

8-25-25

# Between Data and Agenda: Questioning the IPC's Gaza Famine Projections





### **NCRI FLASH BRIEF**

# Between Data and Agenda: Questioning the IPC's Gaza Famine Projections

## **Executive Summary**

The United Nation's Integrated Food Security Phase Classification (IPC) has released three reports about the conditions of malnutrition and food scarcity in the Gaza Strip over the last year. The first report, issued in the fall of 2024, forecast a dire condition by the following spring, with all of Gaza falling under Phase 3 or 4 malnutrition. Their subsequent report in May updated conditions in Gaza to Phase 2 and 3, indicating broad disagreement with their prior forecast without explanation. According to our analysis, the IPC's 2024 Gaza report was the most over-predicted malnutrition analysis of all their analyses during that time period. Without accounting for their earlier mistakes, the IPC subsequently released an Alert in July, which forecast a "worst-case scenario." The IPC's failure to explain the improvement in conditions and the overestimation of their 2024 forecast affords less confidence in their current projections of a "worst-case scenario."

The IPC's 2024 forecast of a deteriorating situation did not just fall short; the opposite happened, as conditions improved into May according to the IPC's reports. It is possible that the removal of the blockade by the IDF against aid flowing into Gaza led to the amelioration of projected famine conditions. That the IPC did not predict this change is understandable given the dynamic and fast-moving nature of modern conflict. However, the May report averred, "latest data indicate a deteriorating trend that is expected to persist," indicating a continuing decline rather than a non-linear shift from improvement to deterioration.

The July alert reproduced earlier projections without contributing new maps, indicating that it offered more an appeal to media than an update related to the conditions. According to our analysis, violence around food distribution points did increase during July and early-August (ie, after the July alert). However, the aid-related violence appears to have decreased more recently, indicating further the problem with forecasting in war zones without the critical processes of revision and verification of prior predictions.

By ignoring the inconsistencies and presenting a continuous deterioration instead, the IPC risks contributing to the one-sided defamation campaign against current aid efforts by the Gaza Humanitarian Foundation. The July alert's presentation, in particular, suggests the singular responsibility of the State of Israel for a continuous deterioration toward a "worst case" rather than assessing the involvement of multiple threat actors and providing constructive insight into ways that food assistance efforts have worked and concomitant ways of improvement. Given shifting conditions in the Gaza Strip, including food delivery adaptations and truce

negotiations, the tocsin of a "worst-case scenario" based on a prior projection that failed to account for earlier over-predictions seems premature at best.

# **BLUF: Bottom Line Up Front**

- The UN's Integrated Food Security Phase Classification (IPC) is the global body whose reports set the standard for famine warnings and guide aid priorities worldwide. On July 29, it issued a high-profile alert projecting that most of Gaza could face "emergency" or "famine" levels of hunger by October 2025.
- **IPC Omitted actuals:** The IPC's July famine alert showed only its May October 2025 projection map—painted almost entirely in the "famine red" of worst-case scenarios—without including its own May 2025 *actual* findings.
- Buried improvement: Those May findings, absent from the alert, show that conditions had *improved* since the IPC's earlier projections, with much of Gaza downgraded from Level 3 to Level 2. Even the earlier forecasts also "famine red" were far more dire than what actually occurred.
- Gaza Anomaly: Gaza is the IPC's worst overprojection performance in recent years. Our projection verification analysis of the eight countries and territories with sufficient data found IPC overestimates an average of ~1/3rd of predictions globally. Gaza was the worst on record, with 80% of subregions projected at a higher phase than measured.
- **Undisclosed Performance Records:** This performance record is not published by IPC and had to be reconstructed from raw data. Omitting recent actuals that contradict projections is poor tradecraft for any forecaster and unacceptable for one setting global famine priorities.
- Breaks forecasting norms: In epidemiology, economics, climate science, and intelligence, forecasters routinely compare past projections to actual outcomes and disclose this. IPC fails to align with best practices in the field, undermining credibility.

### Introduction

### **Geospatial Analysis and Results**

On July 29, the United Nations monitoring institution, Integrated Food Security Phase Classification (IPC), issued an <u>alert</u> titled, "Worst-case scenario of Famine unfolding in the Gaza Strip." The alert disclosed the findings of its <u>May 12 analysis</u> that acute food insecurity will ravage the entire population of the Gaza Strip by September. According to the IPC, acute malnutrition levels rise to Level 3 in a five-tier scale.

