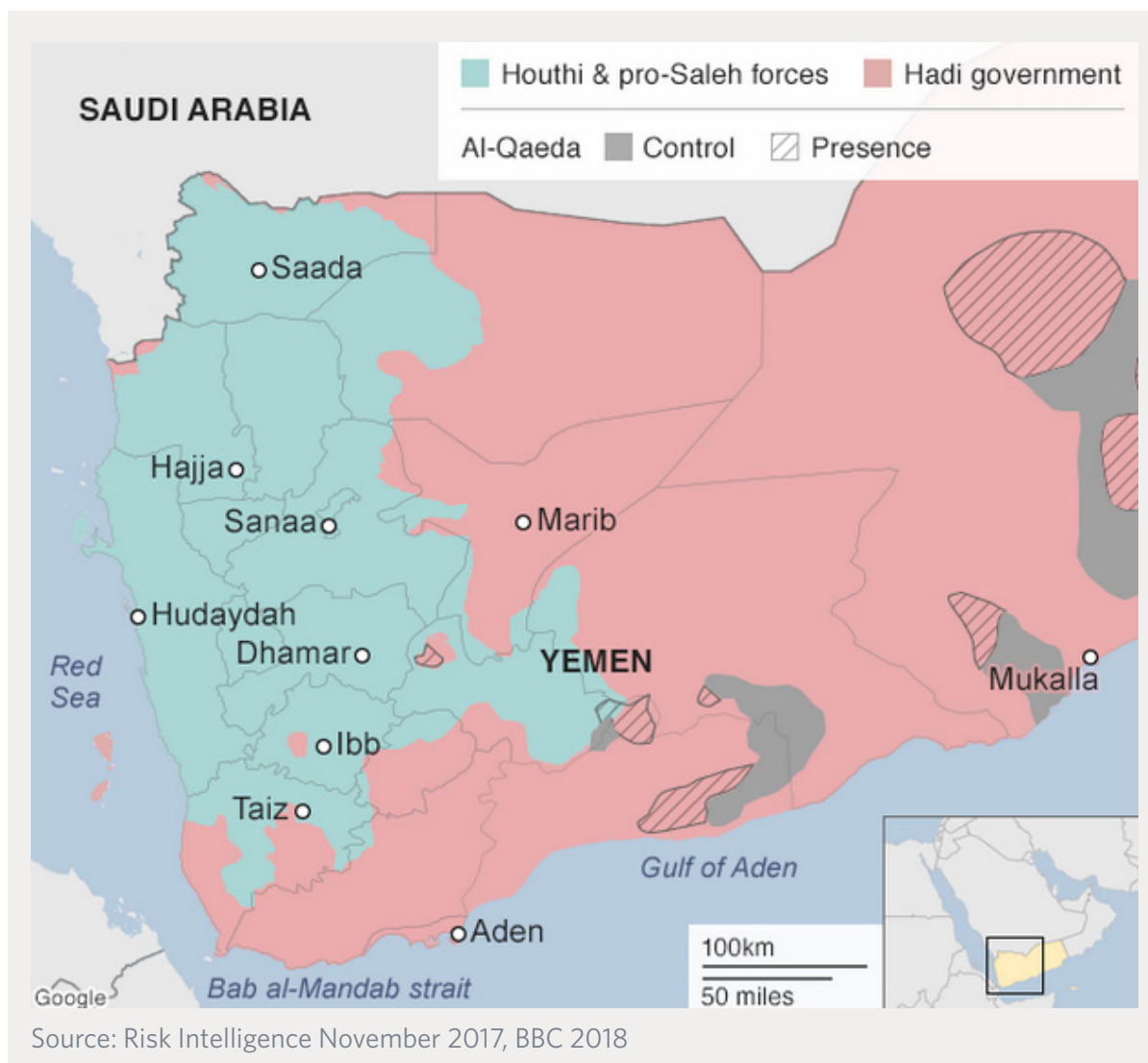
deida on the Red Sea. The civil war in Yemen began in September 2014 when Houthis won a series of battles to dislodge the internationally recognized and predominantly Sunni government of President Hadi, taking control of Yemen's capital and largest city, Sana'a (Al Jazeera 2018). Since early 2015, Hadi has lived in exile in Saudi Arabia. Today, Houthis remain in control of the Sa'ada governorate and other parts of northern Yemen on the border of Saudi Arabia (Figure 1). The Houthis thus control the capital of Sana'a and the surrounding territories but are not recognized by most of the international community.

In March 2015, a Saudi-led coalition (which includes Kuwait, United Arab Emirates, Bahrain, Egypt, Morocco, Jordan, and Sudan) with logistical and intelligence support from the United States, United Kingdom, and France launched a military campaign to restore President Hadi to government; indeed, currently the Hadi government, based in the southern port city of Aden, is the "internationally recognized government." But the main aim of the Saudi-led coalition was to counter the Houthis, whom the Saudis regard as an Iranian proxy (Salisbury 2018). Mirroring the strategy it used to support Lebanese ally Hezbollah in Syria, Iran is reported to provide arms and other supplies to the Houthi movement (Saul, Hafezi, and Georgy 2017). Since the launch of the military campaign, multiple UN-led peace brokering processes have failed; critics note the processes' faulty assumptions and out-of-date analyses, and current parties to the conflict are not incentivized to abide by the terms of the peace agreement.

In early June 2018, the coalition launched a military offensive on the Houthi-controlled Hodeida port, the main entry point for food and humanitarian aid supplies into Yemen, and demanded Houthi's unconditional withdrawal (Wintour 2018b).¹ Observers believe that the Houthis raised as much as \$30 million in taxes through their control of the port and used Hodeida as the main entry point to smuggle

¹ Hodeida port is referenced a number of different ways in the media (for example, Hodeidah, Al Hudaydah). For consistency, the report uses "Hodeida" in its reference to the port.

Figure 1. Who Controls Yemen?



arms from Iran (Wintour 2018a). Prior to the attack, the UN Humanitarian Coordinator in Yemen noted the critical importance of maintaining port operations with nearly two thirds of the Yemeni population relying on the aid from the port, warning that the offensive could result in nearly 250,000 people dying with no viable alternatives to fill the gap in humanitarian supplies (UN Office of the Humanitarian Coordinator in Yemen 2017a). Many feared that the port's closure would plunge parts of Yemen (e.g., Hajjah, Sa'ada, and Ta'izz) into famine (UN Office of the Humanitarian Coordinator in Yemen 2018b; FEWS NET 2018). Despite the months-long offensive in the port city, the Saudi-led coalition failed to dis-

lodge the Houthis and the port remained operational (Al-Haj and Magdy 2018).

A UN-brokered truce agreement was reached in Sweden on the December 18, 2018, with both the Saudi coalition-backed government and the Houthis agreeing to a ceasefire in Hodeida (Al-Haj and Magdy 2018). A few days later, upon the insistence of the US and Saudi delegations, a stripped-down resolution, which removed language on guaranteeing humanitarian deliveries and accountability for war crimes, was passed in the UN Security Council (SC/13643) (Borger 2018; UN Security Council 2018). While some have regarded this peace agreement and resolution as an indication of the potential

end to the conflict and humanitarian crisis, others note that a wider peace agreement appears elusive (Al-Haj and Magdy 2018). The ceasefire has largely held into early 2019, but significant concerns persist that the conflict will continue (FEWSNET 2019)

Today, Yemen is referred to as the world's worst man-made humanitarian crisis (UN Secretary General Antonio Guterres 2018; HRP 2018). Following

four years of escalating conflict, Yemen's GDP has reduced by 50 percent since 2014 with its agriculture and fishery sectors—which employed more than half the rural workforce—severely constrained by the conflict (World Bank 2018). Relative to pre-war capacity, oil and gas production are operating at about 10 percent and exports have been suspended.

2. The humanitarian response to date

An estimated 2.3 million Yemenis were displaced as of mid-2018, with an estimated additional half million displaced by fighting around Hodeida in the second half of 2018 (FEWSNET 2019). As of 2018, the UN estimated that more than 22 million people—over three quarters of the population of 28.7 million—were in need of some form of humanitarian assistance (UN Office of the Humanitarian Coordinator in Yemen 2018a) and by the end of 2018, 15.9 million were facing severe acute food insecurity and in need of immediate food assistance (IPC 2018). In fact, the last three years of the crisis have been designated as a UN Level 3 humanitarian emergency, which requires the highest level of mobilization across the humanitarian system.

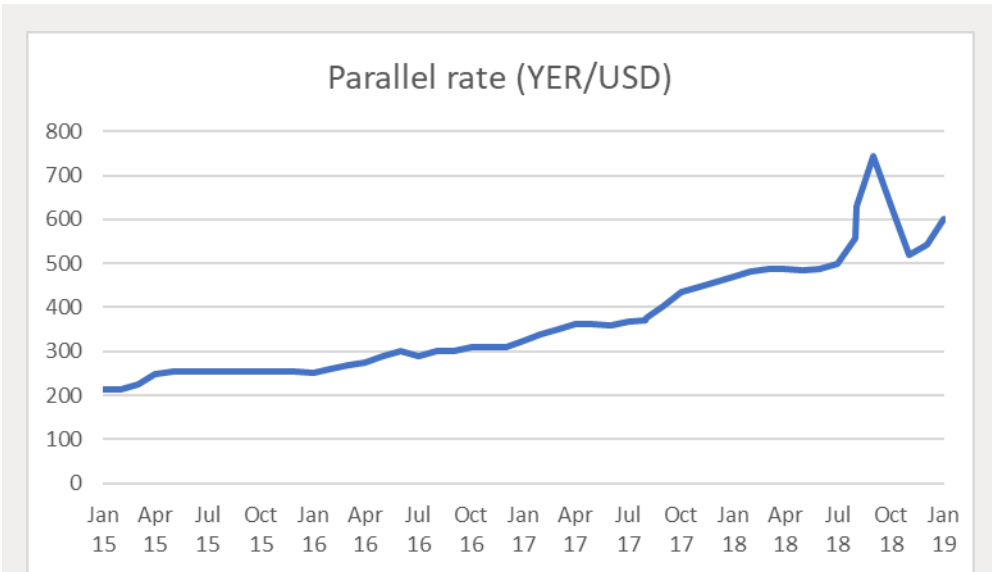
These dire conditions are compounded by the collapse of the purchasing power of millions of Yemenis—caused by several factors. In 2018, the value of the Yemeni rial plunged as the government dealt

with the liquidity crisis by printing money (Figure 2). In addition, salaries were not being paid, especially to government civil servants. Agricultural and fishing livelihoods suffered enormously from the impact of the war (Mundy 2018). And finally, even though Hodeida port remained open, imports were slowed by the long process of inspection on the open seas and bureaucratic delays in clearing goods—both humanitarian and commercial—through Hodeida and other ports, driving prices up even though food commodities continued to be available in most markets. The results were a substantial and rapid decline in the purchasing power of average Yemenis.

These conditions triggered an effort by the UN to develop a “roadmap” out of Yemen’s crisis in late 2018. The “roadmap” addressed the conflict as the primary cause of the crisis—and was linked to efforts to negotiate the ceasefire for Hodeida. It also addressed some of the macro-economic drivers of the crisis,

including the liquidity crisis and the deterioration in the value of the rial. At international urging, the Central Bank of Saudi Arabia, which controls the currency reserves of Yemen, released several hundred million dollars in reserves, which helped to stabilize the rial (Figure 2)—albeit at exchange rates that continue to climb. The continued depreciation of Yemen’s rial and the increasing prices of essential food items are compounding the devastating effects of the ongoing conflict (FAO 2018).

Figure 2. Parallel Exchange Rate (YER/USD)



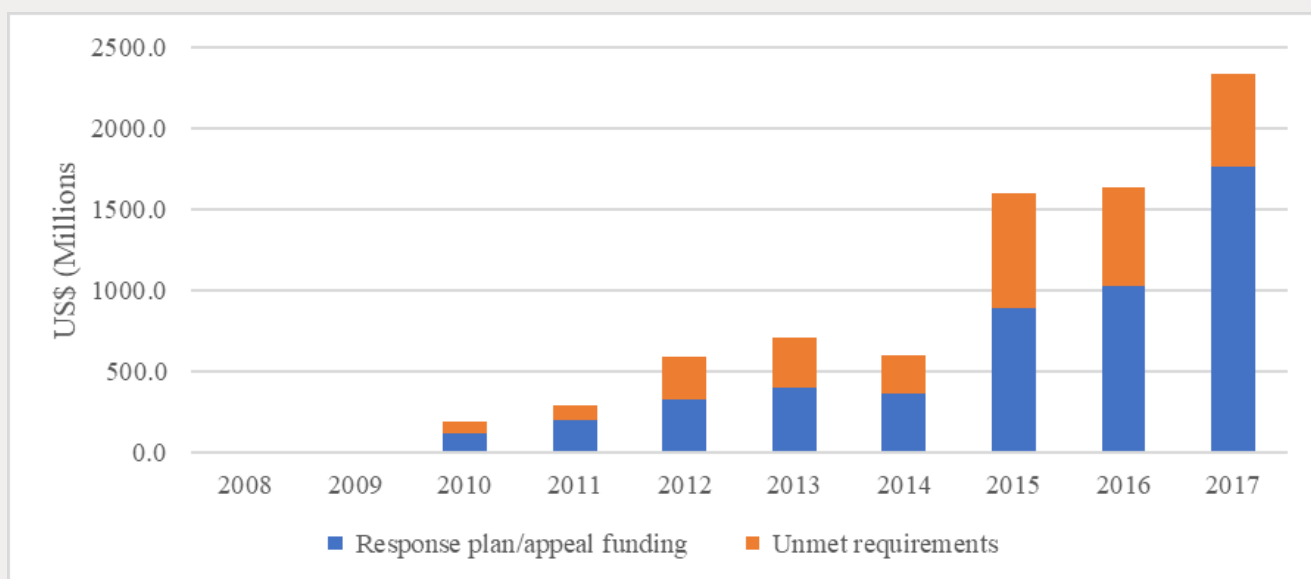
Source: Source FEWSNET 2019, ICG 2019

In response to the worsening situation in Yemen, the UN cluster system introduced the Integrated Famine Risk Reduction (IFRR) strategy in 2018, combining the efforts of the food security and agriculture; nutrition; water, sanitation and hygiene (WASH); and health clusters (UN 2018). This approach to programming is intended to go beyond basic humanitarian response and begin to incorporate risk

reduction and famine prevention measures (O52).² In a separate but related move, the food security and agriculture cluster began the Famine Risk Monitoring (FRM) approach to data collection and analysis in

² Sources in the analysis are noted by numbers in parentheses. These are interview numbers of key informants. Key informants remain anonymous, as per standard ethical protocols in research.

