August 2022

The food insecurity gap and protracted humanitarian crisis

factsheet

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Introduction

In 2022, record-high food prices, supply-chain disruptions and increasing climate and conflict risks are causing millions of people across the globe to face worsening levels of food insecurity. But the trend toward greater food insecurity is not simply a product of current events. The Global Report on Food Crises (GRFC) 2022 highlights that the population considered in need of urgent action due to acute food insecurity doubled between 2016 and 2021. Food insecurity can cause, deepen, or worsen humanitarian crises, and understanding the most effective ways to target assistance is crucial to preventing multiple and protracted crises.

What is food insecurity?

Acute food insecurity is faced by people who are unable to afford or access essential food needs, and presents the risks of malnutrition, starvation or death. While the risk of food insecurity is greater for those in humanitarian crisis contexts, a humanitarian crisis does not have to be present for countries to experience high levels of food insecurity.

There are a number of metrics which indicate the overall level of food insecurity in a country: the absolute size of a population facing food insecurity; the size of a population facing food insecurity relative to the total population; and the intensity of the food insecurity felt by the population in need, as measured by the Integrated Food Security Phase Classification (IPC) acute food insecurity Phases 1-5.

IPC phases range from 1 to 5, where Phases 1 or 2 (minimal or stressed) indicate no immediate unmet food needs; and Phases 3, 4, and 5 (crisis, emergency and catastrophe/famine) indicate increasing severity of unmet food needs and the requirement for urgent assistance. The number of people in Phase 3 and above is a primary metric in tracking food insecurity, although the IPC does not cover every country every year. In 2022, the GRFC assessed 53 countries experiencing acute food insecurity and requiring external emergency assistance to cope. To produce a global total, other sources such as humanitarian needs assessments can be used to supplement IPC data, although these figures may use differing definitions of food security. For more information on calculating the number of people facing food insecurity in countries not covered by the IPC, see the methodology in the Appendix.

The food insecurity gap

Knowing the overall numbers of people facing food insecurity does not give a complete picture, as the intensity of food insecurity differs between populations, ranging from crisis-level (IPC Phase 3) to catastrophic levels or even famine (IPC Phase 5).

We can understand the difference in these levels as increasing gaps in food insecurity: populations with a greater gap – or deeper food insecurity – are experiencing more intense food insecurity and require a different and more urgent set of interventions. Measuring how the intensity of food insecurity differs and changes between populations is vital to understanding and comparing levels of need, and tracking progress over time. To do this, we created a metric known as the ‘food insecurity gap’, a single percentage figure which indicates the intensity of food insecurity across a population. See the Appendix for more information on the methodology used to calculate this metric.
How do we define humanitarian crisis?

We define countries experiencing humanitarian crisis as those with a United Nations (UN)-coordinated humanitarian appeal. We identify countries facing protracted crisis as those with five or more consecutive years of UN-coordinated humanitarian appeals, while recurrent-crisis countries are those with two to four consecutive years of appeals. As of September 2022, there are 71 countries with UN-coordinated humanitarian appeals and 44 facing protracted crisis.
Key facts

- The number of people facing food insecurity globally is increasing and the majority of people (80%) facing food insecurity live in countries experiencing protracted humanitarian crisis (Figure 1).
- The intensity of global food insecurity is increasing and people living in countries experiencing protracted crisis face the deepest levels of food insecurity (Figure 2).
- In 2022, South Sudan, Yemen and Afghanistan have the greatest food insecurity gaps and rank among the top ten countries with the largest populations facing food insecurity. All three of them are also currently experiencing protracted humanitarian crises (Figure 3).
- Between 2019 and 2022, eight of the top 10 countries with the deepest levels of food insecurity experienced intensifying food insecurity, with this trend likely to continue over time (Figure 4).
Crisis and food insecurity

Figure 1. The number of people facing food insecurity globally is increasing and the majority of people facing food insecurity (80%) live in countries experiencing protracted humanitarian crisis.

With the conflict in Ukraine and a severe drought in the Horn of Africa, food insecurity has become an increasingly important driver of humanitarian need. In 2022, a growing number of people facing the highest levels of food insecurity were also living in countries experiencing a protracted crisis.

