

# **Food Security Under Siege: Mixed-Methods Evidence from UNRWA Situation Report and Corroborating UN Sources (Oct 2023–Aug 2025)**

Karim Aziz, Omar Khalil, Noor Ibrahim, Amir Al-Rashid  
Research Center, Alamut; Academy of Studies, Qaf Mountains; Institute of  
Sciences, Ubar; Innovation Hub, Shaddad's Palace

# 01

## Presentation Roadmap

*Overview of the research structure and key discussion points*

# Research Agenda

- Introduction to the food security crisis in Gaza
- Methodology of mixed-methods analysis
- Results on food access erosion patterns
- Conclusion on credibility and legal implications
- Discussion of contributions and future directions

# 02

## Crisis Context

*Understanding the humanitarian emergency in Gaza*

# The Gaza Food Security Crisis (Oct 2023–Aug 2025)

- Critical humanitarian emergency with direct implications for civilian survival
- Period characterized by sustained hostilities and severe restrictions on humanitarian access
- Systematic deprivation of essential food supplies for millions of Palestinians
- UNRWA documentation reveals sequential depletion of food stocks and narrowing operational windows
- Engages fundamental questions of human rights, international law, and operational limitations

# Motivation & Research Objectives

1

## Primary Motivation

Address the critical gap in credible evidence amid competing institutional narratives and geopolitical constraints on aid delivery in Gaza.

2

## Key Objective 1

Document systematic patterns of food access erosion and connect them to technical famine determinations.

3

## Key Objective 2

Examine how UN agencies establish credibility in food-security reporting under siege conditions.

4

## Key Objective 3

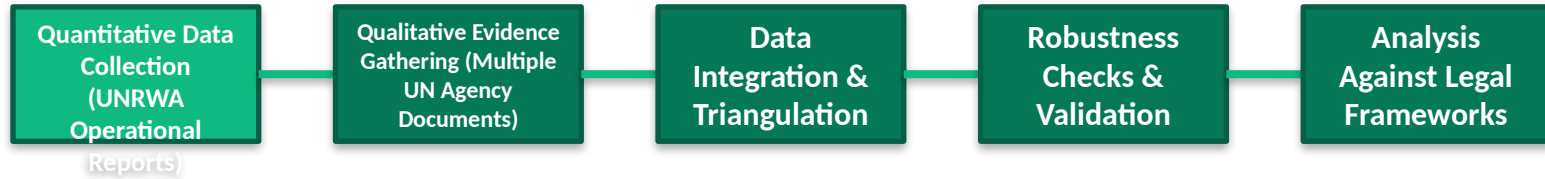
Analyze findings within international legal frameworks, including ICJ provisional measures on humanitarian access.

# 03

## Research Design

*The mixed-methods approach to evidence triangulation*

# Concurrent Triangulation Mixed-Methods Design



# Data Sources & Constraints

## Primary Data Sources

- UNRWA situation reports (Oct 2023–Aug 2025)
- Qualitative evidence from multiple UN agencies
- International Court of Justice (ICJ) legal documents
- Operational data on food distribution coverage

## Key Constraints & Assumptions

- Data subject to institutional biases or access limitations
- Operational constraints and security challenges affected data collection
- Study period includes projected data (future assumptions)
- Reliance on official communications during active conflict

# Analytical Framework & Algorithm

- Employed concurrent triangulation to integrate quantitative and qualitative evidence
- Algorithm focuses on pattern identification in food access erosion across temporal phases
- Includes robustness checks through temporal consistency analysis across reporting periods
- Validation through institutional concordance among multiple UN sources
- Legal framework alignment analysis with ICJ provisional measures and international law