As the map from their latest report shows, their May 2025 alert shows three-fifths of Gaza under Level 2 malnutrition, while the Rafah and Gaza regions are under Level 3. (For reference, the IPC also currently places much of Haiti, Bangladesh, and northern Nigeria under Level 2 or 3, with some instances of Level 4 also appearing in those countries.) On the right side, the IPC's projections indicate that most of Gaza will fall under Level 4 by October 2025. This is an alarming forecast indeed, and there is no need to play down the current food insecurity in the Gaza Strip - precisely the reason to ensure aid reaches those who need it safely and rapidly. However, these IPC findings are challenged in the context of the analysis they conducted last year.

In their <u>previous analysis</u> of acute malnutrition, published in October 2024, the IPC gives reason for even greater concern. As seen in the maps from their analysis shown below, all parts of the Gaza Strip already suffered under Level 3 (Orange). Indeed, their interpretation of malnutrition in the Gaza Strip forecasted a scenario for last April that shows Rafah already in Level 4. As can be seen below, the "current" acute malnutrition conditions improved from October 2024 (Figure 1) to May 2025 (Figure 2), despite their projections of deterioration.

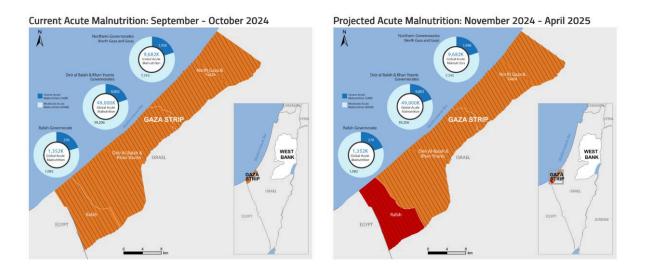


Figure 1: IPC images of Gaza malnutrition nutrition level (Sep-Oct 2024) and projected acute malnutrition (Nov 2024-April 2025). The images suggest a catastrophic decline, particularly around the Rafah area.

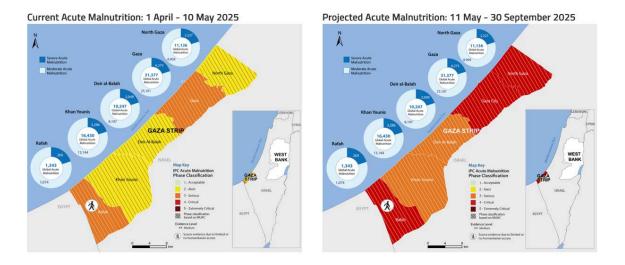


Figure 2: IPC images of Gaza malnutrition level (April-May 2025) and projected acute malnutrition level (May-Sep 2025). It is clear, in comparison to Figure 1, that the situation has already significantly improved

Either the IPC vastly overestimated the level of malnutrition last year or the situation in most of the Gaza Strip has sufficiently improved to the point of downgrading from Level 3 to Level 2. Their forecasting in 2024 suggested not that the situation would improve but that it would degenerate, particularly in Rafah. The situation did not deteriorate in Rafah, according to the IPC's latest analysis from May 12, 2025. Yet their forecast in May looks even more dire than that of 2024.

There is no indication from the July IPC alert that conditions in the Gaza Strip had been improving, despite their analyses indicating improvement.

Furthermore, the alert criticizes the Gaza Humanitarian Foundation's efforts at providing food aid at the "Khan Younis–Rafah border" due to the low population concentration in that area, yet the IPC analyses confirm that Rafah is the most malnourished area to serve. The IPC makes no mention of security concerns that might necessitate placement of distribution points under threat of military retaliation from terrorist groups (see Figure 3 of incidents of violence over aid recorded by ACLED and the level of acute malnutrition reported by IPC¹). Their conclusion does not stop at calling for "scaling up the flow of goods, restoring basic services, and ensuring safe, unimpeded access to sufficient life-saving assistance" - highly uncontroversial demands - but goes further to insist on a political demand: "None of this is possible unless there is a ceasefire."