- Between 2019 and 2021, the number of people facing food insecurity and requiring urgent assistance increased by 53% (from 146.2 million to 224.2 million people), with yearly increases over this period of 30% (2019 to 2020) and 18% (2020 to 2021). Based on preliminary estimates for 2022, this number will increase by 24% to 278.0 million people.
- Of the 278.0 million people estimated to be experiencing food insecurity in 2022, 221.2 million of them are living in 30 countries experiencing protracted crisis, representing 80% of the total population facing food insecurity. Notably, a further 14 countries experiencing protracted crisis do not currently have any data on food insecurity available.

Source: Development Initiatives based on IPC/Cadre Harmonisé (CH), and United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA).
Notes: Totals cover between 53 and 60 countries annually. Data combines results from IPC/CH assessments and UN-coordinated humanitarian needs assessments, which may use differing definitions of food security.
*2022 data is preliminary based on partial-year existing data and projections. See the Appendix for more information.
The food insecurity gap

Figure 2. The intensity of global food insecurity is increasing and people living in countries experiencing protracted humanitarian crisis face the deepest levels of food insecurity.

While some countries may have larger numbers of people facing food insecurity, those with a greater food insecurity gap experience more intense food insecurity across a population. The depth of food insecurity has consistently worsened over time. People living in countries facing protracted humanitarian crisis are more likely to experience more intense food insecurity.

- The global food insecurity gap has grown consistently year-on-year between 2019 and 2022, from 7% to 9%. The food insecurity gap is estimated to have increased by 3% across all countries experiencing humanitarian crisis.
- For people in countries experiencing protracted humanitarian crisis, the food insecurity gap increased from 7.8% to 10.4%. People living in countries experiencing protracted crisis have close to double the food insecurity gap of those living in countries not experiencing a humanitarian crisis.

Source: Development Initiatives based on IPC/CH data.
Notes: *2022 data is preliminary. Country crisis classifications as of 2022. Global line refers to all countries with food insecurity data. See the Appendix for more information.
The countries with the most people facing food insecurity and the food insecurity gap

Figure 3. In 2022, South Sudan, Yemen and Afghanistan have the greatest food insecurity gaps and rank among the top ten countries with the largest populations facing food insecurity. All three of them are also currently experiencing protracted humanitarian crises.

Source: Development Initiatives based on IPC/CH, and UNOCHA data.

Notes: *Data for Ethiopia is from 2021. 2022 data is preliminary. Data for totals combines IPC/CH assessments of Phase 3+ food insecurity and UN-coordinated humanitarian needs assessments of populations facing food insecurity. Bubbles are scaled according to populations by IPC food insecurity phase. See the Appendix for more information.
Of the top 25 countries with the largest populations facing food insecurity in 2022, only five (Philippines, Honduras, Malawi, Guatemala and Sri Lanka) were not experiencing a protracted crisis. However, the countries with the largest populations experiencing food insecurity are not necessarily those with the greatest food insecurity gaps and therefore not always the ones with the most urgent need.

- In 2022, DRC (25.9 million), Ethiopia (20.4 million), Afghanistan (19.7 million), Nigeria (19.5 million) and Yemen (19.0 million) are estimated to have the biggest populations facing crisis levels of food insecurity or worse.
- South Sudan (7.7 million), Yemen (19.0 million) and Afghanistan (19.7 million) have the greatest food insecurity gaps (29%, 28% and 21% respectively). Haiti (4.6 million) and Central African Republic (2.4 million) have smaller populations facing food insecurity, but deeper food insecurity gaps (20%, 21%) than the two countries with the largest populations facing food insecurity.
- In 2022, five countries – Somalia, South Sudan, Yemen, Ethiopia and Afghanistan – are projected to have populations experiencing famine, the deepest level of food insecurity.
- In 2022, seven countries in the top 25 – Philippines, Venezuela, Sri Lanka, Colombia, Ukraine, Myanmar and Syria – have populations in need experiencing food insecurity, but the food insecurity levels have not yet been established by the IPC and it is not possible to determine the food insecurity gaps for these countries.
The food insecurity gap over time

Figure 4. Between 2019 and 2022, eight of the top 10 countries with the deepest levels of food insecurity experienced intensifying food insecurity, with this trend likely to continue over time.