Table 1. Humanitarian Funding for Yemen, 2008–2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Response plan/appeal funding (US\$ million)	0.0	0.0	121.4	194.4	326.4	395.8	357.9	885.3	1,025.8	1,765.8
Unmet requirements (US\$ million)	0.0	0.0	64.7	97.9	259.2	309.9	238.0	715.5	606.9	573.0
Total requirements (US\$ million)	0.0	0.0	186.1	292.3	585.6	705.8	596.0	1,600.8	1,632.7	2,338.8
Unmet requirements (US\$ million)	0.0	0.0	35%	33%	44%	44%	40%	45%	37%	24%

Source: UNOCHA Financial Tracking Service

an attempt to improve both the timeliness of data availability as well as the geographic specificity of the information (002, 004, 032, 059).

2018 saw the largest humanitarian appeal for Yemen ever, launched at \$2.96 billion (Financial Tracking Services n.d.). As of January 2019, 82.5 percent or \$2.44 billion of the required funding had been committed. The governments of Saudi Arabia and the United Arab Emirates (UAE), the leading forces in the military coalition backing the Hadi government in Yemen, have contributed 22.2 percent (\$540.7 million US) and 19.1 percent (\$466.5 million US) of the overall funding to the appeal (Table 1) (Financial Tracking Services n.d.). United States and Kuwait are the top third and fourth donor to Yemen, respectively. They are also key players in the Saudi-led coalition and, in turn, the ongoing conflict (Financial Tracking Services n.d.; UN Office of the Humanitarian Coordinator in Yemen 2017b).

Conflict analysis

The population faces multiple crises—armed conflict, displacement, and risk of famine and disease outbreaks—given the breakdown of public health services. Women and children, refugees, migrants and the displaced, and religious minorities are particularly vulnerable (UN Office of the Humanitarian Coordinator in Yemen 2017c). Civilians face serious risks to their safety as escalating conflict continues to inflict casualties and cause extensive damage to public and private infrastructure (Figure 3). Half the areas inhabited by the Yemeni population are directly affected by conflict.

There are also reports of deliberate targeting of civilians and civilian infrastructure (e.g., schools, health facilities, and markets) and other apparent violations of international humanitarian law (IHL).

Figure 3. Number of Conflict Incidents: October 2016-September 2017

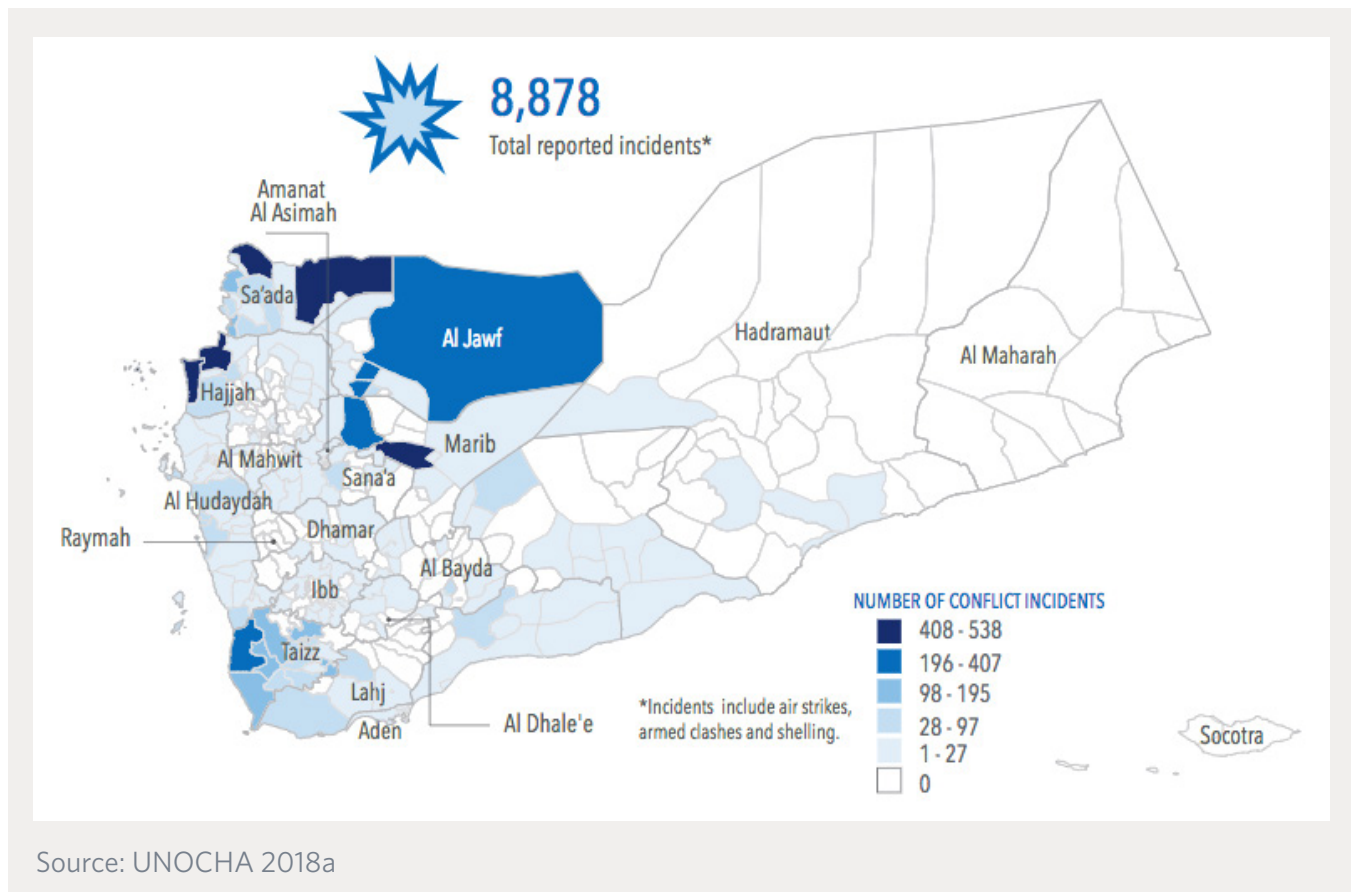
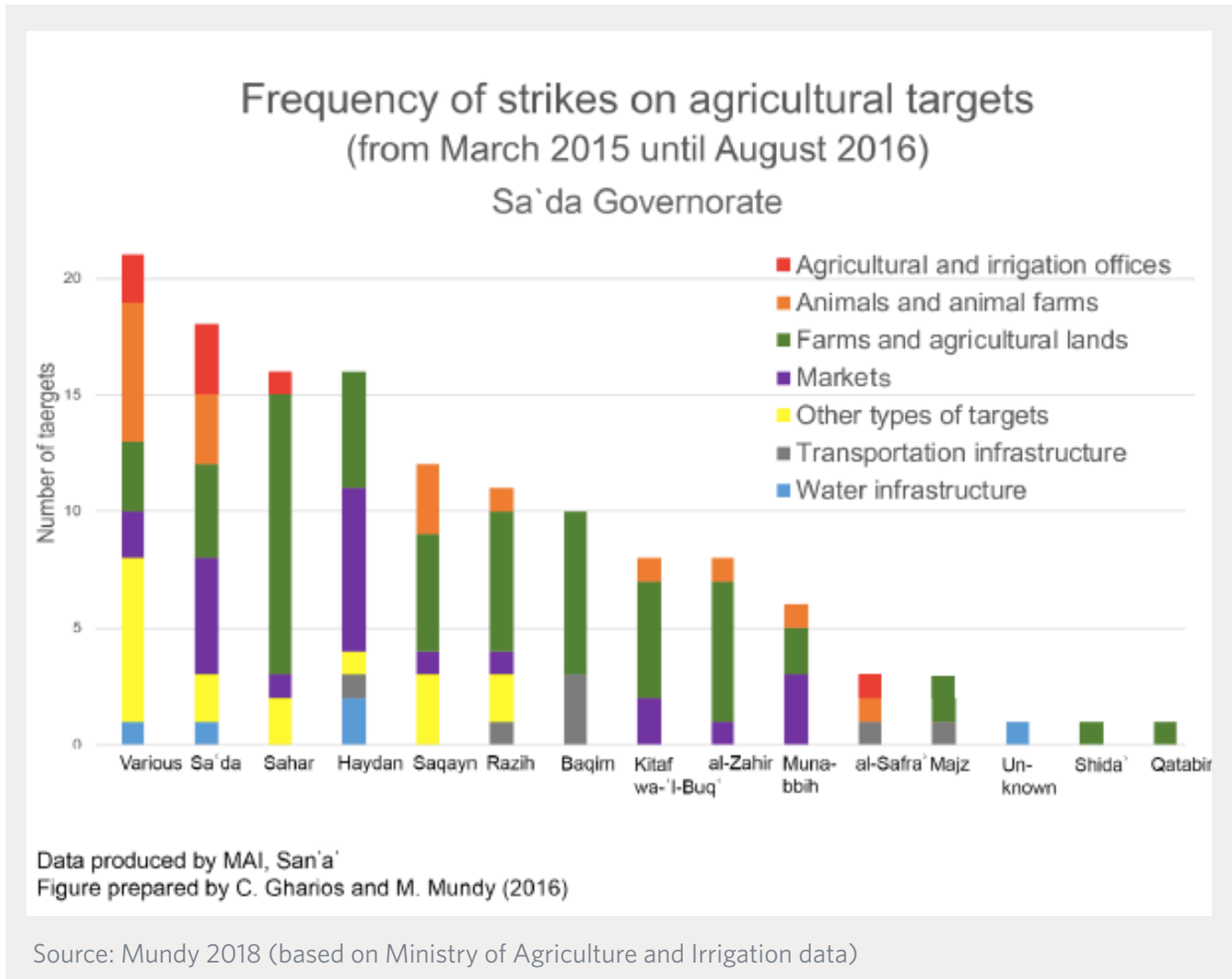


Figure 4. Agricultural Targets by District in Sa'ada Governorate



Yemeni scholars have condemned such illegal offensives (Tharoor 2015). There is also evidence that the Saudi-led coalition is systematically targeting rural livelihood infrastructure, such as agricultural fields and food stores, essential to the rural population's productive capacity and survival (Fisk 2016; Norton 2016). These attacks appear deliberate and precise; for example, agricultural land covers less than 3 percent of Yemen's total land surface yet were targeted by the coalition over 170 times between March 2015 and August 2016 alone (Mundy 2018, see Figure 4). Deliberate attacks on objects indispensable to the survival of the civilian population are war crimes and forbidden under the 1977 Additional Protocol II of the Geneva Conventions (Mundy 2018; Internation-

al Committee of the Red Cross n.d.). Yemen, Saudi Arabia, the UAE, United Kingdom, and France are all signatories.

Amnesty International and Human Rights Watch have also documented, conservatively, over 70 unlawful coalition airstrikes and the use of cluster munitions in civilian areas (Norton 2016). Sexual and gender-based violence have been documented, and children—especially young boys who are out of school—are recruited into armed groups. Yemen, in turn, has become one of the world's largest protection crises (UN Office of the Humanitarian Coordinator in Yemen 2017c), with nearly 13 million people in need of assistance to protect their safety, dignity, or

basic rights from violations of IHL³ (including grave violations of children's rights and gender-based violence).

Of the estimated 2.3 million displaced people, over half are currently sheltered in the governorates of Hajjah, Ta'izz, Amanat Al Asimah, and Amran (Task Force on Population Movement Yemen 2017). The majority are either hosted by someone in the local community (1.1 million) or in rented accommodations (480,000 people). The protracted nature of the conflict and compounding factors such as loss of livelihoods, non-payment of salaries, and disruption of social protection programs are straining the ability of internally displaced persons (IDPs) and their host communities to cope (UN Office of the Humanitarian Coordinator in Yemen 2017c). The majority of the internally displaced persons (IDPs) have been displaced for more than a year, including nearly 70 percent who have been displaced for more than two years (Task Force on Population Movement Yemen 2017). Women and children constitute over 75 percent of the displaced (UN Office of the Humanitarian Coordinator in Yemen 2017c).

