


Emerging Challenges in Agriculture

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USDA Economic Research Service*

2023 Ag Outlook Forum
Sept. 25, 2023



A hand in a dark suit sleeve points at a digital screen. The screen displays a bar chart with blue bars and a line graph with a red dashed trend line. The background features a blurred American flag. A blue text box is overlaid at the bottom of the image.

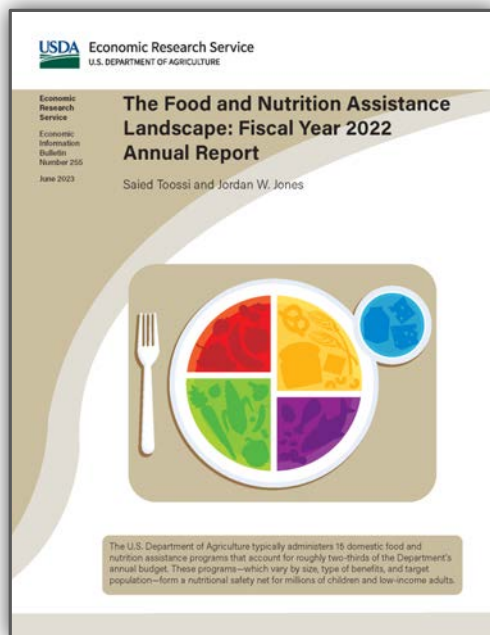
ERS anticipates trends and emerging issues in agriculture, food, the environment, and rural America and conducts high-quality, objective economic research to inform and enhance public and private decision making.

USDA Economic Research Service
U.S. DEPARTMENT OF AGRICULTURE

As one of 13 principal federal statistical agencies, ERS is responsible for ensuring the **quality, objectivity, and transparency** of the statistical information we provide.



2023 Research at a Glance



The Food & Nutrition Assistance Landscape: Fiscal Year 2022 Annual Report

- Total spending on USDA's domestic food and nutrition assistance programs amounted to \$183 billion, 6% lower than the inflation-adjusted high of \$194.7 billion in FY 2021.
- On average, 41.2 million people participated in the Supplemental Nutrition Assistance Program (SNAP) each month, 0.8% fewer than in FY 2021.
- The National School Lunch Program, School Breakfast Program, Child and Adult Care Food Program & Summer Food Service Program served a combined 9.4 billion meals. Total program spending was \$33.6 billion, 24.9% more than in FY 2021.



2023 Research at a Glance



International Food Security Assessment, 2023 - 2033

- Food security is estimated to improve in 2023 relative to 2022, due to an average of 3.7 percent growth in per capita GDP and relative easing of international and domestic food commodity price levels.
- Despite improvements, food insecurity in 2023 remains elevated, with the prevalence of food insecurity estimated at 26.6% for the 83 countries included in IFSA.
- Food insecurity is projected to significantly decline by 2033 in IFSA countries, with 385.9 million people projected to be food insecure (a 66.1% reduction from its 2023 estimate).



2023 Research at a Glance



2023 Farm Sector Income Forecast

- After adjusting for inflation, net farm income is forecast to decrease \$48.0 billion (25.4%) in 2023 relative to 2022. Despite this expected decline, net farm income in 2023 would be 22.6% above its 20-year average (2003–22) of \$115.2 billion in inflation-adjusted dollars.
- Cash receipts from the sale of agricultural commodities are forecast to decrease by \$23.0 billion (4.3%, in nominal terms) from a record high of \$536.6 billion in 2022 to \$513.6 billion in 2023.
- Farm sector equity is expected to increase by 6.8% in 2023 to \$3.57 trillion in nominal terms. Farm sector assets are forecast to increase 6.6% in 2023 to \$4.09 trillion following expected increases in the value of farm real estate assets.



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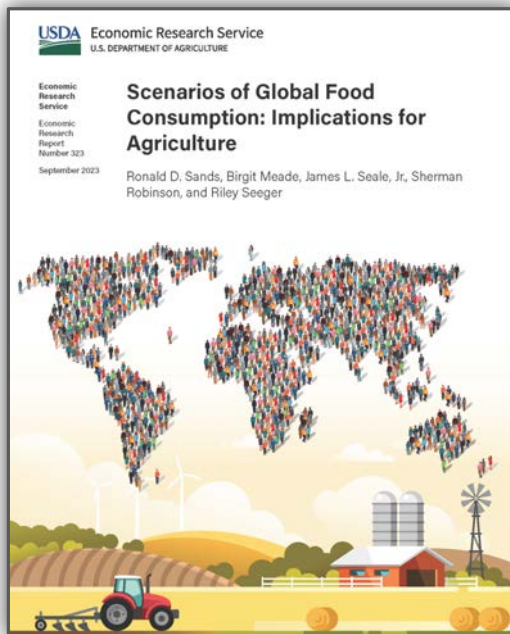