# Experimental Setup & Evaluation Metrics

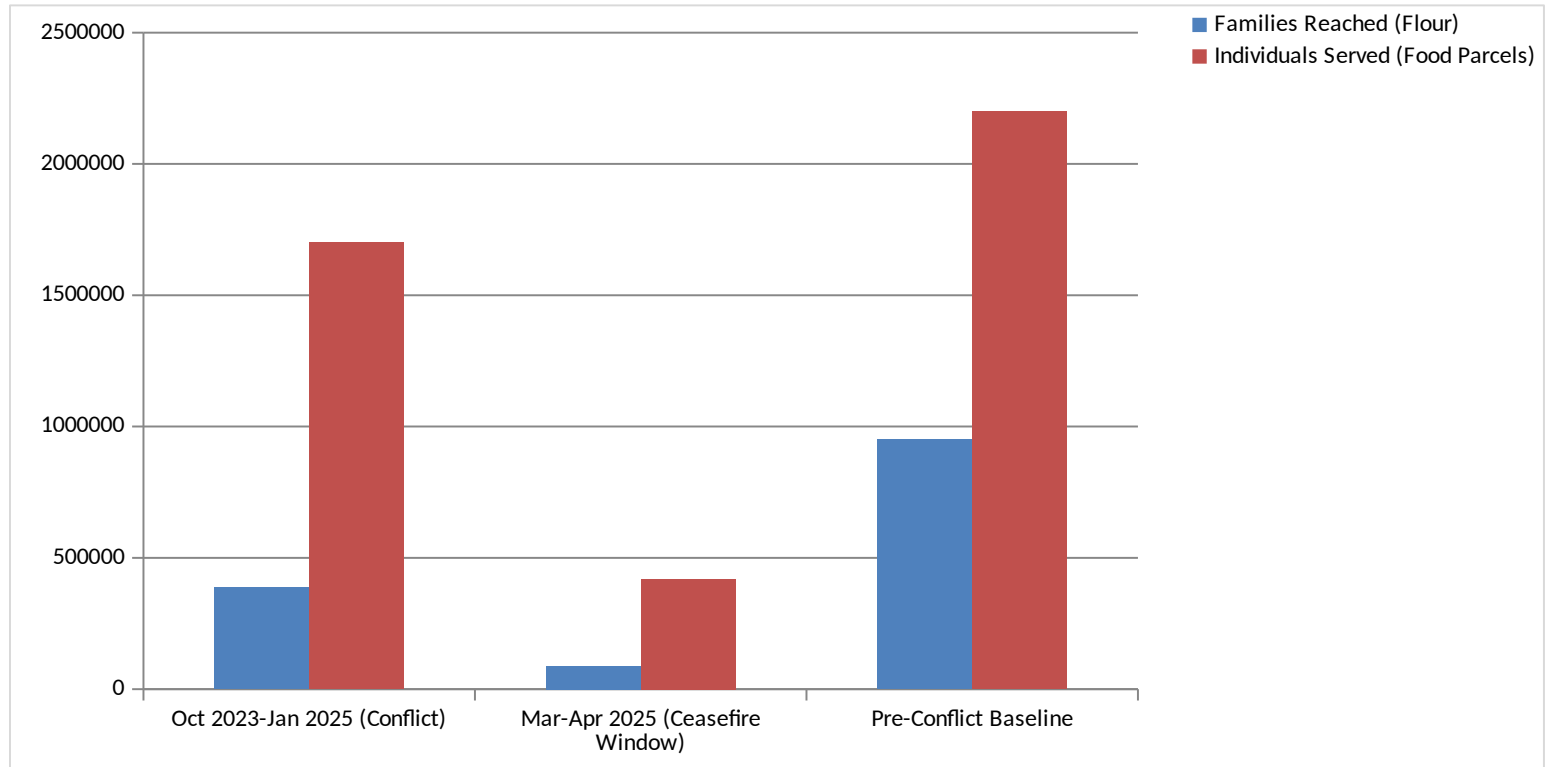
Metric Category	Specific Metrics	Data Source
Food Assistance Coverage	Families reached, Individuals served, Distribution rounds	UNRWA Operational Reports
Temporal Patterns	Monthly/quarterly trends, Ceasefire vs. conflict periods	Time-series analysis
Institutional Concordance	Agreement levels across UN agencies, Narrative consistency	Qualitative document analysis
Legal Compliance	Alignment with ICJ measures, International law frameworks	ICJ documents & legal analysis

# 04

## Key Findings

*Systematic evidence of food access erosion and institutional credibility*

# Quantitative Patterns of Food Distribution



# Systematic Food Access Erosion

- Documented progressive narrowing of operational windows for aid delivery
- Sequential depletion of food stocks across the Gaza Strip
- Food parcel distributions served ~1.7M people with two-week rations (designed for families of five)
- **Ceasefire window (Mar-Apr 2025) saw only partial recovery: 88,000 families received flour bags**
- Represents only a fraction of pre-conflict coverage levels, confirming systematic deprivation

# Credibility Construction in Humanitarian Reporting

## How Credibility is Established

- Measurement continuity across distribution rounds
- Institutional concordance among multiple UN agencies
- Temporal consistency in reporting patterns
- Alignment with technical famine determination frameworks

## Challenges to Credibility

- Competing institutional narratives from different stakeholders
- Politicization of humanitarian access and reporting
- Operational constraints limiting data collection
- Security challenges affecting verification processes

# Legal Framework Analysis & ICJ Measures

- Findings align with International Court of Justice provisional measures addressing humanitarian access
- Documented conditions-of-life risks correspond to ICJ's concerns about genocide prevention
- Evidence shows persistent non-compliance with ICJ orders (ICJ2024a, ICJ2024b, ICJ2024c)
- Systematic deprivation patterns meet thresholds for violations of international humanitarian law
- Connects food security evidence to legal accountability frameworks

# Key Contributions Summary

1

## Methodological Innovation

Integrates quantitative UNRWA operational data with qualitative evidence using concurrent triangulation mixed-methods design.