The conflict, displacement, and economic decline have also put enormous pressure on essential basic services and institutions, which are at the brink of collapse. It is estimated that only half the health facilities are fully functional in Yemen and nearly 16 million people need humanitarian assistance to access safe water, basic hygiene, and sanitation facilities. Such collapsing health facilities and deteriorating water and sanitation systems together contributed to the scale of a 2017 cholera outbreak, which was rapidly followed by a diphtheria outbreak (given low vaccination coverage) (UN Office of the Humanitarian Coordinator in Yemen 2017c 2018a). Extended periods of non-payment of teachers' salaries, conflict-related damage to schools, and displacement have also devastated the education sector (UN Office of the Humanitarian Coordinator in Yemen 2017c). An estimated 4.5 million children have not been able to resume their education with

³ Most reports of IHL violations identify the Saudi-led coalition as the perpetrators, with noted Houthi-perpetrated IHL violations (see [The Yemen Peace Project](#), a non-profit advocacy organization that collates reports of IHL and human rights violations committed by all parties in Yemen) (The Yemen Peace Project n.d.).

the start of the school year in 2017 (UN Office of the Humanitarian Coordinator in Yemen 2018a). Vulnerable groups, such as the displaced, refugees, migrants, and religious minorities, face additional barriers to accessing basic services.

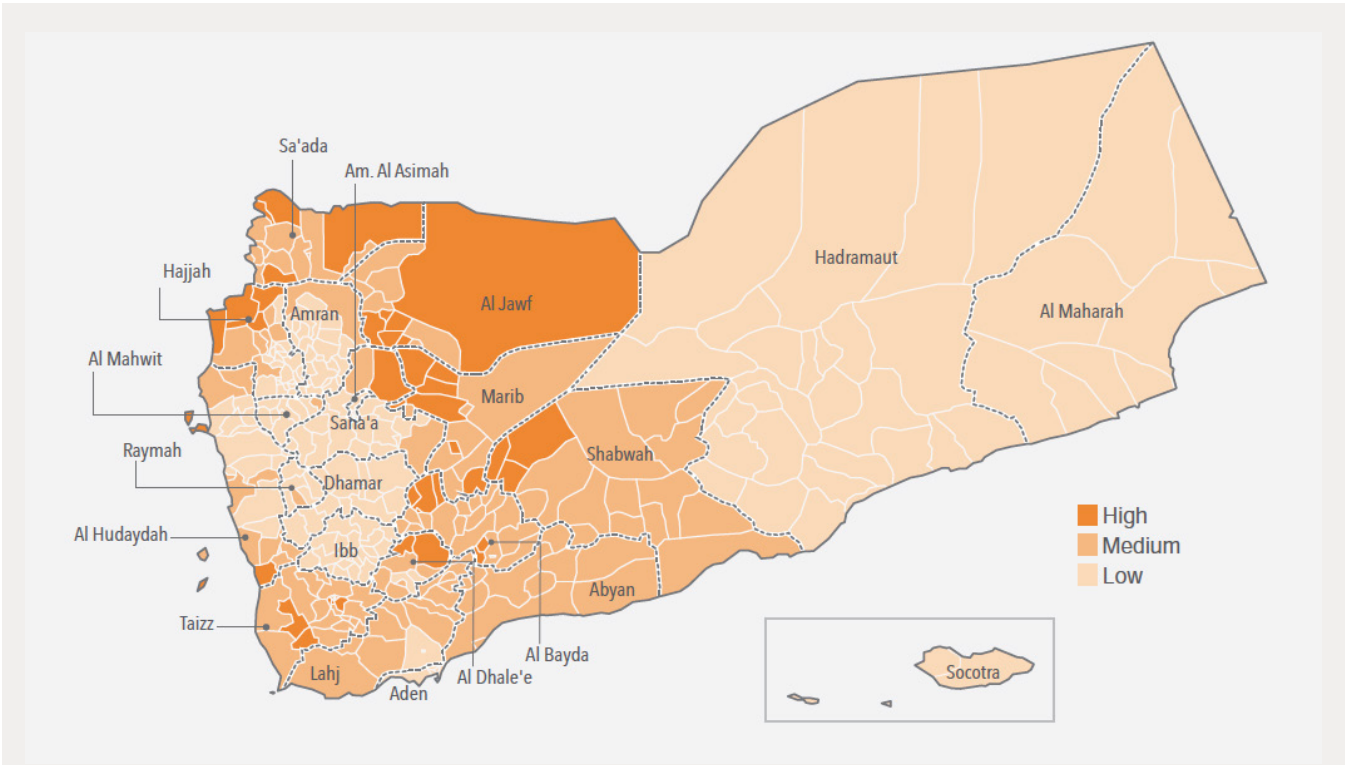
As of early 2019, the ceasefire around Hodeida was largely holding, but it was unclear whether the fragile ceasefire could lead to broader political agreement on ending the war—both between the internal factions within Yemen and between the Saudi-led coalition and the Houthi government in Sana'a (ICG 2019). The magnitude and severity of the food security crisis continues to be tightly linked to the course of the conflict—although even if the ceasefire holds, many factors could continue to worsen the food crisis (FEWSNET 2019). A recent ACAPS assessment highlighted the escalation of violence in Hajjah Governorate, risking the displacement of an additional 400,000 people as well as undermining the confidence in the ceasefire in place since December 2018 (ACAPS 2019a).

Humanitarian access

ACAPS categorizes Yemen (as a whole) as inaccessible: "Insecurity, administrative constraints, entry restrictions, violence against humanitarian workers, and obstruction of civilian mobility hamper access. 6.5m people live in hard-to-reach areas. Fighting exacerbates access challenges, particularly in heavily populated western coastal areas. Checkpoints, landmines and ERW as well as damaged roads and difficult terrain hinder movement. Armed actors have attempted to block aid from reaching groups suspected of disloyalty, directing it to groups more supportive of their agenda or selling it on the black market" (ACAPS 2019b p. 6).

Restricted access by all parties to the conflict continues to hamper humanitarian reach. Generally, the front lines of the conflict-affected governorates of Marib, Al Jawf, Sa'ada, Hajjah, and Ta'izz are the areas with the most restricted access (UN Office of the Humanitarian Coordinator in Yemen 2018a) (Figure 5). The access situation was worsening by late 2018. The Yemen Logistics Cluster reported in December 2018 that across Yemen, more roads were closed

Figure 5. Map of Humanitarian Access Constraints in Yemen



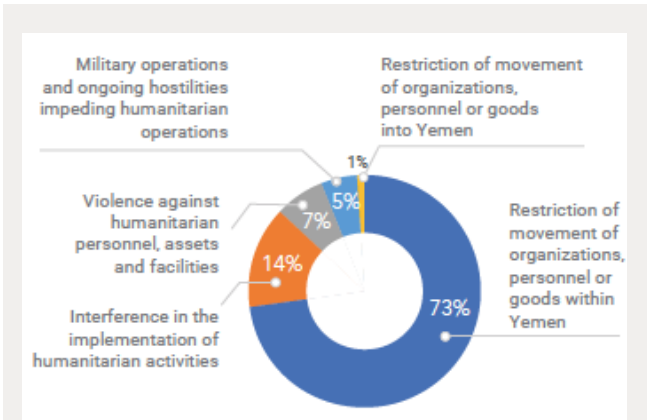
Source: UN Humanitarian Response Plan for Yemen, 2018

due to conflict than seven months earlier (FEWSNET 2019).

Humanitarian agencies report facing bureaucratic constraints and restrictions on movements within or into Yemen (e.g., denials or long delays for visa applications for foreign humanitarian staff, difficulty obtaining custom clearance for medical supplies and other equipment from authorities).

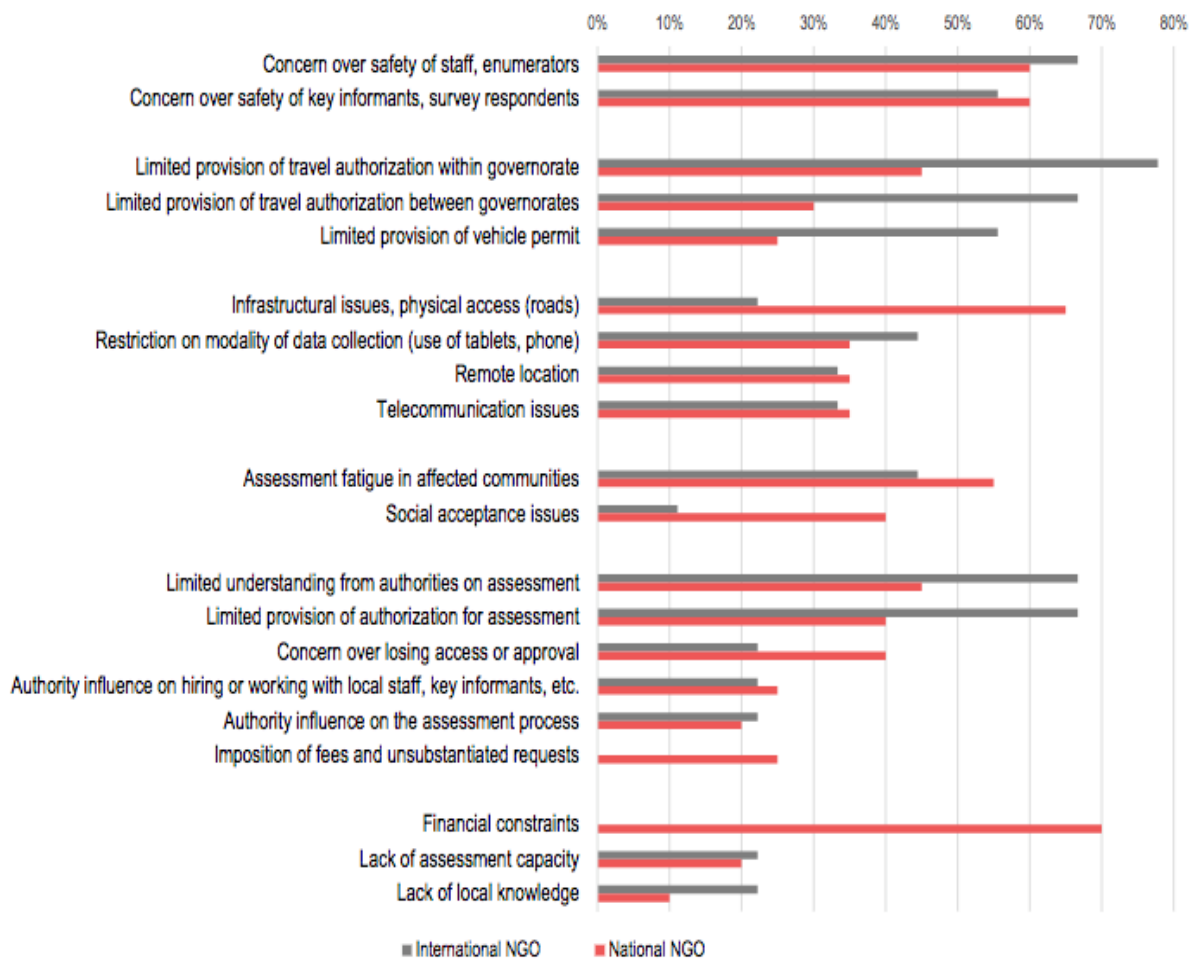
Figure 6 depicts the areas with the most constrained humanitarian access—with those controlled by both the internationally recognized government and the Houthis being reported to have access constraints (UN Office of the Humanitarian Coordinator in Yemen 2018c). While active fighting is one constraint on access, the majority of the reported access constraints were administrative in nature (e.g., 86 percent of the 73 reported between October to November 2018). However, more than half of these were concentrated in districts with active military operations (UN Office of the Humanitarian Coordinator in Yemen 2018c).

Figure 6. Constraints to Humanitarian Access: Reported Incidents (October-November 2018)



Source: UN OCHA 2018

Figure 7. Survey of Constraints to Humanitarian Assessment



* Percentages based on 29 survey responses, 9 of which are from international NGOs while 20 from national NGOs. For visual clarity, 2 UN agency respondents have been omitted from this figure.

Source: REACH 2017

Moreover, despite the increased availability of humanitarian funding, access to reliable information on humanitarian needs in Yemen remains sparse (REACH 2017). In March 2017, REACH, with OCHA, conducted a web-based survey to better understand the factors that impeded humanitarian actors' ability

to conduct assessments. *All* respondents reported facing assessment constraints in the past 12 months, with the majority of both international and national NGOs reporting that they were concerned about the safety of their staff members, enumerators, key informants, and survey respondents (Figure 7).

3. Famine analysis in Yemen

Background and origins

Famine analysis in Yemen is conducted nearly exclusively through the Integrated Phase Classification (IPC). IPC was introduced in Yemen in November 2011 and hosted under the Food Security Technical Secretariat (FAO n.d.). In Yemen, the IPC is managed primarily by a technical working group (TWG) with the support of the Food Security and Nutrition Clusters. The clusters are comprised of international and national partners as well as relevant line ministries. Yemeni authorities are closely involved in the process. All data collection processes and field-level movements require Yemeni authorities' review and permissions. Each year, depending on data availability, the IPC process compiles data to estimate the food security situation; on average, despite the difficult operating context, the IPC analysis⁴ brings together 70 analysts with expertise in agriculture, livestock, food security, nutrition, and WASH (water, hygiene and sanitation) (FAO n.d.). This information is mostly about current-status outcomes (current prevalence of global acute malnutrition and food insecurity, and current crude mortality rate). Information is also collected on contributing (or causal) factors, but it is the outcome data that drive the analysis. This process takes place in two different but connected steps—one in Aden and one in Sana'a.

