



Progress and Challenges in Global Food Security

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What Is the Issue?

For almost six decades, the United States has led global efforts to alleviate food insecurity, providing about half of global food aid and bilateral and multilateral support for agricultural development and trade. Global food security has improved over the past 15 years, but challenges and opportunities persist as U.S. food security decisionmakers continue to prioritize and refine the global food security agenda. The Global Food Security Act of 2016 (GFSA) provides for continued U.S. commitment to reducing food insecurity and poverty through agricultural-led growth, increased resilience, and a broad commitment to improved nutrition. In order to feed a world that will have over 9 billion people by 2050, it is necessary to investigate the drivers of global food security and options for improving it. In this report, we analyze factors contributing to improvements in food security and highlight emerging issues and challenges.

What Did the Study Find?

There have been some improvements in food security measurement, agricultural productivity, food trade, food security safety net programs, and nutrition; however, some challenges persist:

Food Security Measurement

- Better data and ways of measuring progress are key for evaluating evidence-based programs, including those under GFSA. To identify food-insecure populations, researchers must rely on multiple indicators to measure the four dimensions of food security—availability, access, utilization, and stability. Available measures include national-level indicators of availability and access, household-level indicators of access and utilization, physical measures of nutritional and health outcomes, and newer experiential measures of food security. Results differ across measurement techniques, and further development is underway to improve their accuracy and reliability.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

Agricultural Productivity

- In most of the low-income countries studied, domestic production supplies the bulk of those countries' food staples. Production and yield growth have greatly improved food security in the majority of countries over the past few decades. In many developing countries, increased agricultural productivity—producing the same or more output with fewer inputs—has significantly improved food security.
- On average, the faster the growth in agricultural productivity, the larger the reductions in food insecurity. Gains through productivity research and technology adoption—via extension, market access, and risk-management tools—have contributed to improvements in food security in many countries.

Food Trade

- In countries where climate or a lack of land or water resources limits the potential for local production, food imports have played a primary role in improvements in food insecurity. In other countries, food imports have played an important complementary role.
- Some countries limit their reliance on imports because of concerns about the effect on local food production and employment, as well as inadequate foreign currency reserves and insufficient infrastructure. Over the long term, however, a number of developing countries have found effective food security strategies by competing in world markets for goods and services and opening food markets to international trade.

Food Security Safety Net Programs

- Countries implement different types of domestic food safety net programs, ranging from in-kind food assistance to newer methods that provide conditional and unconditional cash transfers.
- Cash transfer programs can be more cost effective than older methods, but not all countries have sufficient food markets and administrative capacity to broadly implement them. However, advances in information technology, personal identification, banking, and mobile phones support the expansion of targeted cash transfer programs. These innovations can make the programs more effective, as well as reduce the market distortions associated with acquiring, distributing, and storing commodities found in traditional in-kind programs.

Nutrition

- Nutrition is a major focus of GFSA. Nutrition challenges persist even when food availability and access have improved. Dietary diversity is key to improved nutrition, and while average diets have become more diverse, this is not broadly the case for lower income groups or vulnerable subgroups, such as mothers and young children. Non-food factors, such as clean water and effective sanitation, are also key factors in improving food utilization and nutrition among these groups.

How Was the Study Conducted?

The report focused on the 76 low- and middle-income countries regularly tracked by USDA in its annual International Food Security Assessments (IFSA). ERS researchers compared and analyzed alternative indicators of food security using ERS databases on international food security and international agricultural productivity and data available from international organizations, such as the Food and Agriculture Organization and the World Health Organization. ERS researchers also examined linkages among agricultural productivity, agricultural trade, food safety net programs, and food security.