<sup>&</sup>lt;sup>1</sup> Data for map comes from IPC acute malnutrition classifications, May 12, 2025; IDF population blocs from <u>GazaMaps</u> (accessed July 30, 2025); and <u>ACLED</u> incidents involving violence over aid from October 19, 2023 up to August 1, 2025 (accessed August 5, 2025)

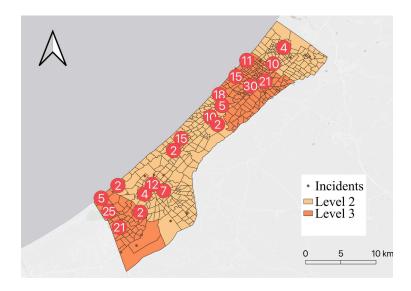


Figure 3: IPC image of incidents and various levels of hunger in the Gaza Strip (Oct 2023–July 2025).

Does the IPC use speculative methods to push a political aim that would benefit Hamas over the exigencies of food assistance? Without any understanding as to why the UN organization downgraded the malnutrition level from 2024 to 2025, or why their projections are far more severe for October in spite of this downgrading, it is impossible to know. Instead of providing the above maps with current estimates, the IPC's alert shows only the "worst case scenario" of their future projections of food insecurity and malnutrition - maps that are mostly covered in the crimson of Level 4. It is difficult to trust these projections, given their failure to predict the improvement of conditions from 2024 to 2025.

It is normal for global hunger monitors to err on the side of activism, presenting data in such a way as to push people toward action. However, the IPC alert quickly spread through international news organizations like <u>Reuters</u>, <u>Associated Press</u>, Germany's <u>DW</u>, etc. without deeper investigation into their data and prior analyses. Since the IPC alert excluded crucial information that adds complexity to the information reported around the world, they risk misinforming the public and misapprehending the needs of aid providers in the Gaza Strip.

# **Projection Verification Analysis - IPC's Gaza Anomaly**

In order to assess whether IPC's massive overprediction of famine in Gaza was an anomaly or instead simply part of a general trend of overprediction, we compared IPC projections and subsequent measured outcomes across all eight other countries and territories for which both current data and immediately-prior predictions were available as of August 11, 2025.<sup>2</sup> Using historical data from IPC's website, we calculated the difference between forecasted Integrated

<sup>&</sup>lt;sup>2</sup> We examined only IPC datasets on "Acute Malnutrition". In order for a country to be included in our analysis, it had to meet five criteria: (1) **Recency:** The latest IPC Acute Malnutrition report for this country must have a Validity Period ending in 2024 or later. (2) **Currents:** This latest report must contain a map of "Current" (i.e. actually measured) Acute Malnutrition, not merely Projections. (3) **Projections:** The corresponding 2nd-latest report must contain a map of Acute Malnutrition Projections. (4) **Contiguity:** The Projections in #3 must be for a time period ending no earlier than 3 months before the "Current" map in #2 begins. (5) **Sufficient Sample:** By visual comparison of the "Currents" and "Projections" maps from #2 and #3, at least ~15% of the country's land area must have been included in both of these maps.

Food Security Phase Classification (IPC) levels and later-reported "actuals" for each administrative region. We visualized these differences as heat maps by subregion (Figure 4) and summarized overshoot frequencies by country (Figure 5).<sup>3</sup>

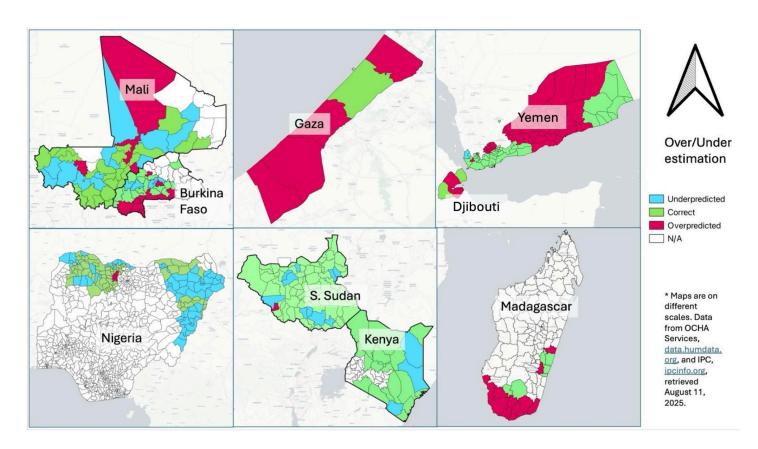


Figure 4. IPC Acute Malnutrition forecast accuracy, by subregion, for Gaza and eight other countries and territories. Blue = undershoot, green = correct, red = overshoot. Regions lacking data are left uncolored.

