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Abundance and Insecurity: Fifty Years of Food Security in the United States (1975–2025)

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Abstract

The United States is the world's largest agricultural exporter and among its most productive farm economies. USDA Economic Research Service estimates show that US farm output nearly tripled between 1948 and 2021, growing by 1.46% per year with almost no increase in total inputs, so that the growth came entirely from gains in total factor productivity. Yet national abundance has not guaranteed household food security. Since federal measurement began in 1995, between about 10% and 15% of US households have been food-insecure in any year: 10.7% in 2001, a peak of 14.9% in 2011 after the Great Recession, a low of 10.5% in 2019–2020, and a rise to 12.8% in 2022 and 13.5% in 2023 as pandemic-era benefits expired and food prices rose. In 2023, 5.1% of households had very low food security. The Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps) is the principal safety net. It expanded from 2.9 million participants in 1969 to a peak of 47.6 million (15% of the population) in fiscal year 2013, and served about 41.7 million people in 2024. This review traces the five decades from 1975 to 2025 across the four pillars of food security. It shows that the US combines exceptional availability with persistent access problems shaped by poverty, unemployment, regional deprivation and policy choices. Utilisation problems are expressed in high rates of diet-related disease. Long-term stability risks include groundwater depletion in the High Plains, climate extremes and concentration in food supply chains. The United States ranked 13th of 113 countries in the 2022 Global Food Security Index with a score of 78.0.

Keywords: *United States; food security; household food insecurity; SNAP; agricultural productivity; total factor productivity; Great Recession; COVID-19; Ogallala aquifer; Global Food Security Index*

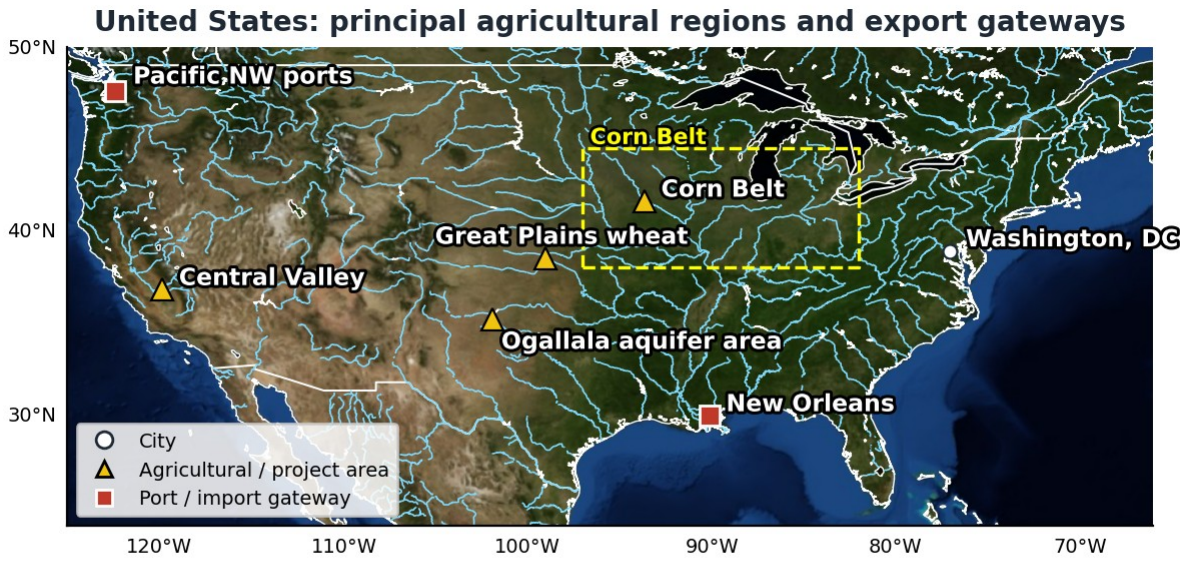
1. Introduction

Most analyses of food security focus on low-income countries where national supply is the binding constraint. The United States presents the opposite case: a country whose agricultural sector produces large surpluses, but where tens of millions of people periodically lack reliable access to adequate food. Amartya Sen (1981) argued that hunger is primarily a problem of entitlements, meaning the ability to command food, rather than of aggregate availability. The

US experience since 1975 is one of the clearest illustrations of that argument in a high-income setting.

This review covers:

- production and productivity (availability);
- household food insecurity and the federal nutrition safety net (access);
- diet quality and health (utilisation);
- long-run resource and system risks (stability).



