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International Food Security Assessment, 2022–32

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What Is the Issue?

Millions of people around the world lack access to sufficient, safe, and nutritious food. Several factors affect the prevalence of food security—including food availability (agricultural production and market conditions), access to food (economic and physical), stability (price and income shocks), and utilization. Personal income, food prices, and economic inequality are major factors determining the ability of people to access food. Widespread food availability, rising income, and low food prices improve a country's food security by increasing access to food. Food security can be worsened by declining income levels, high food prices, or food supply shocks. This report focuses on the availability and access dimensions of food security. Using a demand-driven model that integrates income, food prices, and food supply shocks, the analysis helps USDA and its stakeholders assess food security for 77 countries in Sub-Saharan Africa, North Africa, Latin America and the Caribbean, and Asia. The 2022 report uses macroeconomic and international agricultural commodity price projections completed as of August 2021 to estimate and project the potential impact on present and future food insecurity levels. However, the macroeconomic and international agricultural commodity price estimates were adjusted for the Russian invasion of Ukraine and increases in fertilizer and energy costs beyond expectations as of August 2021. Box "Global Trade Analysis Project (GTAP): A Computable General Equilibrium (CGE) Model" describes those adjustments for the low scenario estimates in this report. The special article covers estimates for medium and high scenarios representing higher impacts of these shocks.

What Did the Study Find?

The 2022 food insecurity estimates reflect the global and country-level macroeconomic conditions and price shocks observed at the time of estimation. The macroeconomic and international agricultural commodity prices for the 2022 to 2032 period are based on projections completed in August 2021, which account for the economic impact of the pandemic crisis and the rebound in U.S. and global economic growth beginning in 2021.

The main findings for the 77 countries covered by this report are:

- Most of the International Food Security Assessment (IFSA) countries across all four regions—Sub-Saharan Africa, North Africa, Latin America and the Caribbean, and Asia—are estimated to experience positive Gross Domestic Product (GDP) per capita growth in 2022, relative to 2021.
- Food security in IFSA countries is expected to deteriorate in 2022 due to the continued effects of the COVID-19 pandemic and high input and commodity prices that have been intensified by the Russian military invasion of Ukraine.
- The number of food insecure people in 2022 is estimated at 1.3 billion in IFSA countries, an increase of 118.7 million people (9.8 percent) from the 2021 estimate. This estimate reflects an additional 41.7 million people who can be considered food insecure associated with Russia's military invasion of Ukraine and fertilizer and energy price increases. The special article includes impacts on food insecurity for two additional scenarios illustrating the effects of a prolonged or intensified conflict.
- In 2022 results indicate that 32.9 percent of the population of the 77 countries is unable to consume 2,100 kilocalories (kcal) a day, an average caloric level necessary to sustain a healthy and active lifestyle. Food security is projected to improve over the next 10 years. By 2032, the number of food insecure people is projected to be 577.3 million, and falling to 12.4 percent of the population (62.5 percent less than in 2022).

How Was the Study Conducted?

The USDA, ERS demand-oriented International Food Security Assessment (IFSA) model (described in appendix A) projects food demand and food gaps in 77 low- and middle-income countries through 2032. Food security is evaluated for each country by estimating the share of the population unable to reach a caloric threshold of 2,100 kilocalories per person per day. The intensity of food insecurity for those falling below the minimum caloric target is measured by the gap between projected food demand and this caloric threshold. Food demand is expressed in grain equivalents, based on caloric content to allow aggregation across four separate food groups: the primary grain consumed in the country, other grains, roots and tubers, and all other food. Average per capita food consumption data are from the United Nations' Food and Agriculture Organization (FAO) Food Balance Sheets and FAO's Global Information Early Warning System's (GIEWS) Country Cereal Balance Sheet. Observed domestic prices are from FAO-GIEWS Food Price Monitoring and Analysis Tool. Tariff data are from the World Bank's World Integrated Trade Solution. Incomes, exchange rates, and Consumer Price Indexes are from the ERS International Macroeconomic Dataset (USDA, 2021). World prices are from *USDA Agricultural Projections to 2031* (USDA, 2022).