The escalating conflict in Yemen is impeding humanitarian agencies' abilities to assess the condition and needs of the population. The 2017 IPC used

⁴ The IPC process in Yemen is unique in that two different authorities engage with the process—one in Aden and one in Sana'a—and thus two different analyses take place sequentially. For an extended period, even during the war, the technical cooperation between line ministries under the two different authorities was functional, but this began to break down in 2018.

food security, nutrition, and mortality data from an Emergency Food Security and Nutrition Assessment (EFSNA), performed in 18 out of 22 governorates in 2016.⁵ In the remaining governorates of Al Maharah and Socotra, data from the 2014 Comprehensive Food Security Surveys (CFSS) were used. WFP, FAO, and UNICEF implemented the EFSNA with the governing authorities.

The Yemen Nutrition Cluster also drafts an annual Standardized Monitoring and Assessment of Relief and Transitions (SMART) survey plan, with one planned in each governorate every year.⁶ However, assessment constraints largely due to limited technical capacity and bureaucratic impediments imposed by the authorities on data collection have led to persistent gaps in the number of SMART surveys. Concerns persist about the quality of food security and nutrition data. Mortality data are consistently missing; available information is considered to be of poor quality and, in turn, excluded from the analysis (Kim et al. 2018).

Once the in-country analysis process is complete, the IPC Global Support Unit (GSU) can request a real-time review for quality control. A concurrent technical working group (TWG) was established in Rome in 2017 to support the analysis workshops. However, there was limited success as Yemeni stakeholders—especially the governing authorities—believed that the external TWG lacked adequate local

⁵ Initially, the EFSNA was planned for 20 governorates. However, escalating and widespread conflict precluded data collection efforts in two governorates. Only 18 governorates are included in the survey results and are not nationally representative (EFSNA 2017 https://reliefweb.int/sites/reliefweb.int/files/resources/yemen_efsna_full_report_final_2016.pdf).

⁶ Historically, the cluster has focused on only the 20 most vulnerable governorates. In 2017, however, the remaining two governorates were added, given the need for updated information.

contextual knowledge they believed necessary for the analysis. The in-country analysis brings together both international and national organizations as well as the government. External engagement, even if from the GSU, is perceived by some of the in-country team as an intrusion. Availability of district-level data and information from all 333 districts continues to be a major challenges for the Yemen IPC convergence of evidence process (IPC 2018).

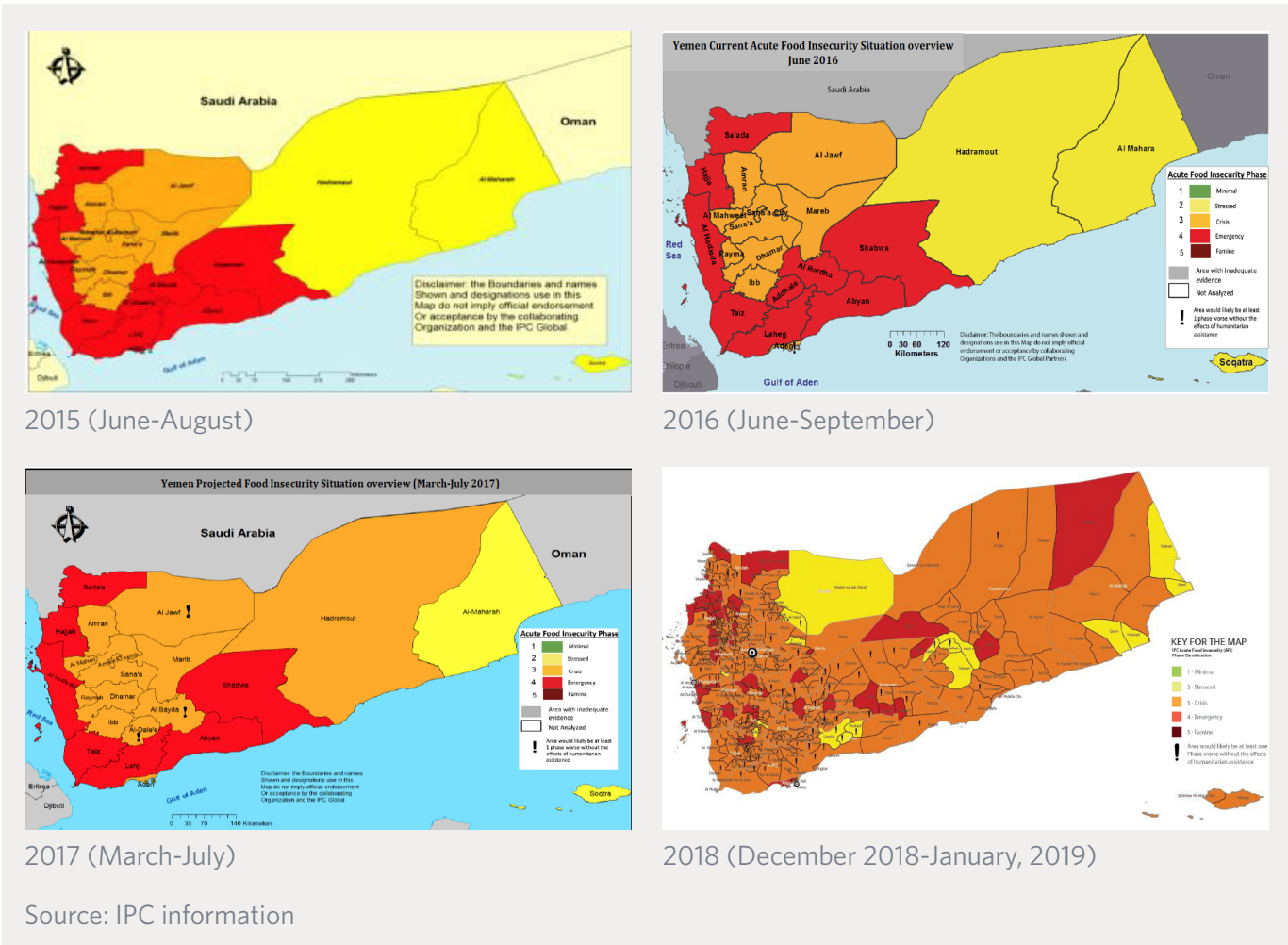
All of these constraints have combined to enable only one analysis per year since the beginning of the war in 2014 (more typically, two or three IPC analyses per year would be conducted in an emergency the size and severity of Yemen). And these complications have further constrained comparability over time because analyses have taken place at different times during the year, which makes comparabili-

ty from one year to the next problematic. Figure 8 depicts recent IPC analyses in Yemen and the time of year the analysis represents.

Current food security status

The most recent IPC analysis in Yemen was conducted in November and December 2018. It estimates that for December 2018 to January 2019, 15.9 million people (i.e., 53 percent of the population under analysis) are facing severe acute food security (IPC Phase 3 or higher) despite the ongoing humanitarian assistance (IPC 2018). In the absence of humanitarian food assistance, it is estimated that up to 20.1 million or 67 percent of the population would

Figure 8. IPC Phase Classification Maps of Yemen, 2015–2018



face severe food insecurity in the same time frame.⁷ This included 238,000 people projected to be in IPC Phase 5 or “catastrophe” (IPC 2018). Compared with the previous IPC analysis (March 2017), the total number of people requiring humanitarian assistance increased from 17 million to 20.1 million, or an 18 percent increase (IPC 2018). So, even though at face value, the maps look “better” in 2018 (i.e., fewer areas mapped in Phase 4) the total number of people affected is substantially higher. The reason the map looks better is because of greater granularity in the analysis (mapped by district rather than aggregated to the governorate level).

Armed conflict remains the main driver of food insecurity in Yemen, with food access disrupted for both the displaced and those in vulnerable communities hosting the IDPs (IPC 2018). The ongoing conflict, airstrikes, and ground fighting continue to seriously disrupt livelihoods and income-generating opportunities, and to damage essential public and private infrastructures, such as markets, roads, power stations, shops, and agricultural farms. Financial access to food and lack of purchasing power are major concerns, given the high prices of basic commodities which continue to rise given the depreciation of the Yemeni riyal. The food security crisis is further exacerbated by non-payment of wages, high levels of unemployment, rainfall shortages, high prices of agricultural inputs, and water insecurity (IPC 2018). While humanitarian food assistance is partially mitigating the food gaps, the conflict-related access constraints noted above continue to hamper the

⁷ The Famine Review Committee (FRC) was activated on November 9, 2018, based on international concern and potential famine classification and upon the request of the country’s IPC Technical Working Group (TWG) (IPC Famine Review Committee 2018). The FRC came to different conclusions than the TWG regarding the projected analysis for the December 2018 to May 2019 period (summary report can be found [here](#)). However, given the urgency of releasing the analysis for humanitarian response planning as well as to prepare for the peace talks in December 2018, a decision was made to limit the release of IPC analyses for the December 2018-January 2019 time frame. The TWG plans to conduct a new round of IPC analysis in March 2019, based on new data and updated information on security and macro-economic factors (IPC Famine Review Committee 2018). Two lead investigators and authors of this case study, Peter Hailey and Daniel Maxwell, both serve on the FRC.

ability to reach and serve all populations in need (IPC 2018). According to the UN OCHA’s Humanitarian Needs Overview, 107 districts or over one third of all districts are at a heightened risk of famine, lack access to safe water for drinking and basic sanitation and hygiene facilities, require assistance to ensure access to health care, and need nutrition assistance (ibid.)

Current nutrition status

The nutrition situation is also negatively impacted by the conflict in Yemen, but apparently to a lesser degree than food security. Five governorates (Hodeida, Lahj, Tai’zz, Abyan and Hadramaut) have acute malnutrition rates over 15 percent and seven governorates report rates between 10 and 15 percent. Over seven million people require services to treat or prevent malnutrition, including 1.8 million children under the 5 years of age and 1.1 million pregnant and lactating women (UN Office of the Humanitarian Coordinator in Yemen 2017c). SMART surveys carried out in 2018 estimated that nearly two million children are acutely malnourished, of whom 394,000 are experiencing severe acute malnutrition (SAM) and require immediate admission into therapeutic nutrition programs (UNICEF 2019). Children under five and pregnant and lactating women bear the brunt of Yemen’s nutrition crisis. These children and women are also vulnerable to morbidity and death due to preventable diseases such as diarrhea.

Yemen also has one of the world’s highest levels of chronic malnutrition (stunting) among children under five years of age (World Food Programme et al. 2017). Stunting has reached critical levels (40 percent and over) in 12 of the 18 governorates surveyed and 60 percent in four governorates (Rayma, Al-Mahweet, Hajja, and Dhamar).

Current mortality situation

According to the Armed Conflict Location and Event Data Project (ACLED), 60,223 people—both combatants and civilians—have been killed in Yemen between January 2016 and end of November 2018

(ACLED 2018). This figure is over six times higher than the previous UN estimates, which reported that at least 10,000 people have been killed or wounded in fighting in Yemen—a figure that had remained the same for several years (UN Office of the Humanitarian Coordinator in Yemen 2017c), but routinely quoted in the press as recently as late 2018. The updated figure only includes those who were killed as a direct result of armed violence in Yemen and does

not account for those who died from malnutrition or disease. It is therefore likely an underestimation given the critical humanitarian conditions in the country (ACLED 2018). Other organizations, like Save the Children, estimate that tens of thousands may have died from causes related to the conflict—including malnutrition and hunger-related causes (Save the Children 2018).

Table 2. Reported Crude Mortality Rates

Crude and under-five death rate (10,000/day)

Governorate	Crude death rate Number/10,000/day (95% CI)	Under-five death rate Number/10,000/day (95% CI)	% Caused by malnutrition
Ibb	0.15 (0.06 – 0.41)	0.49 (0.12 – 2.03)	0.0
Abyan	0.22 (0.10 – 0.53)	0.22 (0.03 – 1.65)	0.0
Sana'a City	0.12 (0.04 – 0.38)	0.26 (0.03 – 1.97)	0.0
Al Baidha	0.15 (0.06 – 0.40)	0.47 (0.11 – 1.97)	0.0
Al Jawf	0.22 (0.08 – 0.60)	0.23 (0.03 – 1.78)	0.0
Hajjah	0.63 (0.31 – 1.25)	0.62 (0.20 – 1.97)	0.0
Hodeidah	0.04 (0.01 – 0.34)	0.00 (0.00 – 0.00)	0.0
Hadhramout	0.21 (0.08 – 0.51)	0.00 (0.00 – 0.00)	0.0
Dhamar	0.11 (0.03 – 0.35)	0.20 (0.03 – 1.51)	0.0
Shabwa	0.21 (0.08 – 0.55)	0.00 (0.00 – 0.00)	0.0
Sana'a	0.15 (0.06 – 0.39)	0.21 (0.03 – 1.62)	0.0
Aden	0.44 (0.24 – 0.81)	0.00 (0.00 – 0.00)	0.0
Lahj	0.13 (0.04 – 0.40)	0.00 (0.00 – 0.00)	0.0
Mareb	0.56 (0.28 – 1.11)	0.66 (0.21 – 2.07)	0.0
Al Mahweet	0.16 (0.05 – 0.53)	0.00 (0.00 – 0.00)	0.0
Amran	0.07 (0.02 – 0.30)	0.39 (0.09 – 1.57)	50.0
Al Dale'e	0.39 (0.18 – 0.87)	0.00 (0.00 – 0.00)	0.0
Raymah	0.30 (0.12 – 0.76)	0.00 (0.00-0.00)	28.6

Source: WFP 2017 (123)

Data from the 2016 EFSNA (World Food Programme et al. 2017) in Table 2 show very low crude death rates and under-five death rates (none coming close to the one death per 10,000 population per day threshold for emergencies). Many respondents questioned whether the mortality data are reliable and valid (Kim, et al. 2018). This has led to serious disagreements among analytical agencies working in Yemen (ibid.) and considerable confusion among donor agencies that have to allocate resources based on this kind of data (021, 026, 029, 034, 040).

