Food Security Is National Security

Evidence and Recommendations

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1. THE SITUATION IN 2025

266 million people faced acute food insecurity in 47 countries

22.9%
of the analyzed population in IPC/CH Phase 3+, nearly double the 11.3% of 2016

39 M+
people in Emergency (Phase 4) across 32 countries and territories

1.4 M
in Catastrophe (Phase 5) in six contexts, over nine times the 2016 level

2
famines confirmed, in Gaza and Sudan: the first dual confirmation on record

35.5 M
children acutely malnourished in 23 countries, nearly 10 M severely

85.1 M
people forcibly displaced across food-crisis contexts

2025
Funding for food-crisis areas fell back to 2016-17 levels

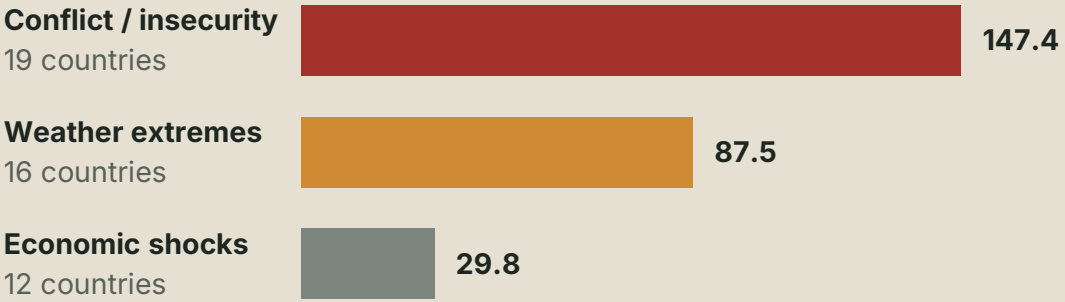
18
countries lacked data meeting GRFC standards, the lowest coverage yet

Source: FSIN & GNAFC, Global Report on Food Crises 2026 (24 April 2026), covering 2025

2. HOW MUCH IS DUE TO CONFLICT?

Conflict drives more than half of the world's acute hunger

PEOPLE IN PHASE 3+ BY PRIMARY DRIVER, 2025 (MILLIONS)



Each country is assigned one primary driver. Several crises coded as "economic" (Afghanistan, Syria, Yemen in GRFC 2025) unfold in post- or ongoing-conflict economies, so conflict's real weight is likely larger.

≈ 55%

of people in acute food insecurity live where conflict is the main driver

⅔

of acute hunger is concentrated in just 10 conflict-hit countries

Displaced people consistently face higher acute hunger than their host communities

Source: GRFC 2026; UN Geneva (Apr 2026); GRFC 2025 for driver coding of economic-shock crises

3. HISTORICAL EVIDENCE

War has long been the most common human cause of famine

1800s
Crops as targets

Burning crops and food stores becomes a routine tactic of war

1939-45
World War II

≈25 M famine deaths in the USSR, Europe and Asia (Leningrad, Bengal)