### **Methods & Code**

IPC's website does not directly supply spreadsheets of their malnutrition data by subregion; instead, it merely presents maps of "Projection" (predicted) and "Current" (actually measured) data in each report. Thus, in order to compare each subregion's predicted malnutrition score to its subsequently-reported actual malnutrition score, each subregion's change (from prediction to reality) had to be manually recorded.

This process was carried out, for Gaza and the 8 other countries and territories, using the open-source cartography software QGIS. Data collected from IPC's "Projection" and "Current"

<sup>&</sup>lt;sup>3</sup> If a subregion lacked either Current or Projection malnutrition data (#2 and #3 in the previous footnote), comparison could not be made and hence this subregion was excluded from the analysis. Such regions are left uncolored in Figure 4.

maps were coded into fields using administrative regions provided by <u>OpenAfrica</u> and <u>OCHA</u>.<sup>4</sup> A separate field was then developed for the difference between the IPC's Projected and Current data by subregion. After exporting these data, for each of Gaza and the 8 other countries, we calculated the percentage of that country's subregions wherein IPC's projections overestimated the subsequently measured "actual" levels of malnutrition. These findings are presented in Figure 5.

To check the robustness of these findings, we ran an additional similar analysis checking the percentage of total *land area*<sup>5</sup> (rather than of subregions) of each country wherein IPC overpredicted subsequent malnutrition. Although the exact percentage numbers were slightly different, the qualitative results remained the same: Gaza was the #1 most-overpredicted region among the 9 countries and territories.

### **Findings**

In six of the nine countries and territories in consideration, IPC projections either matched or underestimated actual malnutrition severity a majority of the time. Across all nine countries and territories, overshooting occurs in only 21% of subregions. By comparison, IPC overprojected malnutrition in 80% of Gaza's subregions, making it the most overprojected region in our sample (Figure 5) and, as far as we can tell, the most overprojected in IPC's history. Four out of five subregions of Gaza were projected at a higher malnutrition phase than IPC's own May 2025 actuals indicate. This would be notable in any context, but here it is paired with another serious lapse: IPC did not disclose those actuals in its July alert.

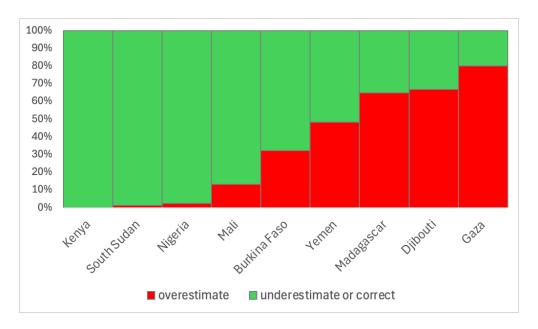


Figure 5. Percentage of subregions wherein IPC malnutrition projections overestimated subsequently-measured actual levels, by country or territory.

For any forecaster, omitting the most recent measurements when they undercut your projections is bad methodology. For an institution whose warnings drive global aid decisions, it

7

<sup>&</sup>lt;sup>4</sup> In some countries, the IPC's "Current" map used slightly different subregions than its "Projections" map did. For these countries, we used the subregions from the "Projections" map, interpolating values from the "Current" map onto these regions or excluding them from the analysis when they did not cleanly map onto "Projections" regions.

<sup>&</sup>lt;sup>5</sup> In WSG84 projection degrees.

is unacceptable. Without access to this historical record, policymakers and the public have no way to assess IPC's forecasting track record. We had to reconstruct it ourselves because it is not published in a database on their website. The question now is why there was no due diligence to present this context and why Gaza, already at the center of global media coverage, emerged as the single most overprojected case we could find.

### **Conclusion**

The IPC's warnings about Gaza's food crisis deserve serious attention, but credibility depends on presenting the full picture, not just the most alarming projections. By omitting evidence of measurable improvement in Gaza since 2024 and focusing on worst-case scenarios already proven wrong, the IPC risks undermining trust in its analysis and inadvertently shaping political narratives that go beyond the scope of its humanitarian mandate. Transparent, consistent reporting which is grounded in current data and clear explanations of forecasting methods remains essential to ensure that aid is directed where it is most needed and that public understanding is shaped by facts rather than selective framing.