Related studies

A recent study on Yemen highlighted many of the same issues this report raises: the politicization of data collection, disaggregation, and dissemination. It notes the collapse of the public system of information gathering and analysis in Yemen, in particular the Central Statistics Organization (CSO), the over-estimation of cases and severity of the cholera epidemic of 2018, and the use (with regard to the specific question of famine) of terms like “on the brink of,” or “pockets of” to cover over the potential of things being much worse, but in the absence of reliable data on which to base an actual assessment of the situation (Bhutani, et al. 2018).

The report notes that humanitarian agencies “using data from politically-motivated parties to inform their reports are not upfront about potential political biases” (ibid p. xi) and frequently are not even aware of the potential biases in the information on which they base programs and activities. That report recommends increased standardization of data collection, greater transparency and built-in quality checks—all of which are discussed below in this report.

A more recent study by ACAPS 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 2019c, p. 1, emphasis added). They suggest “bringing more voices into the analysis . . . increasing cross sectoral and forward looking analysis to help decision makers plan and manage risk . . . and sharing more data and openly discussing challenges” (ibid). These are also themes emerging from the analysis below. Both of these studies recommend mostly technical improvements to address the problem.

4. Methodological note

This study is one in a series of comparative case studies examining the availability and quality of information and the complexities and constraints of analysis. Case studies include four currently famine-affected or at-risk countries: Somalia, South Sudan, Nigeria, and Yemen.⁸ Four main questions drive the research: The first is about the availability and quality of data, chronic “gaps” in data and *why* those gaps persist. The second is about the constraints or influences on information collection and analysis of humanitarian emergencies. The third is about the way in which missing or unreliable information is managed and the impact of missing information. And the fourth is about improved processes for information management and the management of influences on collecting and analyzing information predicting severe humanitarian emergencies and documenting the good practices that emerge.

This report synthesizes information from a comprehensive desk review and key-informant interviews. First, a research assistant at Tufts conducted a review of the literature on the crisis in Yemen. Second, a team from the Feinstein International Center and the Centre for Humanitarian Change conducted interviews, either in person or via Skype, with respondents who oversee or are directly involved in the IPC process, including from the donor community, UN agencies, international and local non-governmental organizations, and members of the government of Yemen. During these interviews, inquiries were made regarding the technical aspects of the data collection and analysis process to attempt to identify potential gaps that might be addressed by quick donor action in advance of the next IPC analysis. These interviews were conducted mostly in May and June 2017. Third, because the field team was unable to obtain visas for Yemen, interviews were conducted in Amman, Jordan, with respondents based regionally or by phone or Skype with respondents in Yemen from the government of Yemen, UN agencies, international

⁸ Reports from the already-completed case studies can be found on the Feinstein International Center website: <http://fic.tufts.edu/research-item/the-constraints-and-complexities-of-information-and-analysis/>.

NGOs, local organizations, and specialized information agencies. Follow-up interviews were subsequently held with staff of regional offices or key informants who had been outside the country at the time of the field team visit.

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. In person and by Skype or telephone, the team conducted 62 interviews with a total of 78 people. During each interview, detailed field notes were taken, noting phrases and terminology used by respondents to capture their narrative. Questions were open ended to avoid leading respondents to particular responses.

Interview notes were coded, and an iterative coding approach was developed with codes determined both deductively from study instruments and inductively from transcripts. Emergent themes were then used to draft the initial outline of this report, with coded information categorized and synthesized accordingly. The Tufts University Social, Behavioral, and Economic Research committee granted Internal Review Board clearance for the overall research program on May 31, 2017, and renewed on May 25, 2018. Sources in the analysis below are noted by reference to an interview number in parentheses. All interviews were conducted on the basis of the anonymity of respondents, and no interview respondents or their respective agencies are identified in the report.

All the case studies conducted under this research program included a series of meetings with key stakeholders after the initial analysis was conducted to check for missing information or misinterpretation of the findings. Meetings were held in Amman, Jordan, in April 2019, attended either in person or on-line by some 30 key informants, most of whom had been interviewed during the case study. Clearly, there was not full agreement on some of the findings and recommendations. Where it occurred, signifi-

cant lack of agreement on the draft findings is noted below in footnotes.

It should be noted that this study is not (and was not intended to be) an evaluation of IPC—either generally or specifically in Yemen. It is a specific study based on the questions outlined above and motivated by the need for humanitarian response to be

based on the most rigorous and most independent analysis possible. And the findings and recommendations have application beyond IPC processes. The findings and recommendations presented here are those of the authors—where serious disagreements over these arose in the feedback meetings, they are noted in a footnote.

5. Challenges and constraints to food security and nutrition analysis in Yemen

While the analysis of famine risk in Yemen has been successfully carried out by the IPC Technical Working Group for each of the past four years, a number of issues have arisen with the analysis, beginning with the data and data collection processes, but including the analysis, constraints on capacity, and constraints on the independence of the process.

Yemen is, of course, a challenging environment in which to work: there are two different authorities—the internationally recognized government in Aden, and the de facto (Houthi) authorities in Sana'a. For several years, a degree of coordination existed between the two, but of late this has increasingly broken down, making for several concerns. Other constraints are also common in Yemen, making the independent collection and analysis of information a challenge. These are analyzed below.

Data challenges

Steady progress has been made in improving both the quality and coverage of data required for a comprehensive assessment of humanitarian conditions in Yemen. The Famine Risk Monitoring initiative, begun in 2017, was an effort to ramp up both the frequency and granularity of data collection in particularly at-risk districts. The initiative is for food security information only—it does not include nutrition or mortality, or other factors such as water, health, or protection (and the initiative's name is slightly misleading because the information collected is all about outcomes, not risk factors). Nevertheless, this has provided more up-to-date information on food

security at a more localized level. However, a number of concerns remain. This section analyzes the results of key informant interviews with 78 respondents in late 2018.

Data transparency and data sharing—and independent checks on data

A major concern about data for the analysis of food security, malnutrition, and famine in Yemen regards the lack of data transparency. Most data are collected either by, or in close collaboration with, governmental authorities. Data on food security, nutrition, and mortality are not allowed to be taken out of the country (002, 006, 010, 021, 022, 048) and there are extreme limits on the extent to which data are shared even within the country (002, 004, 005, 010, 013, 015, 022, 023, 026, 028, 031, 034, 045). This results in a situation in which trust and confidence in the data are seriously undermined. Analysts complain that they have only results to work with, not the underlying data (028, 029). Donors complain that they often have to make resource allocation decisions without seeing the actual data—especially the data on malnutrition and mortality (033, 034, 040). Several donor respondents noted that they have to gather information by networking, not through data analysis. There is “little systematic evidence for what we do,” noted one donor (040).

Independent checks on data are few (002, 007, 048). The Centers for Disease Control routinely reviews the nutrition data from SMART surveys in

nearly all other famine-risk countries, but cannot review data from Yemen (002, 028, 031, 040, 041, 059). UNICEF works closely with the Ministry of Public Health and Population (MOPHP) on SMART surveys, and UN staff note that good plausibility checks are conducted on nutrition datasets in-country, and that data quality is thus ensured (031, 061). However, in the absence of sharing the data with external data-quality check processes, there is no choice but to take their word for it.

Many respondents note that they have no evidence that data are actually manipulated, but in the absence of data sharing, it is impossible to cross-check (017, 040, 060). Staff of agencies involved in training field enumerators are certain data quality is good, but the same staff complain about lack of data sharing and transparency. Complaints about what happens during data cleaning are frequent (057). For the most part, NGOs are not invited to participate in data cleaning. Sometimes the data changes several times during the analysis without explanation (057). Some of the larger agencies have definite interests in the outcomes—and they control the data (041).

Food security data are subject to some of the same constraints. For example, several respondents (056, 060) noted some anomalies with the Household Hunger Scale data in Sa'ada in the last round of Famine Risk Monitoring (FRM) data collection, which showed very high proportions of the population in some districts in Phase 5, while other districts had low levels or no population in Phase 5. There was no nutrition or mortality data to corroborate anything about Phase 5. However, after discussion with some of the enumerators, the analysis team decided the data was invalid, and dropped it from the analysis (056, 060).⁹

⁹ The issue of data transparency was one of the areas in which there was disagreement among key stakeholders during the feedback meetings, with some stakeholders insisting that data is shared and the process is transparent. Most stakeholders agreed with the above analysis. Most of those who disagreed with the above findings were based inside Yemen, most who agreed were based outside Yemen and continued to express frustration with lack of access to data. Several observers noted that if the data were of good quality, there was no reason not to share it openly, and that not doing so raised suspicions that could easily be avoided.

Missing or limited data

In many cases, several types of data are not available for the analysis (002, 007, 008, 010, 011, 014). In contrast to other famine-risk countries, for example, SMART surveys are undertaken only very occasionally in Yemen and are often out of sync with IPC analyses. This means that data are often either not available at all or may be as much as a year old by the time an IPC analysis is conducted (012). SMART surveys are representative at the governorate level, meaning that location-specific information is not available. Mortality figures are often not available or are of questionable reliability and validity (003, 004, 010, 011, 031). Given the current war, births and deaths frequently cannot be registered (038). Likewise, geographic coverage may be limited, both because of security constraints and by bureaucratic obstacles (011, 014). Little data is available from the worst affected areas—several respondents strongly suspect that the severity of the problem is being under-estimated in those areas (022, 016).

Gaps in the geographic coverage make the identification of hotspots difficult and may mean that some seriously affected areas are missed. The units of analysis don't match: for instance, SMART surveys are still representative at the governorate level while the FRM data is representative at the district level—at least for the districts included (033, 045). But the analysis is conducted at the district level anyway (045). Of 333 districts, with 107 prioritized by FRM, 27 were reviewed by an external committee in 2018.

As is the case in other famine-risk countries, sectoral coverage outside of food security and nutrition is very limited (002, 004). Data on displacement and movement is very little (022) as is data in IPC on health and WASH (037). The IPC has no data on protection concerns. Some data on health, WASH and protection concerns is in the Multi Cluster Location Assessment (MCLA) (036), but little makes it into famine-risk analysis. Specific attention to particularly marginalized groups is extremely limited (036). A fair amount of discussion occurs about social networks and indigenous support systems—but little systematic data exists, quantitative or qualitative (036). No central registry of IDPs exists; this was noted by one respondent as an “effort to obscure the impact of war” (041). And although

there is much discussion about social solidarity in Yemen and the ability of Yemenis to help each other, no measure of social solidarity is included in the IPC or other contemporary analyses—and therefore no clear way of determining if or when this system of solidarity begins to break down. As one respondent put it, “this is how people are surviving; this is the system that is under threat” (042).

Data quality

Many significant efforts have been made over recent years to improve the quality and reliability of data, but several concerns were highlighted in this regard. Several institutions had been leaders in the collection and analysis of data, but much of this was shut down after 2014. This resulted in lost capacity, which made ensuring data quality much more difficult (011, 022). One of the big concerns is that data are badly out of date by the time that analysis is conducted—particularly nutrition data (010, 016, 026, 033). Data on nutrition for the November 2018 analysis had been collected as long as a year earlier, with the most recent data having been collected in March 2018. Much of the problem is due to the time required to get permission for a survey. For example, two years were taken to get permission to get permission for SMART survey in Hajjah Governorate (039). Given the different times required by different governorates, coordination of data collection and analysis becomes almost impossible, but as one respondent put it, “too much of this IPC was re-analyzing old nutrition data—which didn’t tell us much” (061). Given the time delays and data quality concerns, NGOs made a push to do more SMART surveys in 2018, but in the end only three were carried out (017, 039).

Data on humanitarian food assistance is constantly changing, meaning that results for the impact of food assistance also changes—and no one is ever quite certain that they are working with the “final” data, undermining faith in the system (045). A strong fear exists that data on mortality badly under-estimates actual death rates (see, for example, Table 2, which reports U5MRs as low as zero, even in some of the most seriously affected parts of the country). Several respondents noted fears that data about the cholera epidemic had been manipulated so as to maximize

resources allocated, while holding the death toll to a minimum (005, 033).

Data collection requires better coordination—it is a very heavy process given the number of districts (059). The requirement of working with two separate authorities complicates this process. On the other hand, in the view of some respondents, the selective use of concerns about “data quality” allows authorities to control the narrative about malnutrition and mortality (023). Combined with the lack of international checks, all of this raises questions about the quality and reliability of the data overall (033).

Early warning and hotspots

Given the disparate geographic areas and different levels of coverage, one of the major concerns is the means of identifying “hotspots” (022, 028) or emerging areas of concern due to rapid deterioration in humanitarian conditions. In principle, the IFRR was a big step forward in this regard, in that the process identified 107 districts for closer monitoring (IFRR Yemen 2018). However, that was in early 2018, and presumes no change over time—so the assumption underlying the analysis is that the same 107 districts remain the ones of greatest concern. The hotspot identification monitoring process must be dynamic and responsive to changes in context to be effective.