Base image: NASA Blue Marble satellite composite (public domain); boundaries: GSHHG/Basemap. Labels by the author.

Figure 1. Satellite view (NASA Blue Marble composite) of the contiguous United States showing major agricultural regions (Central Valley, Corn Belt, Great Plains wheat belt, Ogallala aquifer area) and principal export gateways (Mississippi River and Gulf ports at New Orleans, Pacific Northwest ports). The dashed box outlines the approximate extent of the Corn Belt.

2. Methods and sources

The review draws on:

- USDA Economic Research Service (ERS) statistics on agricultural productivity and household food security;
- USDA Food and Nutrition Service (FNS) programme data on SNAP participation;
- peer-reviewed literature on food-insecurity measurement and health outcomes;
- the Economist Impact Global Food Security Index.

Household food-security estimates come from the annual Food Security Supplement to the Current Population Survey, which uses the 18-item US Household Food Security Survey Module (Bickel et al., 2000).

3. Availability: the productivity engine

3.1 Output growth without more inputs

ERS productivity accounts show that total US farm output in 2021 was about 190% higher than in 1948, nearly three times the starting level. Output grew at an average of 1.46% per year, while aggregate input use declined slightly, by about 0.03% per year (USDA ERS, 2024). All of the growth is therefore attributed to total factor productivity (TFP), which rose by about 1.49% per year.

The drivers include:

- improved crop and animal genetics, including hybrid and later genetically engineered maize and soybeans;
- mechanisation;
- agricultural chemicals;
- precision technologies;
- structural change towards larger, more specialised farms.

Over 1975–2025 several changes followed from this productivity growth:

- maize yields roughly doubled;
- soybean production expanded sharply;
- livestock production concentrated in large confined operations;
- the US remained the world's leading exporter of maize, soybeans and many other commodities.

The 1970s also marked a turning point in policy. The 1972–1974 grain price surge, the large Soviet grain purchases and the 1973 oil shock ended the era of chronic US surpluses. Farmers were encouraged to plant "fence row to fence row". The subsequent farm crisis of the early 1980s, when high interest rates collided with falling land values, caused widespread farm bankruptcies. Since then, federal farm policy has shifted from price supports and supply control towards crop insurance and decoupled payments. The 1996 Farm Bill was the key turning point in that shift.

3.2 Trade

The United States is both a major exporter and a growing importer of food. It exports grains, oilseeds and meat. It imports a rising share of fresh fruit, vegetables and seafood, much of it from Mexico, Canada and Latin America. Trade policy therefore affects food prices and diet diversity, as shown by:

- the North American Free Trade Agreement (1994), succeeded by the USMCA (2020);
- tariff disputes in 2018–2019 and from 2025.

4. Access: household food insecurity

4.1 Measurement

Systematic national measurement began in 1995, following recommendations from the National Nutrition Monitoring and Related Research Act of 1990. Households are classified on a continuum:

- **high food security;**
- **marginal food security;**
- **low food security:** reduced diet quality or variety;
- **very low food security:** disrupted eating patterns and reduced intake because of insufficient money or other resources.

The last two categories together are reported as "food insecure" (Bickel et al., 2000).