1967-70
Biafra

Blockade during Nigeria's civil war turns hunger into mass starvation

1984-85
Ethiopia

≈1 M deaths and 8 M affected as civil war compounds drought

2011
Somalia

≈258,000 deaths as drought meets conflict and blocked aid

2017
South Sudan

Famine declared in parts of Unity State during civil war

2018
UNSC Res. 2417

First UNSC text linking conflict and hunger; condemns starvation as a weapon

2025
Gaza & Sudan

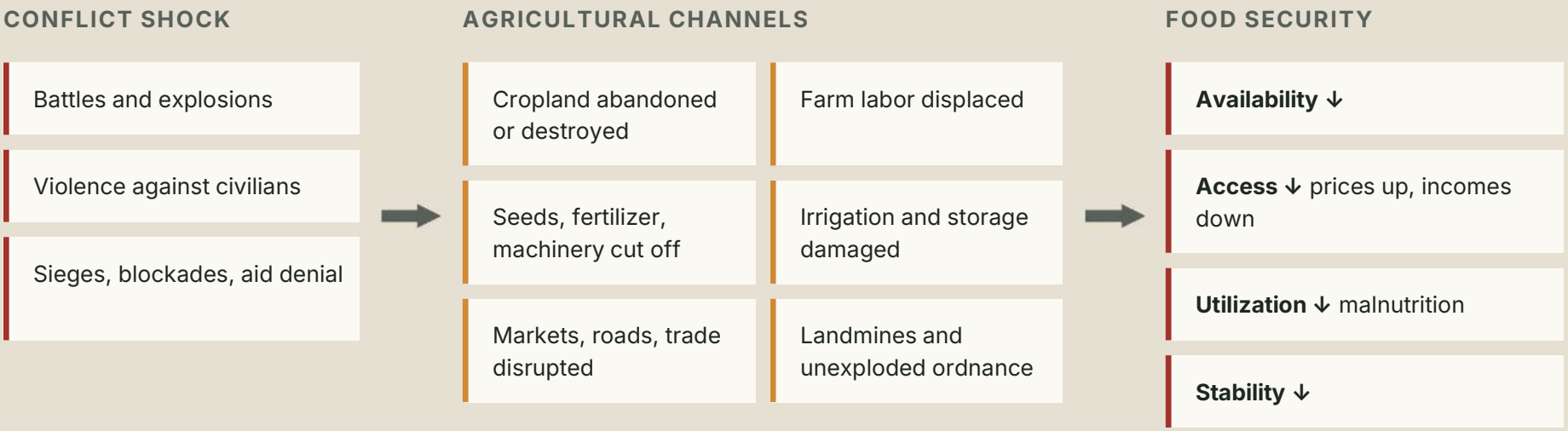
Famine confirmed in two places in one year, a first on record

The long view: famine deaths fell as large-scale war waned and democracy spread. Famine today is mostly man-made; it strikes where conflict blocks food.

Sources: Britannica; Our World in Data/World Peace Foundation famine dataset; UNSC S/RES/2417; GRFC 2026

4. SCIENTIFIC EVIDENCE: MECHANISMS

How conflict travels from the battlefield to the plate



And the loop runs both ways: degraded farmland and food price shocks sharpen competition for land and water, as in farmer-herder clashes across the Sahel. Next: the reverse pathway.

Sources: Li et al., Nature Food (2026); Anderson et al., Nature Food (2021); Torero, Devex (Jan 2025)

5. SCIENTIFIC EVIDENCE: THE REVERSE LOOP

How food system shocks turn into conflict



Where it bites hardest: poor, rain-fed, weakly governed places. Experts rank low development and weak state capacity above climate itself as conflict drivers.

Sources: Miguel et al., JPE (2004); Hsiang et al., Science (2013); Mach et al., Nature (2019); McGuirk & Nunn, NBER (2020)

6. NEW GLOBAL EVIDENCE · LI ET AL., NATURE FOOD, OCT 2026

Armed conflict causes measurable, global cropland loss

STUDY DESIGN

30 m annual cropland maps, 2000-2020

460,000+ geolocated ACLED conflict events in **155** countries

Difference-in-differences before vs after conflict within 5 km buffers

Propensity score matching against similar places without conflict

Losses converted to **calories** using yields of 34 crops

3% → 6%

Conflict zones cover 3% of land but hold 6% of global cropland

-3.0%

cropland after conflict exposure, ≈14.5 ha lost per buffer each year

+23.7%

more cropland loss than in matched non-conflict areas

255.5 M

people's annual dietary energy forgone, ≈9.6% of the population in affected countries

Source: Li, Qi, Sun, Liu & Wang, "Armed conflict accelerates cropland loss and food insecurity worldwide", Nature Food 7, 960-973 (2026)

7. NEW GLOBAL EVIDENCE · DYNAMICS AND HOTSPOTS

Losses persist for years and cluster in fragile regions

CROPLAND AFTER EXPOSURE

-5.5%
average decline in the years after exposure

Year 3
brief partial recovery, then decline resumes

-7.6%
after 15 years: conflict scars farmland

HOTSPOTS · PEOPLE WHOSE ANNUAL DIETARY ENERGY WAS LOST

Hotspot	People (M)
South & Southeast Asia (Afghanistan to Thailand)	59.1
Middle East (Syria, Iraq, Türkiye, Lebanon, Israel)	31.5
West Africa (Nigeria, Benin, Burkina Faso, Mali)	19.8
Horn of Africa (Ethiopia, Sudan)	7.6
Great Lakes (Uganda, Kenya, DRC, Rwanda, Burundi)	6.7

Largest relative loss: **West Africa -10.2%**, then Eastern Africa and Southeast Asia (above -5%). Losses are larger in severe, protracted conflicts and with high displacement, and smaller where governance is stronger.