2

## Empirical Documentation

Documents systematic patterns of food access erosion and connects them to technical famine determinations and international legal frameworks.

3

## Credibility Analysis

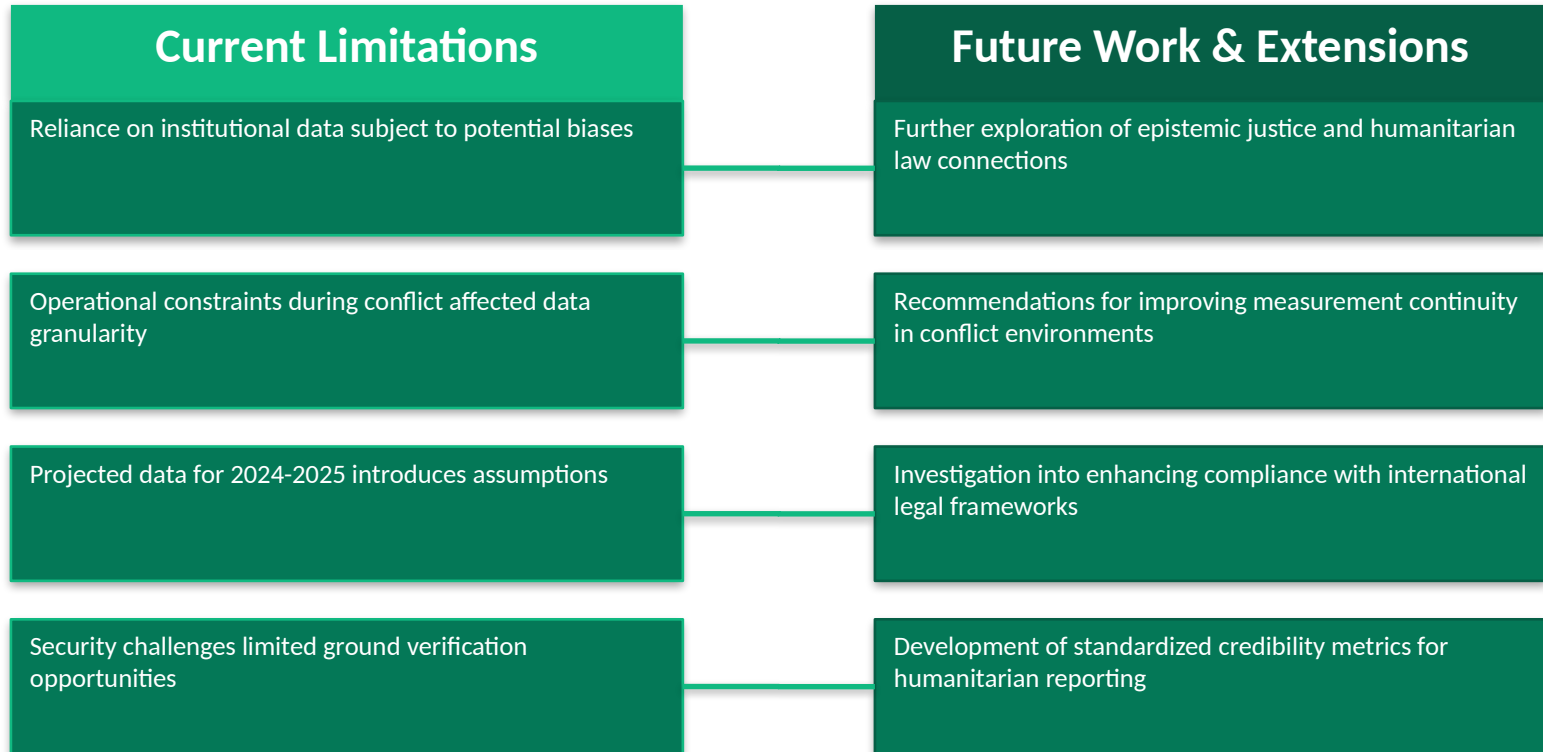
Examines how UN agencies establish credibility in food-security reporting under siege conditions through measurement continuity and institutional concordance.

4

## Legal Implications

Analyzes the impact of communicative and contextual factors on trust in humanitarian measurements within international law contexts.

# Limitations & Future Research Directions



# Conclusions & Implications

- Systematic food access erosion in Gaza aligns with technical famine thresholds and violates international law
- Credibility in humanitarian reporting develops through measurement continuity and institutional concordance
- Mixed-methods triangulation provides robust evidence amid competing narratives
- Findings have direct implications for legal accountability and humanitarian policy reform

# Thank You

For questions: [research@alamutcenter.edu](mailto:research@alamutcenter.edu)  
Project Archive: [github.com/foodsecurity-gaza-study](https://github.com/foodsecurity-gaza-study)