Even with the FRM initiative that further focused attention on the most-affected districts, some of these are often unreachable—for instance 6 of 22 districts in Hodeida Governorate were not reachable (031). But given that these were likely the worst-affected areas, some believe that this constituted de facto interference in an objective assessment. This issue also raises the confusion between current status (empirical information) and early warning (probabilistic information). Several respondents noted that the difference between current and projected status is not well understood (022, 037, 050). One member of the analysis team noted, “We can see famine conditions in the coming months” (050) but nothing in the projections suggested this.

Analysis challenges

The central conundrum of the analysis in Yemen is that the indicators of food insecurity (and indeed IPC classifications generally) have looked very severe for a long time (see maps in Figure 8), but malnutrition figures have stayed fairly low and mortality figures are very low—even zero in some cases (see Table 2 on CMR). It is unclear whether the issue is with the quality of the data, the way in which data are collected, the analytical model on which IPC analysis is based, whether the conundrum simply defies explanation at this point in time,¹⁰ or if either the data or the process is being influenced in ways that confound the analysis. It is likely a combination of all these.

Setting aside the question of the mortality data (discussed above), the main analytical conundrum concerns what could explain the nutritional resilience in the face of such a serious, widespread, and long-lasting food security crisis. All of the other causal factors that might be expected to explain the nutrition figures are also bad: health facilities have been attacked and many are closed or not functioning, a serious WASH crisis culminated in a cholera epidemic, and livelihoods are shifting in ways that would require greater time commitments from women—possibly robbing time from child care. Respondents are aware of this apparent mismatch, but aside from the fact that the nutrition data were quite out of date for the 2018 analysis, no comprehensive explanation emerged (O12, O28).

Published figures for the prevalence of global acute malnutrition look better (i.e., GAM prevalence is lower) in 2018 than before the current war began in 2015 (O29, O39). Severe acute malnutrition (SAM) admissions are much higher in 2018 than in 2015, but many factors could explain this. Nevertheless, SAM admissions and SMART surveys don't align (O39). The alignment of FRM data collection for food security and the SMART surveys that collect nutrition and mortality data are not ideal (O12). For

¹⁰ Several respondents point out that deterioration in food security may be preceding a deterioration in nutritional status or mortality, and that subsequent analysis will clarify the conundrum. This is a possible explanation, although the food security situation has been critical in some of these areas for upwards of four years.

the November 2018 IPC analysis, the FRM data was quite recent—indeed its collection put off the analysis meetings—but the latest SMART data was from March 2018. This no doubt confounds the analysis somewhat, but doesn't fully account for the very different outcomes for food security and nutrition. This creates a situation in which disbelief in the results

The central conundrum of the analysis in Yemen is that the indicators of food insecurity (and indeed IPC classifications generally) have looked very severe for a long time, but malnutrition figures have stayed fairly low and mortality figures are very low—even zero in some cases. It is unclear whether the issue is with the quality of the data, the way in which data are collected, the analytical model on which IPC analysis is based, whether the conundrum simply defies explanation at this point in time, or if either the data or the process is being influenced in ways that confound the analysis. It is likely a combination of all these.

of the analysis is widespread (O10, O18, O23) but, in the absence of alternative data or explanations, for the most part donors and humanitarian actors base their response on an analysis about which they have serious reservations (O26, O33, O34, O40).¹¹

¹¹ This was another area leading to serious lack of agreement during the feedback meetings. Some stakeholders noted an obvious problem with the data, but it wasn't

Analytical process

The analysis process is unusual: Two different analysis processes—one in Aden and one in Sana’a—are necessary before a national analysis can be completed. This makes the process difficult and time consuming, but the team has managed to make this work over recent years. Nevertheless, respondents noted several concerns regarding the analysis process. First, it is inevitably based mostly on food security data (016, 020). Nutrition teams for the most part are not involved in the IPC analysis (013)—they have their own analytical meetings. This compounds the central conundrum noted above, although it is not the cause of the conundrum. Equally importantly, the IPC analysis (food security) is not linked to the MCLA analysis of WASH and health, among other sectors (003, 029). The MCLA data are not as controversial as the data in the IPC analysis, but doesn’t include food security or nutrition (054). This makes for a somewhat “siloeed” analysis of the overall humanitarian situation (in addition to the more or less separate analysis of food security and nutrition within the IPC process) (054). MCLA is also very different methodologically—based on key informant interviews, not household surveys (041, 046).

Technical capacity

While IPC analysis has been conducted in Yemen for the past five years, challenges continue regarding technical capacity. As is the case in many famine-risk countries, the turnover in personnel involved in the analysis is high. Some of these are highly experienced and well trained, some not. The challenges of working with two different governmental authorities compound these. The Ministry of Public

clear *which* data; others suggested that the combination of units of analysis, use of very out-of-date nutrition data and selective access to the most affected populations added up to a situation in which it simply wasn’t possible to come to consensus conclusions; some suggested that the disconnect between (very serious) food insecurity data and (not so serious) nutrition data was explained by excellent nutrition programs (though failed to note why nutrition programs could succeed where food assistance was failing). All of this adds up to more or less the same findings as offered above: a major unexplained analytical conundrum that leaves key decisions makers more confused than informed.

Health and Population (MOPHP) is widely believed to have replaced experienced staff with new people, resulting in delays in the analysis (027, 028), and potentially injecting an element of political control over the analysis (042). Other ministries, notably the Ministry of Planning and International Cooperation (MOPIC) have also undergone major staff turnover (011). Some respondents indicated that the refrain about “lack of technical capacity” plays into the hands of some actors, because “building capacity” is often a good way to obtain funding from donors. However even donors were hobbled by a lack of technical capacity in Yemen (026).

The IPC Manual Version 3.0 was used in an analysis for the first time in 2018, and introduced very different means of doing projections. Although the process was strongly supported by the technical team from the GSU, different people in the process interpreted the changes differently (045). One result was widely differing views on how to interpret the projections (045, 050, 057), which added to a sense that the analysis wasn’t transparent (057). The rationale for using Version 3.0 in Yemen was that the new protocols would allow for classification even in areas with no or limited access, certainly a legitimate concern.

Participation, leadership, and management

In one sense, the greater the number of partners involved in the analysis, the more participatory it is, but several respondents noted that more participants doesn’t necessarily mean a better analysis (014). Others noted that even when attending the analysis meetings, it is very difficult to feed into process (020). And the sense is that although agencies may be represented, key members of staff of those agencies are often not around during the analysis (050). The engagement of the UN Humanitarian Country Team (UNHCT) in support of the analysis process is not always clear to all stakeholders.¹²

¹² As noted elsewhere in this report, the UNHCT and TWG appeared to have differing perspectives on the question of famine. A close reading of UNHCT or UNSC statements referred to the risk of famine, not necessarily the current status of famine, but this nuance was lost on many respondents who thought that the UN was contradicting itself about the question of famine in Yemen.

Leadership and management of the process is key, but there are several important constraints. Participation in terms of numbers is reported to be good, but local NGOs felt intimidated by the process. Several respondents noted serious disagreements between members of the analysis team. This is not unusual—such disagreements are noted in all the case studies so far. But the mechanism for resolving these disputes is not well-developed. Therefore, such disputes sometimes result in bad relations between analytical partners (015, 043).

It is unclear whether the authorities—particularly in Sana’a—trust the process, viewing it as outside their control (011). But at the same time, several respondents note that there is no verification or voice independent of the authorities (008, 023, 046). So, judgement about the independence of the analysis depends very much on the perspective of individual stakeholders. Respondents who rely on IPC analyses, but who are not part of the food security and nutrition clusters, note that in the past the analysis process was very opaque, with little or no discussion with other clusters (041). The IFRR initiative is intended to address this problem (052) but the results of that process will take more time to become visible.¹³

Analysis of causes (contributing factors)

Finally, there is the question of what is being analyzed. Most IPC analysis is concerned with current status outcomes for food security and malnutrition (and, in theory, mortality). However, mortality data (as noted above) is often missing, and the food security and nutrition data are only about outcomes. There is little specific analysis of causes. This compounds the central conundrum discussed above about the apparent disconnect between nutrition information and potential drivers of nutrition outcomes. In particular, there is little information about conflict (045) and limited space to discuss conflict, even though it is clearly the major driver of the humanitarian crisis (034, 038, 045). Information on the conflict clearly could be available—from the

¹³ Some stakeholders argued that there has been good participation in the process—though these were not the same as those who argued in the interviews that they felt marginalized by the process.

ACLED data base or from the “humanitarian de-confliction” unit set up by the UN after a hospital supported by Médecins Sans Frontières (MSF) was hit by a Saudi airstrike in 2015 (IRIN News 2018a). However, information from this unit is not available to food security analysts, and there is no equivalent humanitarian source of conflict information: inclusion of conflict information in the analysis is ad hoc.

The situation is much the same for other information that is not collected at the household level. For example, much was made in the analysis of the strong social linkages among Yemeni people, with the resulting observation that sharing resources—including food—provides a strong if informal safety net that mitigates much of the negative impact of the food crisis. Yet there is little in the way of data to support (or negate) this claim.

There was widespread disagreement on how to interpret both the causal factors and the likely outcomes of the UN “Roadmap” described above, resulting in a significant disagreement on the overall analysis (see Famine Review Committee 2018). Given this limited ability (and “space”) to analyze drivers or mitigating factors, many respondents noted that the lack of complete consensus on the projections was not surprising (042, 045, 062).

Influences on food security analysis in Yemen

As in all countries, IPC analysis in Yemen is a “technical consensus” based on a convergence of evidence approach—the assumption being that a thorough examination of the evidence will result in such a consensus. However, this is often not the case in Yemen and other countries. But more fundamentally, how the consensus is shaped is therefore critical to the believability of the analysis.

A number of respondents closely involved with the analysis pointed to ways in which the “technical” consensus is shaped by factors other than convergence of the technical evidence (006, 007, 008, 010, 017, 023, 037, 045, 057, 059, 062). Some of this is related specifically to the data itself. For example, one respondent noted, rather incredulously,

“During the war, wasting did not increase?” (037). Others were more concerned about the analysis process—based on the data but also based on other influences—the relative power of individual agencies or actors in the analysis, the ability to over-rule, etc. (045, 059, 062). The users of the data and the analysis—individuals and institutions that have to make decisions based on the outcomes of the analysis— noted some of the consequences of this (003, 021, 026, 029, 033, 034, 040, 053). This section analyzes the various influences on the data collection and analysis process.

Several major categories of concern emerge from the interview data of this case study: The first is around the independence—both of the data collection process and the analysis. The second—and related—concern is around the critical question of access and the way access for both assessment and response is shaping the analysis and understanding of the crisis as a whole. The third is about perceived attempts to deliberately influence the outcomes of the analysis. And a fourth category of miscellaneous concerns emerges. These are reviewed below in this order.

Independence of data collection and analysis

Although many respondents noted that data collection processes had improved in recent years (017, 022, 032, 050, 056), a number of constraints on the independence of the analysis remain closely linked to the data collection process. Nutrition data are viewed as very political (023, 037). Examples were cited where SMART surveys and enumerator trainings were disrupted by national security (012). Agency staff engaged in the collection of information have been detained and traumatized (046), making further independent collection and assessment of information very difficult. Getting assessment teams to the field and supervising teams properly can both be very difficult (021). In one particular case, a team of third party monitors (TPMs) were arrested by authorities and jailed for two days—leaving them quite traumatized and vowing to the agency that hired them they would “never again” do that kind of assignment (023). Incidents were reported in which “minders” accompany field teams—telling people how to answer questions (047, 056). As a result of

all this, people who were involved in government-led data collection noted that since the war started, it has become much more difficult to get reliable, independent information (047).

These concerns, combined with concerns about transparency (019) and about not allowing data to be shared outside the country (see above, 031, 041, 045), all add up to a situation in which many respondents reported difficulty in believing the independence of the data. Not everyone agreed with this conclusion (035, 059, 061), but the difference in view correlated with how closely the respondents are affiliated with government or government-controlled processes (in this case, mostly the authorities in Sana’a). Thus while some observers tend to suggest pressure from the government is at the root of the issue, others blame this lack of data transparency on the limited courage on the part of the humanitarian community (036) and, in particular, a fear of some of the major donors—including Saudi Arabia and the United Arab Emirates, who are also major actors in the conflict (036, 040). For instance, *The Guardian* reported on October 30, 2018, that the Saudi-led coalition had forced the UN to provide “favorable publicity” (though it didn’t explicitly mention “famine”) as part of its “visibility plan” for humanitarian response plan for Yemen (*The Guardian* 2018) (Saudi Arabia and the United Arab Emirates provide almost 40 percent of the budget for Yemen). IRIN News made similar suggestions (IRIN News 2018b).¹⁴

In terms of the analysis, there have been major disagreements reported on how final numbers of people in need are determined, but no clear, overall pattern emerges from the interview evidence. Some respondents suggested that numbers might be inflated to attract greater levels of resources; others suggested that numbers are downplayed to avoid annoying one party or another—including the authorities and various conflict actors—and avoiding discussion of famine was part of this (018, 022, 023, 027, 034, 038, 047, 057). This may depend on the nature of the information: one respondent noted that the de facto authorities in Sana’a are quick to let humanitarians report on Saudi-led coalition atrocities or airstrikes, but not malnutrition (044).