Outlook for U.S. Agricultural Trade: August 2023

- U.S. agricultural exports in Fiscal Year (FY) 2024 are projected at \$172.0 billion, down \$5.5 billion from the revised FY 2023 forecast.
- U.S. agricultural imports in FY 2024 are forecast at \$199.5 billion, \$3.0 billion higher than the revised FY 2023 estimate due to higher imports of horticultural and livestock products and stabilizing global prices.
- The global economic outlook for calendar years 2023 and 2024 remains positive despite several economic challenges.



2023 Research at a Glance

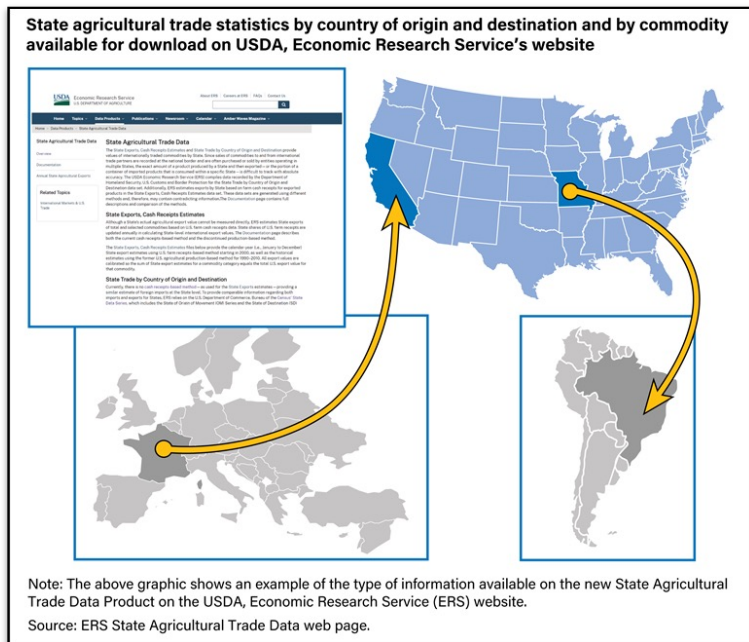


Scenarios of Global Food Consumption: Implications for Agriculture

- Results show that in an income-driven food demand scenario, production of world crop calories increases by 47% from 2011 to 2050.
- Demand for food calories and crop calories increases over time in all scenarios, with most of the adjustment through increases in crop yield.
- Growth in crop calories reflects income driven shifts to greater total food calories per person and an increasing share of animal products in food consumption.



2023 Research at a Glance



State Agricultural Trade Data

- The State Exports, Cash Receipts Estimates & State Trade by Country of Origin & Destination data provide different approaches of reporting internationally traded commodities by State.
- These data are available for download or searchable in our Annual State Agricultural Exports Interactive Chart at:

www.ers.usda.gov/data-products/state-agricultural-trade-data/



2023 Research at a Glance



2023 Farm Bill Research

- ERS' core research and data program covers the breadth of USDA programs touched by the Farm Bill: farming, nutrition, conservation, rural development, research, and energy.

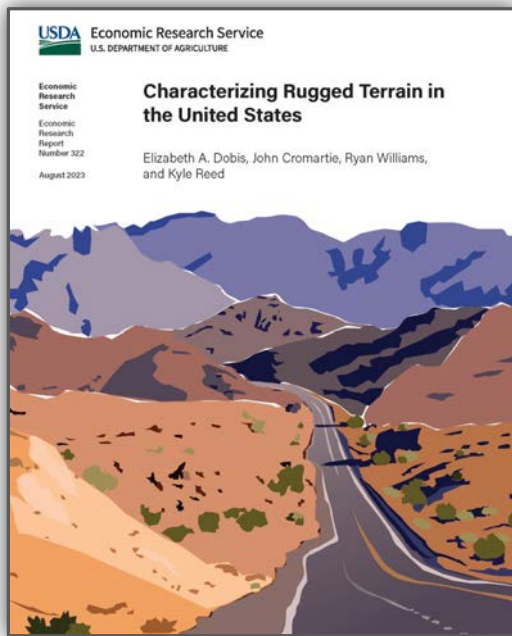
- Visit the Farm Bill Research page for ERS research focusing on these issues:

www.ers.usda.gov/topics/farm-bill/2023-farm-bill/

- One example is the ***U.S. Agricultural Policy Review, 2021*** report – the inaugural edition of a series examining annual developments in U.S. agricultural policies.