Source: Li et al., Nature Food 7, 960-973 (2026), event-study and hotspot analyses

8. REVERSE EVIDENCE · CROP AND CLIMATE SHOCKS

Crop-damaging climate shocks measurably raise conflict risk

THE EVIDENCE BASE

60 studies meta-analyzed across all major world regions

Rainfall as a natural experiment in 41 African countries, 1981-1999

110 km grid cells across Africa, 1997-2011, matched to crop growing seasons

Structured judgment of leading climate-conflict experts

Caveat: effects are context-specific and contested at the margins; climate is one risk factor among several.

+ 14%

intergroup conflict for each 1σ shift to hotter or more extreme rainfall

Hsiang, Burke & Miguel, Science 2013

+ 50%

likelihood of civil conflict the year after a 5-point, rain-driven drop in growth

Miguel et al., JPE 2004

3-20%

of armed-conflict risk in the last century was influenced by climate

Mach et al., Nature 2019

Years

Growing-season droughts raise local conflict persistently and it spills into neighbouring areas

Harari & La Ferrara, REStat 2018

Sources: Science 341:1235367; J. Political Economy 112(4); Nature 571:193-197; Rev. Econ. Stat. 100(4):594-608

9. REVERSE EVIDENCE · PRICES, POLICY AND THE BILL

Bad policy turns price shocks into unrest, and violence is costly

CASE: THE 2010-11 WHEAT SHOCK

Jul 2010 Russian heat wave cuts grain output from 97 to ≈60 Mt

Aug 2010 Export ban on wheat, barley, rye; world wheat prices up ≈50% since June

Egypt, top wheat importer, relied on Russia for half its wheat: up to $700 M extra subsidies

2011 Food prices an "aggravating factor" in the Arab uprisings

WHAT STUDIES FIND

Food prices cause unrest: price rises drove social unrest in 1990-2011

Bellemare, AJAE 2015

Poor states most exposed: in 120 countries, spikes raised civil conflict and riots in low-income states

Arezki & Brückner, IMF 2011

A tipping point: above a threshold of the FAO Food Price Index, riots become likely

Lagi et al. 2011

THE BILL FOR VIOLENCE

$21.8 T

economic impact of violence in 2025, 10.5% of world GDP

23.4%

of GDP on average in the 10 most affected countries

$2.7 T

global military spending in 2025

Sources: Carnegie (Sep 2010); Moscow Times (Aug 2010); UPI (Mar 2011); Strauss Center; IEP Global Peace Index 2026

10. CONVERGING EVIDENCE

Other studies point the same way, locally and globally

Conflict, not drought, drove Africa's hunger rise

The rise in sub-Saharan food insecurity from 2014 is attributable to more violent conflict, chiefly in South Sudan and Nigeria. The few famines of 2009-2018 all coincided with conflict *and* drought.

Anderson et al., Nature Food (2021)

War displaces farming across borders

The Russia-Ukraine war cut cropland and yields inside Ukraine but spurred cropland expansion in other producers, shifting environmental costs and raising prices for food importers.

Studies cited in Li et al. (2026)

Distant wars hit fields through inputs

In 2026, tanker traffic through the Strait of Hormuz fell by over 90%. FAO traces a staged shock: energy, fertilizer, seeds, lower yields, then food inflation.

FAO / Torero briefings (Mar-May 2026)

Recovery is uneven: pastoral zones stay food-insecure about 2 years after drought in conflict settings, versus about 12 months for farming zones.

Limits: cropland estimates measure lost production capacity, not consumption, and causality runs both ways, which makes clean identification hard.

Sources: Anderson et al. 2021, doi:10.1038/s43016-021-00327-4; Li et al. 2026; FAO newsroom (26 Mar, 13 Apr, 20 May 2026)

11. PREVENTION · WHAT WORKS

Protecting food and incomes measurably reduces conflict

India

Rural job guarantee as insurance

The NREGS guarantee of 100 days' work at minimum wage cushioned bad harvests. It uncoupled rainfall shocks from Maoist violence and kept conflict persistently lower.

Fetzer, JEEA 2020

Philippines

Cash transfers in a randomised trial

In 130 villages, Pantawid cash grants of $200-370 to poor households substantially cut conflict incidents and insurgent influence.

Crost, Felter & Johnston, JDE 2016

Global

Prevention pays for itself

Prevention in about five countries a year avoids ≈$34 B in losses yearly for ≈$2.1 B, saves donors ≈$1.2 B on aid and peacekeeping, and reaches $150 B a year after 15 years.