¹⁴ This was also an area of disagreement during the feedback meetings—the extent of difference in views was already obvious from the interviews.

It is also possible numbers can be downplayed and exaggerated at the same time—provided that the issue of famine does not arise. The case study on South Sudan (Maxwell et al. 2018) noted a tendency towards classifying very high numbers in IPC Phase 3 and 4—up to as much as 70 or 75 percent of the population being classified in these two phases—while leaving no population in Phase 5: the “right-skewed but truncated” population distribution, first noted in the South Sudan case study, was very common in Yemen. Figure 9 provides some examples.¹⁵

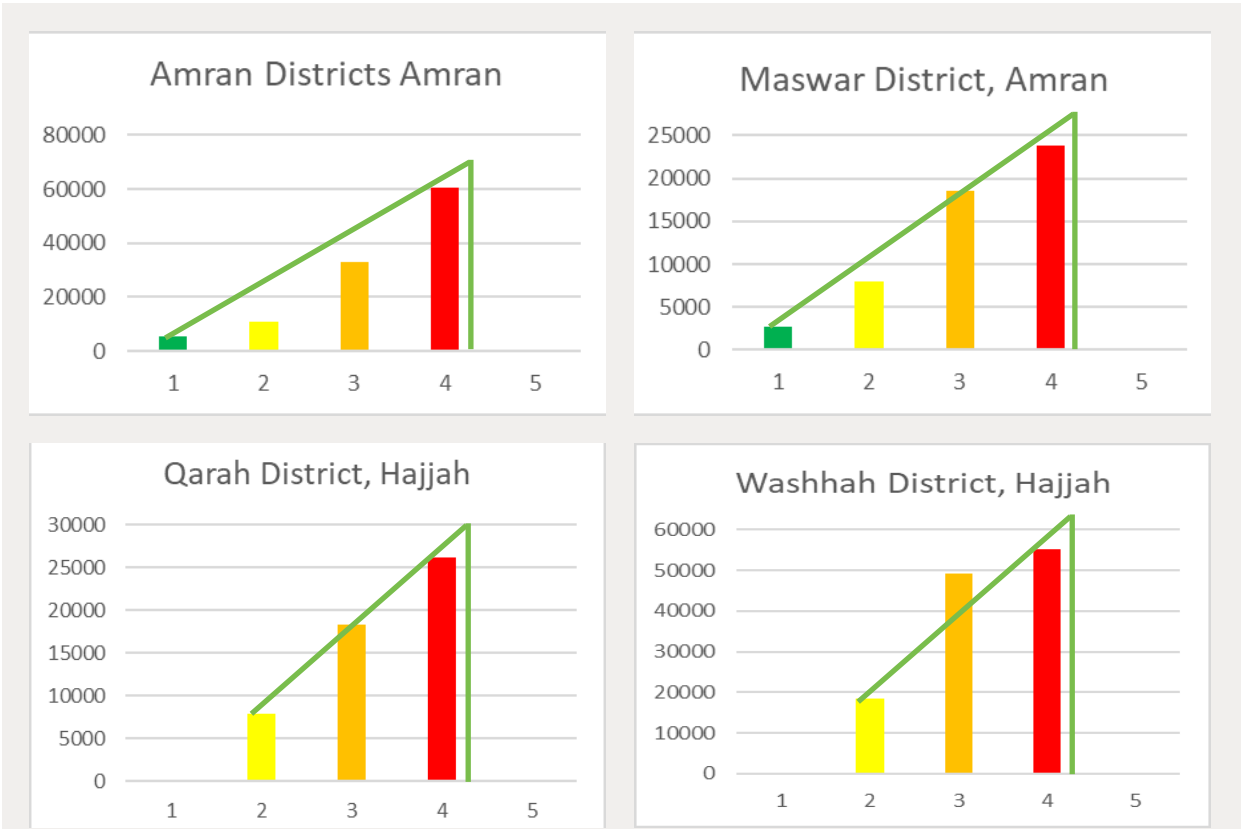
This at once highlights—and perhaps over-estimates—the number of people in crisis and emergency, while indicating that no one is in Phase 5 or famine conditions. This is not conclusive evidence

¹⁵ Note that Figure 9 is taken from the results of the analysis *in the absence of humanitarian food assistance*, in which at face value, one would expect the numbers to reflect a “worst-case” scenario.

of external pressure to avoid discussion of famine, but whereas a few dozen cases of this kind of distribution noted in South Sudan over several years of analysis (about 5 percent of the cases analyzed) were cause for alarm there, nearly *half* of the districts (158 out of 333) in the most recent Yemen analysis showed this kind of (highly improbable) distribution of population—with increasing proportions of the population respectively in phases 2, 3, and 4, but then no population whatsoever in Phase 5. It should be noted that these figures were for the scenario in which there was no humanitarian food assistance.¹⁶

¹⁶ This was the other major area of disagreement in the feedback meetings. Some respondents were quick to agree that these findings suggested a reluctance to discuss famine; others suggested that the analysis teams had no fear of discussing famine—noting the FRM and IFRR initiatives as examples. No one had an explanation for the “right-skewed/truncated” population distributions or why they were so common in the most recent

Figure 9. “Right-Skewed/Truncated” Distributions of Population of Selected Districts, by IPC Phase Classification, Yemen, 2018



Source: IPC Technical Working Group-Yemen

Other forms of influence were more subtle. Agencies directly involved in data collection and analysis were extremely careful about what they said in public, effectively amounting to self-censorship. Respondents reporting this self-censoring noted that failure to do so could make access more difficult for future assessments or could result in difficulties in registration or the withholding of visas or work permits (002, 003, 004, 008, 015, 021, 028, 041) or perhaps even in being expelled from Yemen (041). For example, respondents noted a strong reluctance on the part of agencies to discuss mortality—no one knows why it is so under-reported, but “everyone knows it is” under-reported (033). Some respondents said it is as if humanitarians are suspected of spying (041), and agencies that specialize in information gathering and analysis are especially suspect. However, while data and evidence concerns are real, most donors do not think it is deliberately influenced by the authorities in either Sana’a or in Aden. The only way the authorities might influence the data is by controlling where it can be collected (040). However, the same respondent noted that, no doubt, the Saudi-led coalition tries to influence information (040).

Access constraints

The second major way in which the results of the analysis are potentially distorted concerns populations that are accessible and those that are not. At the moment, some 1.4 million people are estimated to be in inaccessible areas (034) and the extent to which available data accurately reflect their conditions is not known.¹⁷

Obtaining the necessary permissions to collect data can be very time consuming. Some of this is due to security concerns, but some is simply bureaucratic constraints. Permission for access to the field can take a long time and often is not granted at all (002, 017, 027, 028, 038, 045). Or, one level of government can authorize, another can delay, and by the time the latter agrees, the first letter of permission has expired (017, 027) meaning that the agency has to start the process all over again. This is a major reason for the long delays between analyses and for inconsistencies in the time of year that analyses take

Yemen analysis.

¹⁷ Note that the ACAPS estimate is much higher than this.

place. Even local organization may not be allowed access to some of most affected areas (027, 046).

Respondents didn’t agree about the extent to which access constraints are driven by concern for the physical safety of the enumeration teams, whether they are an attempt to distort what the data show, or whether they are simply bureaucratic obstacles (for whatever reason). Many respondents suggested they were mainly bureaucratic hurdles—not real conflict (033, 044, 052)—but nevertheless attempts to control access to places where outcomes are “better” (056). Some respondents suggested that authorities don’t necessarily want assessments to be conducted (008, 010, 011, 021, 027). Others suggested that only actual conflict prevents field assessments (061). In mid- to late 2018, security constraints hampered data collection—particularly in Saddah, Hajja, Amran and Hodeida Governorates (050), which almost inevitably leads to perceptions of biased sample selection, though there is disagreement about how this might skew results.

When this happens, analysts face three choices: extrapolate from out-of-date data (collected when access was possible); use data that is believed to be biased (such as extrapolating from accessible areas), or simply delete inaccessible areas from the analysis (leave blank both in terms of numbers and mapping classification). All three of these choices have consequences for the independence and quality of the data—and the accuracy and validity of the analysis (059). For the most part, even inaccessible areas are still classified but it is not clear to users on what basis classifications are made (029).

Influences on the process

Several respondents did report instances when they knew that data had been deliberately manipulated, albeit more likely for the purposes of ensuring resource flows than to influence the assessment of the severity of the crisis (005, 018, 048). Some of these reports were about the cholera crisis, not the famine analysis, although respondents cited them as evidence that data and analysis were subject to numerous influences—both political and financial (005, 052). Some went so far as to assert that “data is manufactured” (042). Others noted that the issue wasn’t so much about the actual numbers being

changed, but that constraints on access, refusal to share the data, the banning of some surveys and the use of others to extrapolate to unreachable areas, and difficulties in cross-checking all meant that the door was open to all kinds of influences on—and varying interpretations of—the evidence (017, 023). For example, when FRM data for some areas showed a population in Phase 5 conditions (with regard to food security data only—nutrition and mortality data were not available), it was dismissed as “a mistake” (045). However, the view of the respondent in this case (who had long experience in IPC analysis) was that the data were unambiguous and correct—but showed something the authorities didn’t want to endorse. Others (060) did not agree with this view, but were not as closely involved.

Two external factors may have influenced the 2018 analysis—one being the media, the other being UN Humanitarian Country Team (UNHCT). Everyone agreed that the UN “Roadmap” was a timely intervention in preventing famine in Yemen, but the fact that it came out before the TWG analysis confused things. Again—a careful reading of the “Roadmap” makes the distinctions clear, but the distinctions were lost on some readers.

The media, of course, were every engaged with the story of famine in Yemen throughout the latter months of 2018. One story in particular irked members of the analysis team and was mentioned repeatedly. In a story about Yemen in *The Globe and Mail* on September 14, the journalist-author made reference to people eating leaves and showed a picture of a (fairly healthy looking) family clearly cooking leaves (Associated Press 2018). Eating leaves as a famine coping strategy was subsequently debunked—apparently eating these leaves is not abnormal in this area—but the story cemented the belief that the journalistic world was out to “prove” that there was famine in Yemen, irrespective of the facts. No less than five independently interviewed key informants (all of whom had direct engagement with the analysis process) cited this story to note how badly

wrong journalists had gotten the story on hunger and famine in Yemen (026, 028, 049, 056, 059). The comment about eating leaves—with the exception of the fact that the editors chose to make it the title of the article—was pretty much in passing: the story was mostly about malnourished children turning up at a feeding center. But the fact that the media were raising the specter of famine in Yemen before the analysis was completed seemed to have influenced the analysis team (to demonstrate that there was not a famine). At the same time, other actors accused the UN of invoking “famine” to draw attention and resources (051).

Finally, there is the issue about how the “technical consensus” is formulated. Several respondents referred to the consensus being driven by the “loudest voice in the room” (019, 062). This has also been witnessed elsewhere (Maxwell et al. 2018), where a “consensus” outcome is essentially driven by the most powerful individual members of the analysis team—in this case the group that has all the data (045).¹⁸ While the “consensus” outcome of the 2018 analysis was that there was no famine, and none projected, a number of individuals believed differently and noted, in private, that they thought famine was more likely in some areas than the analysis suggested (045, 056, 057). Key informants from government (both in Aden and Sana’a) insisted that the data were good, and the consensus analysis was that famine is not a risk (035, 062). All that is needed is more funding. Nutrition agencies didn’t see any increase in therapeutic feeding center (TFC) admissions when “famine” started to be talked about, but noted it was difficult to get independent data (051).

¹⁸ Some stakeholders strongly disagreed that more powerful actors held more sway over the process, citing the agreement between the major UN agencies and the government over the outcomes of the analysis as evidence. But these were precisely the most powerful actors that some of the interview respondents had mentioned in the first place.

6. Conclusions: Lessons Learned and Recommendations

Lessons learned

The analysis of famine in Yemen has progressed significantly since this crisis began in 2014. The level of granularity, prioritization of the most at-risk districts through the FRM initiative, and coordination of analysis between two different authorities (who are otherwise hostile towards each other) are all significant achievements. Nevertheless, concerns remain with the independence and reliability of the data collection processes, many pieces of information remain missing from the analysis, and some existing data present analytical conundrums that no one can adequately explain. Examples of direct interference with both data collection and analysis processes have been noted, but much of it appears to be indirect. Some respondents noted that too little time was given for analysis—especially of contributing factors. Others noted that too much “hearsay” was admitted as evidence, and in some cases, data was thrown out. There is both the fear of “crying wolf” (false positives) and the real possibility of overlooking pockets of the population who may indeed be in famine or humanitarian catastrophe (false negatives)—as suggested by the number of “right-skewed but truncated” analyses noted above. And as footnotes have suggested, consensus among stakeholders closely engaged in the process remains elusive.

The situation as of early 2019 is quite fluid—with the currency first inflating nearly out of control, then brought back to a somewhat more stable, but still rapidly inflating, level. A tentative ceasefire around Hodeida is holding—but only barely, and while the macro-economic situation has stabilized a bit since late 2018, no one believes that the crisis is anywhere

near to being over (UNSC 2019). The need for rigorous and independent analysis of the humanitarian situation on the ground is as strong as ever. Several clear conclusions or lessons learned emerged from the foregoing analysis. These are summarized briefly below, followed by some specific recommendations.