2023 Research at a Glance



Area and Road Ruggedness Scales

- The Area and Road Ruggedness Scales data product provides measures of topographic variation, or "ruggedness," for census tracts across 50 States & Washington, DC.
- The data include the Area Ruggedness Scale, a six-category measure based on the changes in elevation for all terrain & the Road Ruggedness Scale, a five-category measure based on the changes in elevation beneath roads.
- A recent report on ***Characterizing Rugged Terrain in the United States*** uses this data to analyze population, population density, & income across road ruggedness categories, rurality, & regions in the U.S.





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Area and Road Ruggedness Scales

DATA TRAINING WEBINAR



September 28, 2023 | 1 PM ET



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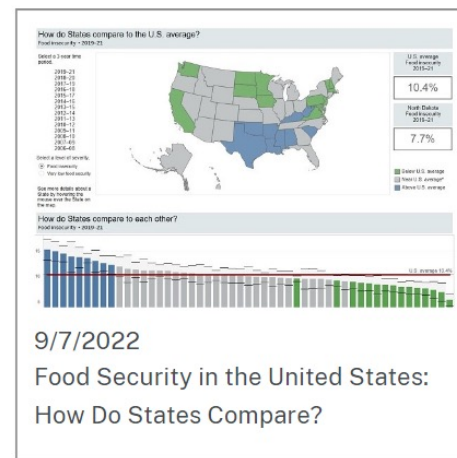
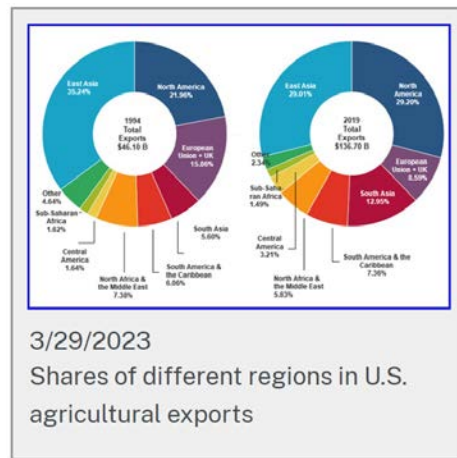
John Cromartie
Geographer



Elizabeth Dobis
Regional Economist

ERS Data Visualizations

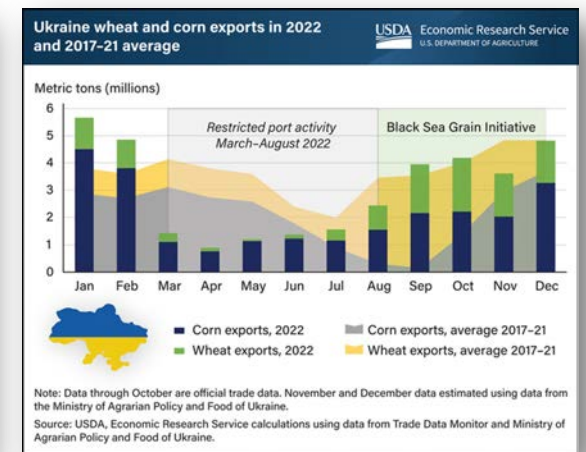
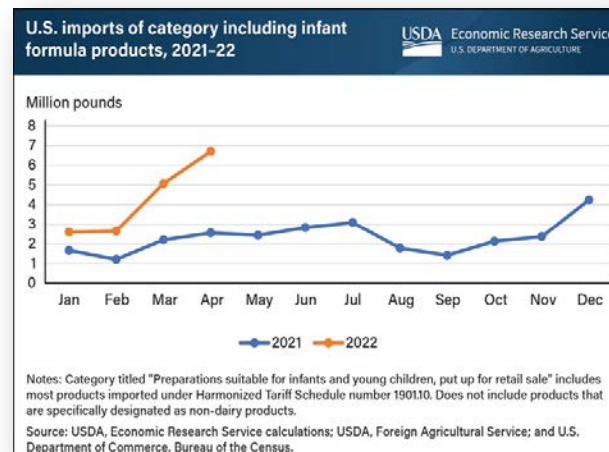
A collection of 60+ interactive data charts!



www.ers.usda.gov/data-products/data-visualizations/

Delivering Timely Research on Emerging Issues

- Timely research on emerging issues:
 - COVID-19 Pandemic
 - Agricultural Markets in Russia & Ukraine
 - Infant Formula Shortage
 - International Food Security Assessment



Save the Date!



Oct. 25 – Household Food Security in the United States in 2022

Nov. 15 – Rural America at a Glance: 2023 Edition

Dec. 12 – America's Farms & Ranches at a Glance: 2023 Edition



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