UN-World Bank, Pathways for Peace 2018

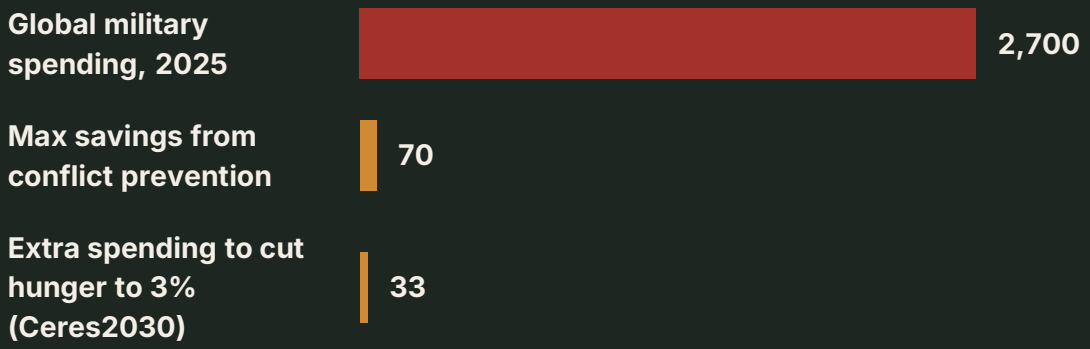
Design matters: household-level, low-visibility support works best; high-profile projects can draw insurgent attacks. Effects may partly displace violence elsewhere.

Sources: Fetzer, J. Eur. Econ. Assoc. 18(6); Crost et al., J. Dev. Econ. 118; World Bank Pathways for Peace and Mueller (2018)

12. PREVENTION · THE ECONOMICS

Ending hunger costs a sliver of what the world spends on arms

US$ BILLIONS PER YEAR, DRAWN TO SCALE



$33 B a year is about **1.2%** of one year's military spending, or roughly **4½ days** of it. Over two decades, the world spent $1 on peacebuilding for every $100 on the military.

$1 → $7

avoided losses per dollar of anticipatory action

FAO / WFP / OCHA, 2025

$1 → $3

in reduced aid and avoided losses per dollar of resilience; acting early saves 30% of aid

USAID, Ethiopia, Kenya, Somalia 2018

Sources: The Institute for Economics and Peace, Global Peace Index 2026; UN-World Bank 2018; Ceres2030 (2020); UN Peacebuilding report (2026); FAO; Cabot Venton/USAID (2018)

13. RECOMMENDATIONS · MAXIMO TORERO, FAO CHIEF ECONOMIST

Treat agrifood systems as an investment in peace

1 **Invest in agrifood systems, not only in security**
With military spending at $2.44 trillion (2023), neglected agrifood systems speed economic collapse and fuel conflict; strategic investment makes them drivers of stability and growth.

2 **Accelerate income growth where conflict risk is high**
More economic opportunity lowers the likelihood of conflict; pair it with macroeconomic stability and social protection.

3 **Build resilience: prevent, absorb, build back better**
Design agrifood systems to withstand compound shocks of conflict, climate, and economic downturns.

4 **Keep food and input trade open, and markets transparent**
Avoid export restrictions, protect humanitarian food flows, and use AMIS to coordinate policy in concentrated cereal markets.

5 **Act early and raise countries' "absorption capacity"**
“The clock is ticking”: Governments, international financial institutions, and the private sector should move before crop calendars lock in losses.

Sources: fao.org/about/leadership/torero; Devex (28 Jan 2025); FAO newsroom (28 Jul 2025; 19 Jan 2024; 13 Apr & 20 May 2026)

14. RECOMMENDATIONS · WHAT THE SCIENCE ADDS

A six-point agenda to break the conflict-hunger cycle

Monitor

Combine conflict events, satellite cropland change and production data to flag farmland deteriorating fast

Restore

Rebuild irrigation and storage, clear landmines and back smallholders as part of every ceasefire and recovery plan

Target

Tailor support to conflict intensity, duration and governance; prioritize West and East Africa and Southeast Asia

Anticipate

Join climate and conflict early warning; fund anticipatory action for pastoral areas that recover slowest

Protect

Enforce Resolution 2417: unimpeded humanitarian access and accountability for starvation as a weapon

Invest upstream

Fund safety nets, anticipatory action and resilience: $1 returns up to $3-7, at a sliver of military budgets

> *" . . . cultivate the fields to produce more bread; otherwise there will be no peace."*
>
> Norman Borlaug, Nobel Peace Prize lecture, 1970

Sources: Li et al. 2026; Anderson et al. 2021; Fetzer 2020; UNSC S/RES/2417; FAO/WFP 2025; Nobel Lecture, N. Borlaug (1970)