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International Food Security Assessment, 2016-2026

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What Is the Issue?

International food price spikes over the last decade highlighted the impact of price shocks on the food security of vulnerable populations. ERS has developed a new demand-oriented framework to analyze income and price shocks and their impact on food security. Grains comprise the bulk of the diet in most of the study countries. Prices of these commodities are projected to decline over the next decade. Conversely, incomes in nearly all the study countries are projected to rise. To understand how food prices and income affect food security, ERS researchers estimated and projected the number of food-insecure people regionally and in each of the 76 low- and middle-income countries covered in this report for 2016-26.

What Did the Study Find?

Given projections for lower food prices and rising incomes, food security for the 76 low- and middle-income countries included in this demand-oriented framework is expected to improve through 2026. The share of population that is food insecure is projected to fall from 17 percent in 2016 to 6 percent in 2026. The number of food-insecure people is projected to fall markedly, 59 percent, to 251 million in 2026. This roughly matches the decline in the distribution gap, the amount of food needed to allow all food-insecure people to reach the nutritional target of 2,100 calories per person per day. The similar rates of decline for the two measures indicates no worsening in the intensity of food insecurity, at the aggregate level, for those people considered to be food-insecure.

At the regional level, the greatest improvement in food security is projected for *Asia*, where the share of population food insecure falls from 13 to 2.4 percent and the number of food-insecure people falls 80 percent between 2016 and 2026. In 16 of the region's 22 countries, less than 5 percent of the population is projected to be food insecure in 2026. The number of food-insecure people in the *Latin America and the Caribbean* (LAC) region is projected to fall by half over the next decade; the share of population that is food insecure falls from 14.6 percent in 2016 to 6.4 percent in 2026. Strong gains are expected throughout the region with the sole exception of Haiti, where improvement is expected to be relatively modest.

Sub-Saharan Africa's (SSA) food security situation is also projected to improve, but at the slowest rate of all the regions. The number of food-insecure people is projected to fall by 36

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percent and the share of population that is food insecure falls from 29 to 15 percent. In 29 of the 39 countries included in this region for this study, 20 percent or less of the population is projected to be food insecure in 2026. Improvement in food security is also projected for *North Africa*, which is the most food secure among all the regions in the study. The share of population food insecure falls from 2 percent in 2016 to 0.6 percent in 2026.

How Was the Study Conducted?

The new IFSA model used in this report projects food consumption (food demand) and food gaps in 76 low- and middle-income countries through 2026. Food security of a country is evaluated by estimating what population share is unable to reach a nutritional target, which is set at 2,100 calories per capita per day. The intensity of food insecurity is measured by determining the size of the gap between projected domestic food consumption (food demand) and the nutritional target. Food demand is expressed in grain equivalent based on caloric content to allow aggregation across four separate food groups: major grain, 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. Observed domestic prices are from FAO's Global Information Early Warning System database. Price and income elasticities are from Muhammad et al. (2011). Tariff data are from World Bank WITS (World Integrated Trade Solution). Exchange rates and CPIs are from the ERS International Macroeconomic Dataset. World prices are from USDA's Agricultural Projections to 2025.