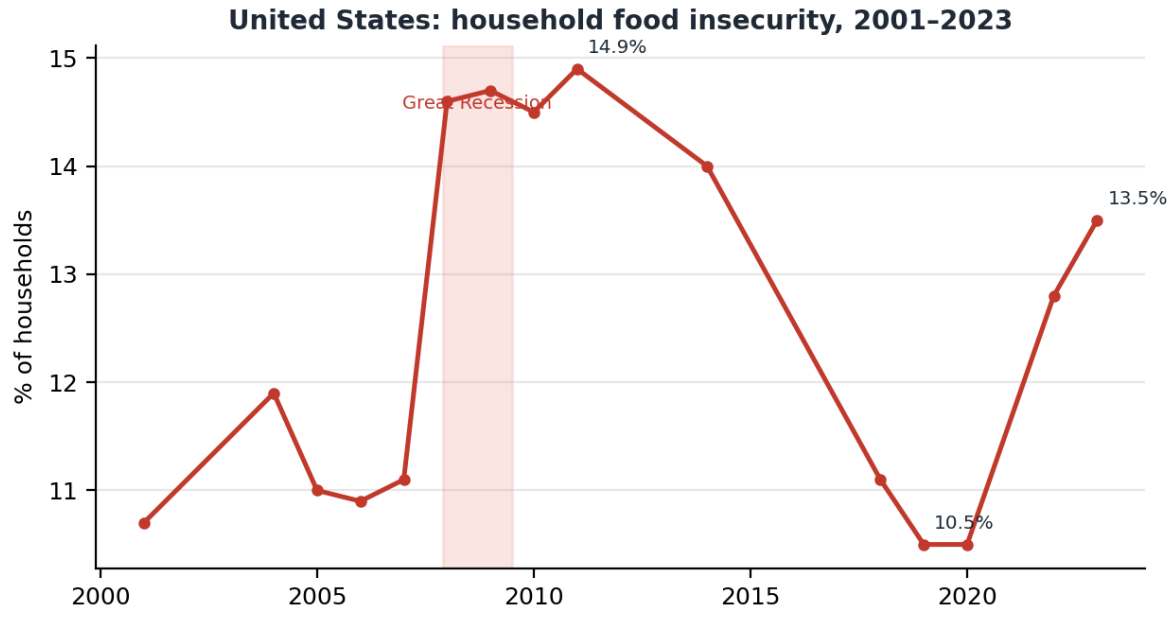
4.2 Trends, 1995–2023

Food insecurity was around 10–12% of households in the late 1990s and early 2000s: 10.7% in 2001 and 11.9% in 2004. It rose abruptly from about 11.1% in 2007 to 14.6% in 2008 at the onset of the Great Recession (Nord et al., 2009). It remained near 14.5–14.9% until 2011 and declined only slowly as unemployment fell. It reached 11.1% in 2018 and a series low of 10.5% in 2019.

Despite the COVID-19 shock, food insecurity in 2020 remained at 10.5%. This was largely because of massive temporary expansions of:

- SNAP emergency allotments;
- Pandemic EBT for children;
- enhanced unemployment insurance;
- the expanded Child Tax Credit.

As those measures expired and food price inflation peaked in 2022, food insecurity rose to 12.8% in 2022 and 13.5% in 2023. Very low food security reached 5.1% of households in 2023 (Rabbitt et al., 2024).



Source: USDA Economic Research Service. Household Food Security in the United States (annual series). Some years omitted.

Figure 2. Percentage of US households classified as food insecure, 2001–2023 (selected years). The shaded band marks the Great Recession. Values from USDA ERS annual reports.

4.3 Who is food insecure

Food insecurity is strongly associated with:

- low income and unemployment;
- single-parent households, especially those headed by women;
- households with children;
- certain racial and ethnic groups;
- residence in the South and in principal cities and rural areas rather than suburbs.

Spatial patterns of "food deserts", meaning low-income areas with limited access to supermarkets, received great attention after 2008. However, research suggests that household income is a stronger determinant than store proximity.

4.4 The nutrition safety net

The federal nutrition safety net has its roots in the Food Stamp Act of 1964 and became nationwide in 1974. Its main programmes are:

- **SNAP:** benefits delivered by electronic benefit transfer (EBT) cards since the 2000s. The programme was renamed SNAP in the 2008 Farm Bill.
- **WIC (Special Supplemental Nutrition Program for Women, Infants, and Children):** established in 1972.
- **National School Lunch and School Breakfast Programs.**
- **Child and Adult Care Food Program.**
- **Emergency food distributed through food banks.**

Food banks grew rapidly from the 1980s into a nationwide charitable network.

SNAP participation responds to the business cycle and to policy changes. It rose from about 2.9 million in 1969 to 22.4 million in 1981, then fell after eligibility tightening in the Omnibus Budget Reconciliation Act of 1981. It stood at about 26 million before the Great Recession and then rose by about 75% to a record average of 47.6 million people per month in fiscal year 2013, about 15% of the population (USDA ERS, 2014). Participation then declined to about 35.7 million in 2019, rose again to 41.6 million in 2021 during the pandemic, and was about 41.7 million in 2024.

