



ANALYSIS, PLANNING & PERFORMANCE DIVISION

Examining the Alignment of the CARI and IPC Food Security Assessment Systems

A study by Dr. Diego Rose and Dr. Shalean Collins (Tulane University), June 2025

BACKGROUND

WFP utilizes two complementary tools to assess and report Acute Food Insecurity (AFI): the **Integrated Food Security Phase Classification (IPC)** and the **Consolidated Approach for Reporting Indicators of Food Security (CARI)**. To strengthen global AFI reporting, this study assessed the alignment between the two tools and examined how CARI can complement IPC in supporting operational and strategic decision-making within the broader humanitarian community.

IPC	CARI
<ul style="list-style-type: none"> Internationally Recognized Standard Consensus-based (multiple partners) Area-level classification of AFI Less than 60 countries 	<ul style="list-style-type: none"> WFP Internal Standard Algorithm-driven tool Household-level classification of AFI 80+ countries with WFP operations

Commissioned by WFP, this study was **independently conducted** by Professor Diego Rose and Shalean Collins from Tulane University. The advisory group included four members from academia, IPC and the Food Security Information Network (FSIN).

The study was conducted using 22 datasets containing IPC and CARI data at area level, from 11 countries in Africa, Latin America and Middle East. The quantitative analysis was complemented with results from 13 key informant interviews with experts from different organizations, located in country offices, regional offices and headquarters.

Dataset used

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|---|--|
| <ul style="list-style-type: none"> Afghanistan (2019, 2020, 2021) Burundi (2020, 2021) Central African Republic (2020, 2021) Djibouti (2020, 2022) Ethiopia (2019) | <ul style="list-style-type: none"> Guatemala (2022) Lesotho (2019, 2021) Pakistan (2019, 2020, 2021) South Sudan (2019) Sudan (2020, 2021) Zimbabwe (2019, 2020) |
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HIGH-LEVEL FINDINGS

Strong Country-Level Classification

CARI correctly identified 80% of countries with widespread food insecurity (at least 80% of areas in IPC 3+) while correctly dismissing 86% of countries being less affected by food insecurity. **It is thus highly effective at identifying vulnerable countries.**

Moderate Area-Level Alignment

Across 1,044 areas in 11 countries, **the alignment of CARI and IPC classifications was moderate overall**, with stronger alignment in Afghanistan, Djibouti, and Guatemala.

Difference in CARI and IPC AFI prevalence

CARI generally reports higher AFI prevalence than IPC - likely due to IPC's conservative consensus process, and not due to the choice of indicators included in the CARI. This is consistent with previous findings from studies looking at IPC accuracy.

Robust methodology

Results were consistent across sensitivity tests and alternative indicator configurations. Modifications to CARI inputs did not improve alignment.

Strength of both methodologies

- CARI:** quick and replicable approach to household level classification and targeting.
- IPC:** consensus approach presenting a strong voice for advocacy, fund raising and policy.



RECOMMENDATIONS

REPORTING OF AFI NUMBERS

- **Continue to rely on IPC data** for country-level and global AFI numbers, **where available**.
- **Adopt CARI prevalence as robust and reliable AFI estimation** for country-level and global reporting, for areas **where IPC analysis does not exist**. Stakeholders should accept the divergence between CARI and IPC numbers as driven by the different methods of aggregation (algorithm vs. consensus).

USAGE OF CARI FOR IPC

- **Incorporate CARI results into IPC discussions** to support the consensus process, as they offer an objective benchmark based on household-level data and food security indicators.

CARI IMPROVEMENTS

- **Retain and improve CARI as a standalone rapid assessment tool.**
 - Refine economic indicators used by CARI to develop an alternative to FES and ECMEN that is a simpler to collect.
 - Enhance and promote high data quality standards during household surveys to improve CARI outcomes.
- **Expand use of rCARI** to improve reach and inclusion of access-constrained areas in global AFI.
- **Enhance training and guidance** to clarify CARI's role within and beyond IPC settings.
- **Promote regular and timely CARI data sharing.**

CONCLUSION

CARI and IPC are complementary tools. CARI provides rapid, household-level analysis for targeting and operational planning, while IPC enables consensus-building to support a unified voice for advocacy and coordinated action. **Together, they form a robust framework for assessing and addressing acute food insecurity.**

Efforts should focus on enhancing CARI's visibility within the broader humanitarian community—not as a replacement for IPC, but as a rigorous, transparent, and reproducible tool. **With strong indicator foundations and broad geographic coverage, CARI offers a credible alternative for estimating AFI prevalence, particularly in countries where IPC is not available.**

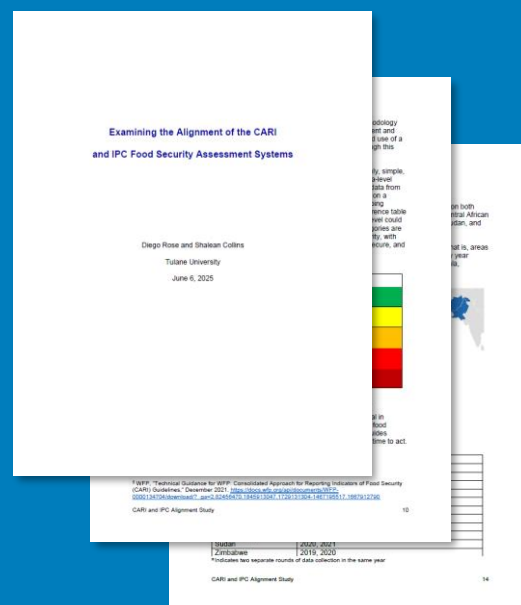
A stronger, reliable and robust CARI is the backbone of a robust IPC analytical framework.

ACCESS THE FULL STUDY

[Link to the full study](#)

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