Acute Food Insecurity Across 14 Cadre Harmonisé Countries, June-August 2026

Technical Methods for the Experimental Daily-Equivalent USU Pilot Estimate | WSI-AFI-CH-2026-01 | Release v1.1

1. Source and subset

The analytical subset contains 14 Cadre Harmonisé countries with displayed June-August 2026 periods from the completed WSI evidence profile. The subset is used because the broader IPC/CH dashboard combines analyses with different validity periods. Counts are preserved as dashboard source indicators and apply to analyzed populations.

2. Model specification

The model follows WSI Experimental USU Pilot Modeling Standard v0.1: p=1, no overlap adjustment, one to five mutually exclusive states, mortality separately reported, and deterministic low, central, and high mapping scenarios.

For this snapshot model, duration is one day and the reported result is U1 per day. The equations are:

B1_day = sum_s N_s * I_s * 1 day

U1_day = B1_day / 1.96875

3. Mapping rationale

Phase 3, Phase 4, and Phase 5 are mapped to intensities 3/4/5, 5/6/7, and 7/8/9 respectively. These are P1 - illustrative pilot mappings. They use the source phase order and reference-table descriptions as an ordinal severity basis but are not validated subjective-intensity estimates.

4. Results and rank stability

Scenario	B1 per day	U1 per day	U1 per 100,000
Low	162,480,428	82,529,741	18,998
Central	214,754,366	109,081,583	25,110
High	267,028,304	135,633,424	31,223

All total and per-100,000 ranks are unchanged across low, central, and high mappings. Central total-USU rank equals the Phase 3+ population rank; central USU per 100,000 equals the Phase 3+ share rank. This occurs because Phase 3 dominates both population and modeled burden.

5. Validation

The calculation was independently reproduced from the machine-readable input file, the result CSVs, workbook values, and Python script. Final validation checks included exact arithmetic reconciliation, rank-stability checks, document preflight, JSON validation, workbook formula scans, and package checksum verification.

6. Files

- USU_Pilot_Input.json
- USU_Pilot_Result.json
- Scenario_Results.csv
- Country_Results.csv
- Phase_Contributions.csv
- run_afi_ch_usu_pilot_v1.1.py

7. Sources

https://www.ipcinfo.org/ipcinfo-website/ipc-dashboard/

https://www.ipcinfo.org/ipc-manual-interactive/ipc-acute-food-insecurity-protocols/function-2-classify-severity-and-identify-key-drivers/protocol-22-compare-evidence-against-the-ipc-acute-food-insecurity-reference-table/en/

https://www.ipcinfo.org/ch/