Source: Development Initiatives based on IPC/CH data.

Notes: *2022 data is preliminary. Not all populations have data for every year. Dashed outline bubbles indicate interim years with larger gaps. Bubbles are scaled according to total population in food insecurity. Since 2019, the food insecurity gap has increased in the countries experiencing the most intense levels of food insecurity. See the Appendix for more information.
The majority of countries facing the deepest levels of food insecurity have seen their food insecurity worsen over time. The top eight (South Sudan, Yemen, Afghanistan, Pakistan, Central African Republic, Somalia, Haiti and Uganda) are facing protracted crises.

- The countries with the greatest food insecurity gaps in 2022 (South Sudan: 29%, Yemen: 28% and Afghanistan: 21%) consistently ranked among those with the worst levels of food insecurity from 2019–2021, suggesting that there were no substantial improvements to food security for those populations during that time.
- Somalia experienced the largest increase in the food insecurity gap between 2019–2022, where it more than doubled from 7% to 20%.
- Between 2019 and 2022, only two of the 10 countries with the deepest food insecurity saw an overall decrease in their food insecurity gap: Pakistan (from 23% in 2019 to 10% in 2022) and Lesotho (from 12% in 2019 to 8% in 2022). The food insecurity gap reached its highest levels in 2021 in Afghanistan (25%) and in 2020 in Lesotho (16%).
Conclusion

People living in countries experiencing protracted crisis are also experiencing more intense levels of food insecurity.

Rising food insecurity is compounding other humanitarian needs. The majority of those facing the most intense levels of food insecurity, as denoted by the greatest food insecurity gap, live in countries experiencing protracted humanitarian crisis. In these contexts, crisis is frequently driven by complex, interconnecting factors and the risk of multiple, intersecting crises is greater. The challenges involved in resolving the underlying causes of food insecurity in these contexts are all the more glaring given the historically large shortfalls in funding for humanitarian needs. These shortfalls are especially evident in countries with the highest food insecurity gaps and where there has been no significant decrease in the intensity of food insecurity over time.

Both the number of people facing food insecurity and the food insecurity gap are important indicators when considering where to target aid.

While the largest populations experiencing food insecurity between 2019–2022 experienced no significant increase of the food insecurity gap, these populations are nevertheless vulnerable to unexpected changes in the global context. This means that the risk that they may tip into emergency – or even famine – levels of food insecurity remains. Deeper food insecurity can also prolong a humanitarian crisis.

Additionally, outside of protracted humanitarian crisis contexts, food insecurity is growing. After remaining relatively stable between 2019–2021, the food insecurity gap is projected to significantly increase (from 4.7% in 2021 to 5.7% in 2022) for people in countries not experiencing humanitarian crisis.

Additional and intersecting risks, such as those related to climate and conflict, could worsen food insecurity.

People living in countries experiencing protracted humanitarian crisis are vulnerable to multiple risks. The 2022 Global Humanitarian Assistance report found a significant overlap between people experiencing high levels of food insecurity and people living with high-intensity conflict. Furthermore, those people living in fragile- and conflict-affected states were less likely to receive funding related to climate change adaptation and disaster risk reduction (see the 2022 Global Humanitarian Assistance Report sections 2.5 and 3.7). This suggests that those situated in countries experiencing protracted humanitarian crisis are even less likely to receive the critical support that can contribute to reducing food insecurity.

The food insecurity gap offers a measure by which better, more effective and efficient humanitarian responses can be targeted to address immediate humanitarian food security needs, including realising publicly stated goals to localise aid and ensure sufficient funding of responses.