Data concerns

A clear and urgent issue regards data transparency and data sharing. Yemen is the only country studied in this research in which data had been withheld from international review and cross-checking—indeed in most countries this is welcomed, particularly for nutrition and mortality data.¹⁹ Although everyone agrees that the results of the analysis supported by these data are of critical importance, no national and international protocols are in place to ensure that this data is clearly treated as a public good. Missing data, data that is extremely out of date, or data that is not representative of the specified unit of analysis all constitute significant challenges to rigorous and independent analysis of food security and nutrition in Yemen. The times between analyses are often long—too long for trend extrapolation to yield reliable results for decision making. Data on mortality in particular is frequently missing, and what little data there is does not inspire the confidence of most analysts or donors. As a result of all this, major decisions have to be made about humanitarian advocacy, and issues such as the UN Roadmap and resource allocation, on the basis of what frequently could be described as worst-case scenarios, rather than empirical evidence.

¹⁹ It emerged during the feedback sessions that some of the data was shared with external experts, but this was not well known—meaning that in the end some of data was shared, but the data sharing was kept confidential.

A good faith effort has been made to prioritize data collection in the most chronically vulnerable districts, but a built-in mechanism to recognize and prioritize “hotspots” in real time is lacking. Numerous respondents referred to the social solidarity among Yemenis, which they considered a significant factor in preventing famine. Yet this is rarely actually measured—making it difficult to know how such support systems, and in particular support systems for IDPs and marginalized groups, are weathering the current crisis.

All that said, in the end, enough checks on the data were in place to be able to classify most areas of Yemen in 2018. Questions about data quality of data remain, however, and more needs to be done to be transparent about data quality used in final analyses.

Considerable effort is being put into bringing food security and nutrition data together in common survey instruments. This will better synchronize timing and units of analysis to facilitate joint analysis. Integrated data collection involves making compromises so that very different food security and nutrition and mortality data collection methods and tools can be combined—particularly sampling methodologies. These compromises appear to undermine confidence in the outcomes of the integrated analysis.

Analytical concerns

Yemen presents an analytical conundrum that so far has defied full explanation: extremely high levels of reported food insecurity, the collapse of the public health system, a WASH-related crisis—and yet low levels of reported malnutrition and extremely low levels of reported mortality. Various explanations have been put forward—perhaps bad quality data, perhaps the timing (or mis-timing) of the data collection, perhaps deliberate limitations to where data can be collected, perhaps cultural reasons for not reporting mortality, or perhaps Yemenis have some extraordinary coping ability in the face of significant challenges (or perhaps some combination of all these). But the fact that this conundrum remains unresolved, and the fact that there are so many counter-narratives in the media and from other humanitarian sources, undermines faith in the analysis. Several factors could be contributing to this.

First, the analysis is not well joined up—even the food security and nutrition components run on

somewhat separate tracks in terms of joint analysis, and other analytical processes—notably the Multi Cluster Location Assessment which collects different kinds of data, but which could inform the analysis—are also on very different tracks. The IFRR process is aimed at addressing this question the issue of collecting joined up data—and perhaps needs more time to come to fruition. Participation in the process is remarkable, especially given that IPC analysis requires two separate exercises. Nevertheless, some respondents expressed concerns about participation.

Second, the limited ability of analysts outside the country to engage is no doubt a constraint, as is the transparency issue noted above. As has been noted in other country case studies, the main analytical emphasis is on the outcomes, meaning that relatively less analytical attention is given to drivers or contributing factors—and hence significant disagreement about the projections.

Third, some confusion remains between current status (empirical) and early warning (probabilistic) or between current status reporting and projections. The Famine Risk Monitoring initiative, for instance, is not really measuring risk—it is measuring current status outcomes. While all the current drivers of famine risk are recognized, they seemed to make little difference in the final analysis—with the importance of current status information outweighing the importance of the drivers of famine in the analysis leading to projections. In the most recent (November 2018) analysis, the process was so delayed that both the media and the UNHCT came out with statements that both preceded and to some extent seemed not to concur with the IPC analysis, leaving some key decision makers confused about the situation on the ground.²⁰ In some cases, members of the TWG interviewed seemed to suggest that the messaging had gotten out in front of the analysis, challenging their conclusions. The lesson learnt is that if the IPC is to be the sole judge of both the classification of a famine and the risk of famine, then all agencies involved in IPC analysis have the duty to ensure that the analyses are more frequent (two or three

²⁰ Actually, careful reading of the statements of the UN Under-Secretary General and some of the messaging of the UNHCT speaks of “famine risk,” not famine occurring, so technically there wasn’t a contradiction in terms, but one had to read very carefully to get these fine differences.

times per year would be ideal in a crisis of this severity and magnitude), more timely in terms of data analyzed (data no more than two or three months old is the usual standard), the risk of false negatives is significantly reduced, and with projections that are of much greater quality. This will require the mobilization and support from the highest management level of agencies involved in data collection and their full support to the IPC process.

Finally, Version 3.0 of the IPC guidelines were field-tested for the first time in Yemen in November 2018. While there were valid reasons for using Version 3.0 in Yemen, many respondents noted that trying to both learn a new system *and* conduct a good analysis at perhaps the most difficult time period in the history of this crisis was asking too much.

Influences

Several factors worry observers about how the process (data collection and analysis) may be influenced. One is about access, and whether blockages to access for assessment and response are for purely security reasons—most observers believe that there are multiple reasons. Equally importantly, when access is blocked, technical teams do not always get the support of agency leadership in taking up concerns with authorities. The higher levels of the UN system acknowledge the implications for the analysis, and in some cases agency heads have engaged directly to help negotiate access. But some respondents mentioned intimidation as a real deterrent to this kind of support—the threat of denied visas or work permits for internationals and, perhaps worse for national staff. At the same time, there is persistent pressure, at least at a high level, for positive publicity from donors who are also direct belligerents in the war that is driving the humanitarian crisis.

Some observers believe that information and analysis has been politicized to secure more resources, although others note that the humanitarian capacity to handle more funding has already been surpassed and that therefore perhaps more humanitarian funding isn't really the issue. Experience in both Yemen and other contexts has shown that increased humanitarian resources are frequently justified by the results of the analysis. At the same time, some observers believe that, like in other countries studied, a general

fear of the politics of the “f-word” exists, and thus discussions of the topic of famine are subtly avoided.

Many of the institutions of government (MOPHP, CSO, etc.) are under the control of de facto authorities in Sana'a, and in some cases technical staff have been replaced with political appointees, resulting in a loss of technical capacity. Cooperation at the technical level between authorities in the north and south continued for a while: early on, data was shared, but then this broke down. Cooperation between different authorities on surveys ended in 2018.

As noted in other country case studies, numerous incidents were reported of “the loudest voice in the room” swaying the analytical consensus. This makes for a fraught environment in which to try to conduct a rigorous, independent analysis of the humanitarian situation, and makes for the kind of analytical outcomes that strongly suggest possible compromises related to the use (or not) of the word “famine”—or even proportions of populations in catastrophe.

Related to this observation, there is some acceptance of high numbers in Phase 3 and 4, but not Phase 5—referred to elsewhere as a kind of “Goldilocks” solution to the analysis problem (“not too hot, not too cold”). No one wants a population to be shown in Phase 5, but the high number of people in Phase 4 is somehow “acceptable.” The very high proportion of districts analyzed to have a “right-skewed but truncated” distribution of population by IPC phase classification is strongly suggestive evidence of this phenomenon, as well as the manner in which areas inaccessible for data collection are mapped. This results in funding decisions having to be made in the absence of reliable assessment results, in the view of most donor representatives interviewed—potentially resulting in resources not being targeted impartially, undermining the very purpose for which these data collection and analysis processes were invented, and for which reason so much has been invested in them. The consequences of all this for the analysis of famine in Yemen (and beyond) are significant.

Recommendations

The situation in Yemen remains fraught with difficulties. Whether these concerns can simply be “fixed”

is not clear. Nevertheless, several recommendations follow from the conclusions offered above.

1. Develop strong protocols for data transparency and data sharing.

Yemen is the only country noted in this research where data are not regularly shared with recognized, international authorities for data quality and plausibility checks. Within Yemen, even among agencies, data is not routinely or freely shared. Information on humanitarian conditions and emergency needs should be treated as a national and international public good, with an open process and clear, consensus guidelines for collection, cleaning, joint analysis, and sharing of data. The lack of data transparency causes many observers to believe some information is being withheld from decision makers. Donors can encourage data transparency and data sharing, but leadership is required at the level of agencies—both globally and in Yemen.

2. Build and engage high-level support for access.

Some agency directors and sometimes the Humanitarian Coordinator engage with authorities to ensure access for both assessment and, of course, response. This process needs to be regularized and pressure maintained until improved access is achieved. This requires strong and constant advocacy with authorities. Donors can help with this process. Recommendations below on agility of data collection and analysis and prioritization of hotspots are linked to this recommendation. Focused advocacy for access will be more effective if an agile analysis system exists that can seize opportunities to assess hotspots at any time that access is possible.

3. Ensure the most independent, impartial and neutral evidence possible for decision making.

The motivations of all the actors in Yemen are not necessarily clear and some appear to have countervailing tendencies. The politics of information may differ from one time period to the next, calling for

vigilance and mitigation of the factors that influence the analysis through a system of governance that is as transparent, participatory, and inclusive as possible. The IPC already has many of these systems in place but the arguably unique political environment in Yemen is testing the limits of the IPC governance system. To ensure that the system is seen to be as transparent and independent as possible, more attention to governance of the system is required at the most senior levels of the UN and donors in Yemen. It cannot just be assumed that the technical part of the system is able to manage the potential interference alone without understanding the issues and backing at the most senior level. Most importantly the technical part of the IPC needs senior support in managing the perceptions of potential political interference. Efforts to increase participation, transparency and inclusiveness in the analysis and transmission of the findings of the analysis is urgently required.

4. Build greater participation.

Participation goes beyond attendance in meetings—it really means the ability to engage in assessment and analysis without fear or intimidation. Engagement with external actors may help to enhance this framework—a more proactive role from the GSU and from donors can take much weight off field teams—but in-country, high-level leadership is critical. Broader participation in data collection can also help build consensus in the analytical outcomes. Using a funding strategy that consciously promotes participation at all levels—survey design, data collection, analysis and presentation of the results—can also contribute. Broader participation and an empowered multi-stakeholder analysis are probably the best guarantees of independent analysis—particularly if they are strong enough to mitigate the potential sources of influence.

5. Streamline timely and coordinated processes of assessment and analysis.

Access is the biggest issue to tackle, but if and when better access is permitted by governing authorities, the humanitarian community needs to be ready

with plans for more frequent, more agile and more coordinated data collection and analysis processes. Improved identification of hotspots should be a priority. This would allow for concentrated advocacy for access, better timing, and joined up analysis for the prioritized areas. Extreme food insecurity is not driven solely by seasonality in this context; hence analysis of food and nutrition security and mortality should not be exclusively tied to a seasonal calendar. Coordination on the identification of hotspots and the need for improved rapid needs assessments in hotspots are urgent priorities. A more flexible approach to the timing and coverage of each analysis is also needed. Attempting to have regular, country-wide analyses has likely undermined their timeliness and utility. The practicality of trying to regularly assess 333 districts simultaneously would be an enormous task even if there was not a war going on. An “update” approach to IPC analysis is a possible compromise solution whereby a countrywide analysis is updated over a year or so by in-depth analyses of specific hotspots. Defining a clear prioritization criterion for areas that need updated data would ensure timely analysis. Lastly, a measure of social solidarity should be developed and included in the data collection process.

6. Balance data integration and prioritization.

The current focus on incorporating food security, nutrition, and mortality into a single, combined survey protocol with a focus on national analysis risks further complication, undermining the timeliness and utility of the food security assessment system. Given the need to produce evidence that allows decision-makers to keep up with the dynamic context, anything that slows down the system reduces its value. A better balance is needed between integrated pan-territorial food security assessments and prioritization of in-depth assessment of hotspots.

7. Continue to build technical capacity.

Many of the issues identified here are not necessarily technical, but the observation applies that strong technical capacity is one of the safeguards against

influences on the process. High levels of support are needed to maintain technical capacity built in years past. This includes improved data quality checks, clear representation of extrapolated results, the monitoring of drivers and the inclusion of other outcomes beyond food security and nutrition—especially health, WASH, protection, and conflict analysis. Better plausibility checks are needed for food security data, and better joint analysis of information is needed across the board. And capacity must be built across different sectors.

8. Clarify the difference between current status information and early warning information.

IPC data are often out of date, and while there is an analysis of contributing factors, converting old current status information into accurate projections is clearly a gap in the current process. The purpose of early warning information is to help identify hotspots or rapidly deteriorating situations, where assessment (and response) resources can then be concentrated.

* * *

A dedicated team of analysts and agencies has made significant efforts to improve the quality of evidence for decision-making in the highly challenging and volatile situation of Yemen over the recent years of conflict. Their perseverance and expertise in the face of significant constraints and challenges should be acknowledged. Such a complex environment no doubt brings to light some of the weaknesses and gaps in the famine analysis system despite this dedication and expertise—as this report has tried to highlight. Timeliness, utility, and consensus, as well as the independence and integrity of the analysis, need to be the guiding principles for the analysis of famine in Yemen. These principles call for the famine analysis system (including, but not limited to the IPC) to be more agile, and more willing to learn from and adapt to a changing environment. The risk of large-scale mortality requires all stakeholders to acknowledge that a pursuit of a perfect analysis risks being at the expense of having “good enough” evidence to guide the response for the Yemeni population.

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