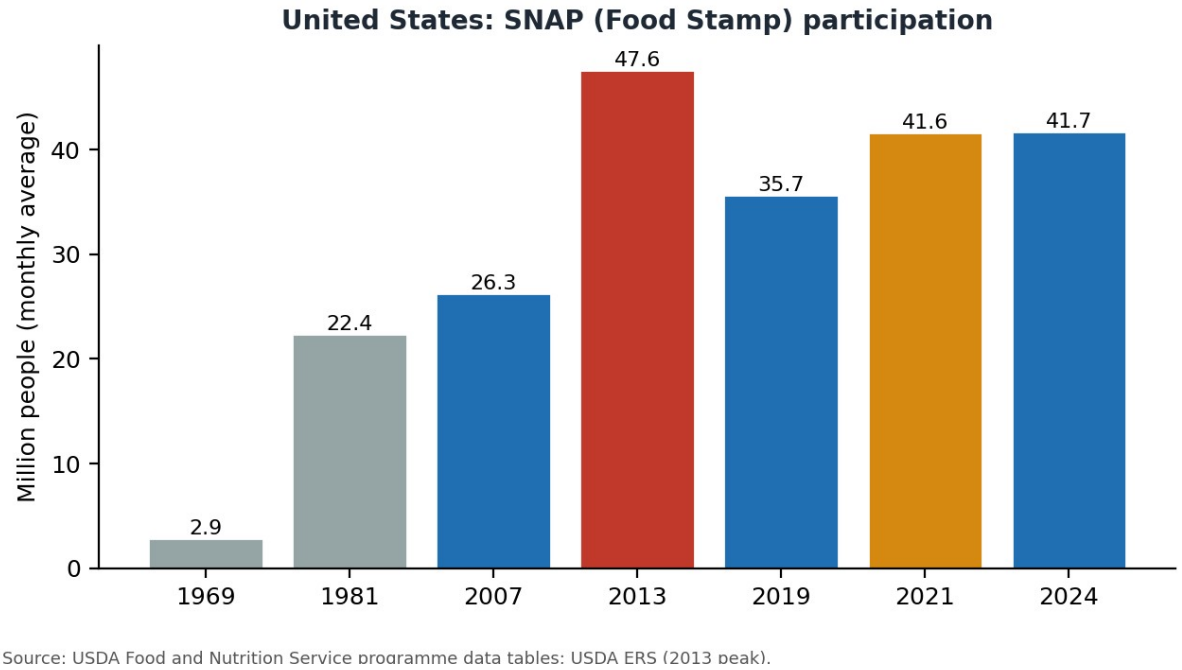


Figure 3. Average monthly SNAP (Food Stamp) participation in selected fiscal years. The 2013 peak followed the Great Recession; the 2021 rise reflects pandemic-era expansion.

Research shows that SNAP reduces food insecurity and poverty and has long-term benefits for children's health and economic outcomes. It is also one of the most responsive automatic stabilisers in the federal budget.

Table 1. Key milestones in US food security, 1975–2025

Year(s)	Event	Food-security relevance
1972–1974	World grain price surge; Soviet grain purchases	End of chronic surpluses; export-led expansion
1974	Food Stamp Program nationwide	Universal access safety net established
1980–1987	Farm financial crisis	Farm consolidation; policy shift
1981	Omnibus Budget Reconciliation Act	SNAP eligibility tightened; participation fell
1995	First national food-security survey	Systematic measurement begins
1996	Farm Bill (FAIR Act); welfare reform	Decoupled payments; work requirements for some SNAP recipients
2008	Farm Bill renames Food Stamps as SNAP; Great Recession	Food insecurity jumps from 11.1% to 14.6%
2013	SNAP peak (47.6 million)	Safety net at maximum reach
2020–2021	COVID-19 pandemic; emergency allotments, P-EBT, Child Tax Credit	Food insecurity held at 10.5% despite the shock
2022–2023	Benefits expire; food inflation	Food insecurity rises to 13.5%

5. Utilisation: diet quality and health

Calorie availability per person in the US is among the highest in the world. Yet diets are often low in fruit, vegetables and whole grains, and high in added sugars, sodium and ultra-

processed foods. Adult obesity rose from around 15% in the late 1970s to over 40% in recent national surveys. Food insecurity is associated with:

- poorer self-reported health;
- diabetes;
- hypertension;
- depression;
- higher healthcare costs (Gundersen & Ziliak, 2015).

The "food-insecurity–obesity paradox" reflects the low cost per calorie of energy-dense foods, the stress of cyclical scarcity, and limited access to healthy options.