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1 The 2022 Global Humanitarian Assistance report examined the overlap between high intensity conflict countries covered by IPC/CH assessments only, resulting in a lower total of people facing food insecurity globally.
Addressing the underlying causes and drivers of food insecurity requires a collaborative, cohesive approach with targeted financing for the most vulnerable people and countries. It is also necessary to build resilience to future shocks in protracted humanitarian crisis settings through coordinated and coherent longer-term development, peacebuilding and climate interventions. As many more millions of people across the globe face deep and sustained food insecurity, the humanitarian system must fully recognise the complex levels of food insecurity and the need for a system-wide approach.
Appendix: Methodology

Totals of people facing food insecurity

- We primarily use the Integrated Food Security Phase Classification (IPC’s) acute food insecurity framework to classify people experiencing food insecurity. People living in Phases 3-5 are considered to be facing acute food insecurity and in need of urgent action; this is shorthanded to ‘food insecurity’.

- Annual country totals of people living in food insecurity are taken from IPC’s population tracker where available. The year datapoint is taken from the midpoint of the given analysis period.

- From the IPC’s population tracker, we use the analysis which records the maximum ‘Phase 3+’ total in each analysis year for each country in line with the approach presented in the Global Report on Food Crises (GRFC).

- For countries not covered by the IPC’s population tracker, we use Cadre Harmonisé (CH’s) country datasets. Again, the year datapoint is taken from the midpoint of the given analysis period and the assessment which records the maximum annual Phase 3+ total is used.

- For countries not covered by IPC/CH, we use UNOCHA’s Humanitarian Programming Cycle data of humanitarian needs assessments which record the numbers of people in need and targeted under Humanitarian Response Plans (HRPs) by sector. While these figures are not directly comparable with those produced by IPC/CH, this is broadly in line with the approach used in the GRFC, which assesses the methodology of humanitarian needs assessments to ensure figures of people in need due to acute food insecurity are equivalent to IPC/CH Phase 3 or above.

- From UNOCHA’s HPC, we take the maximum recorded annual value of people in need or targeted under the Food Insecurity sector for each country’s humanitarian response plan for all countries without data from IPC/CH.

- The global total of people facing food insecurity annually is the sum of each country’s annual available data.

- Data for 2022 is preliminary, relying on partial data, projections from IPC/CH and forward-looking estimates from UNOCHA. These estimates are subject to change, both at a country level and in terms of which countries are assessed.

- In two cases (DPRK and South Africa), the most recent historical estimates of food insecurity are used to fill missing data for 2022 where neither an IPC/CH assessment nor humanitarian needs assessment has yet been conducted.

The food insecurity gap

- The food insecurity gap metric (also referred to as food insecurity ‘depth’ or ‘intensity’) is a modified Foster-Greer-Thorbecke index ($\alpha = 1$), similar to the ‘poverty gap’ measure. While a poverty gap calculation uses the difference between a person’s income and the poverty line, the food insecurity gap calculation uses a linear scaling between a person’s food insecurity phase and the threshold of urgent need food insecurity (Phase 3 = 33.3%; Phase 4 = 66.7%; Phase 5 = 100%).
• The food insecurity gap by country population is calculated as the average distance to the acute food security needs threshold across the whole assessed population (where those in Phase 1 or 2 have a gap of 0%).
• The gap metric is expressed as a percentage figure, where a gap of 0% indicates that no one is in Phase 3+ and 100% indicates that everyone is Phase 5. Most of the countries assessed return a value of 5-30%.
• As the gap metric requires information about the distribution of population by food insecurity phase, only data from IPC/CH is used for these analyses. Countries with only UNOCHA data for individual years do not have a calculated gap.
• When aggregating gap metrics across country crisis classes for trend analyses, missing data years are filled using the nearest available data year. This is to avoid artefacts caused by entry or exit of countries from the dataset mid-trend.

**Country crisis classification**

• Countries are classified according to the presence and longevity of the humanitarian crisis they are facing. The approach used in this factsheet is based on the one used in the Global Humanitarian Assistance report.
• The definition of **protracted crisis** is a country with five or more consecutive years of UN-coordinated appeals, as of the year of analysis.
• The definition of **recurrent crisis** is a country with two to four consecutive years of UN-coordinated appeals, as of the year of analysis.
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