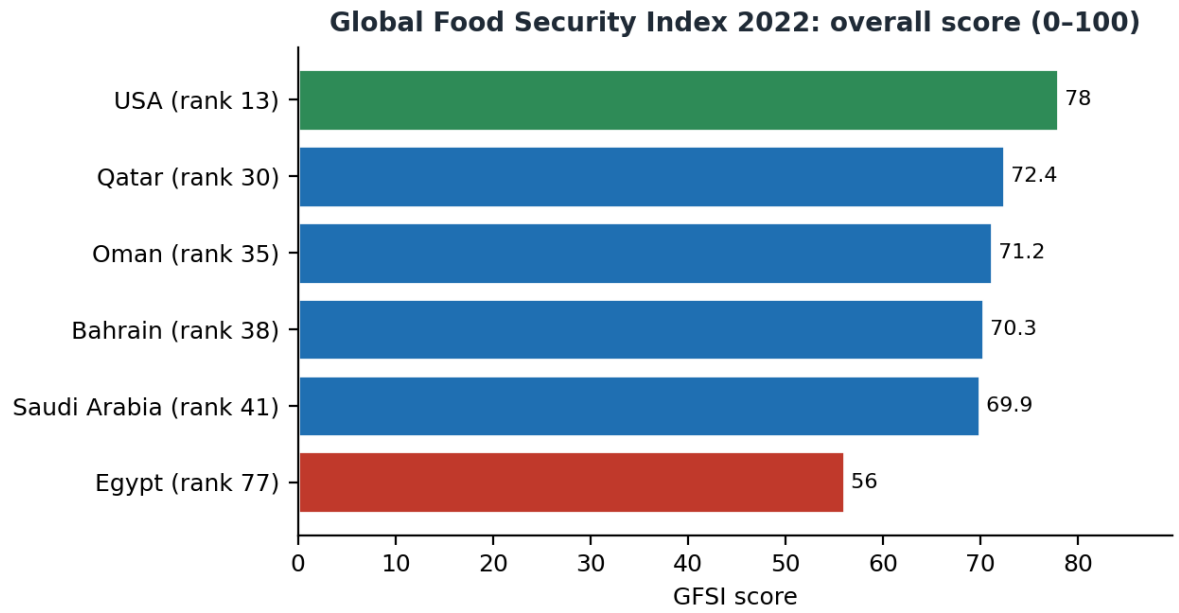
6. Stability: long-term risks

Several long-term risks threaten the stability of the US food system:

- **Groundwater depletion.** The Ogallala (High Plains) aquifer underlies about a fifth of US irrigated land, and has been heavily depleted in Kansas and the Texas Panhandle. This threatens irrigated maize, cotton and cattle-feeding economies.
- **Western water scarcity.** Repeated droughts in California's Central Valley and the Colorado River basin constrain fruit, vegetable and nut production.
- **Climate extremes.** Heat waves, droughts (for example 2012) and floods (for example 2019 in the Midwest) cause year-to-year output shocks, and climate change is projected to reduce yields of major crops without adaptation.
- **Concentration and supply-chain fragility.** The COVID-19 pandemic exposed vulnerabilities in highly concentrated meat processing and in the separation of food-service and retail supply chains. Avian influenza outbreaks in 2022–2025 caused egg shortages and price spikes.
- **Policy volatility.** Changes in federal nutrition-programme funding and eligibility, and disruptions in benefit delivery during federal government shutdowns, can rapidly affect household access.

7. International comparison

The United States ranked 13th of 113 countries in the 2022 Global Food Security Index, with a score of 78.0. In earlier editions it had placed near the top. The decline in rank reflects both a methodology that gives more weight to sustainability, natural resources and inequality, and relative improvements elsewhere. The US scores highly on availability, quality and safety, and on research and innovation. It scores less well on natural resources and resilience and on the affordability dimensions affecting low-income households.



Source: Economist Impact, Global Food Security Index 2022 (113 countries).

Figure 4. Global Food Security Index 2022 overall scores for the six countries in this series.

8. Conclusions

The United States demonstrates that national food abundance is necessary but not sufficient for food security. Over fifty years, productivity growth has kept supply ample and real food prices historically low. However, household food insecurity has persisted at 10–15% and moves with the economy and with policy. The evidence of the past two decades, especially the contrast between the Great Recession and the COVID-19 pandemic, shows that a well-funded, responsive safety net can prevent large increases in food insecurity even during severe shocks. Priorities for the coming decades include:

- protecting the responsiveness of SNAP and child nutrition programmes;
- integrating food security into healthcare;
- addressing diet-related disease;
- managing groundwater and western water sustainably;
- strengthening agricultural research to sustain productivity under climate change.

Declarations

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Data availability: No new primary data were generated. All values shown in figures and tables are taken from the cited sources. Satellite base maps use the NASA Blue Marble composite (public domain) rendered with the Basemap library.

Use of generative AI: The author used Claude (Anthropic) to assist with literature searching, drafting and figure preparation. The author reviewed and edited all content, verified the references and takes full responsibility for the published article.

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