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## Food Security Assessment, 2010-20

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Indicators of food security point to improvement between 2009 and 2010 for the 70 countries covered in this report. The number of food-insecure people is estimated to decrease from about 953 million in 2009 to 882 million in 2010. Food-insecure people are defined as those consuming less than the nutritional target of 2,100 calories per day per person.

Any increase or decrease highlights the fact that consumption for large portions of the populations in lower income countries is clustered around the nutritional target. This implies that even a brief economic slowdown or food production shock can result in millions of additional people being subjected to food insecurity. Conversely, a slight improvement in economic conditions can propel people past the nutritional target.

## What Is the Issue?

The 2010 results are based on the economic recovery assumptions by the International Monetary Fund (IMF), which is cautiously optimistic, but admits that there is a downside risk of an economic retreat. Among key factors influencing economic assumptions is the unknown issue of capital flows. According to the IMF, capital inflows will remain volatile because the current global economic rebound is mainly driven by major fiscal stimulus in support of credit markets, the impacts of which could be eroded before the end of 2010. In *Food Security Assessment*, 2010-20, ERS researchers estimate and project the number of food-insecure people regionally and in each of the 70 developing countries for 2010-2020.

## What Did the Study Find?

Food security in 70 developing countries is estimated to have improved between 2009 and 2010, due in part to economic recovery in many of these countries. The number of food-insecure people in the developing countries analyzed by ERS researchers is estimated to decrease 7.5 percent from 2009 to 882 million in 2010. The number of food-insecure people at the aggregate level will not improve much over the next decade, declining by 1 percent from 2010 to 2020. While there will be notable improvements in Asia and Latin America, the situation in Sub-Saharan Africa (SSA) is projected to deteriorate after 2010.

Despite the unfavorable long-term projections, SSA's food security situation improved between 2009 and 2010 following stronger economic growth and a continuation of the recent upward trend in food production. The number of food-insecure people in the region is estimated at 390 million in 2010, a near 12-percent decline from 2009. The distribution gap—the amount of food needed to raise consumption in each income group to meet the nutritional target of 2,100 calories per person

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per day—also declined, albeit negligibly. Despite the improvement, nearly half of the region's population remains food-insecure. In addition, while accounting for only one-quarter of the population of the 70 countries included in this study, the region is estimated to account for 44 percent of the food-insecure people.

As the global economy slowly recovers from the worldwide recession, Asia will continue to make impressive gains in improving food security as the projected number of food-insecure people is projected to decline from 433 million in 2010 to 320 million in 2020. In absolute terms, the number of food insecure in Asia is large; however, in relative terms Asia is doing better than SSA. In 2010, Asia will account for nearly 64 percent of the population of the 70 developing countries included in this report, but will account for barely half of the estimated 882 million total food-insecure people.

By 2020, the number of food-insecure people in SSA is projected to exceed 500 million out of a total population of roughly 1 billion. In other words, without any significant increase in investment or change in historical trends of major indicators, more than half of the region's population will consume less than the nutritional target. The region's food security position will also deteriorate relative to the other regions included in this report. In 2020, the region will account for only 27 percent of the population of the 70 countries, but it will have about a 59-percent share of the total number of food-insecure people.

The long-term projections are made assuming continuation of current trends in several key factors affecting long-term food security—agricultural production, income, foreign exchange availability, and population growth. The question is how changes in these variables would affect the results. To do this, ERS developed two scenarios. The first scenario doubles capital inflows by 2020 to examine the impacts of improved food import capacity in all study countries. The food security baseline projections assume a constant capital inflow during the projection period.

The second scenario analyzes the effect of targeting the most vulnerable countries with the goal of improving their food production performance. The scenario stems from concerns raised in different forums among governments and donors that without significant improvements in production, vulnerability to shocks such as the global food price crisis of 2008 could continue. To examine the impact on food security of increased agricultural production in low-income countries, the second scenario couples the increase in capital flows from the first scenario with a 50-percent increase in projected grain yields in 2020. The countries selected for this scenario are the 37 in the SSA region and 4 in Central America and the Caribbean. (Guatemala, Honduras, Nicaragua, and Haiti were selected because they have the highest share of rural population relative to other countries in the region.)

In the first scenario, when capital inflows of the 70 countries are doubled in 2020, the number of food-insecure people is projected to decline 11 percent relative to the 2020 food security baseline projections. Scenario results indicate improvement in all regions. In Asia, the number of food-insecure people declines by 14 percent, in Latin America and Caribbean (LAC) by 31 percent, and in SSA by 8 percent. As expected, the regions that benefit under this scenario are those that are highly import-dependent (LAC) and those where external capital inflows (private and foreign assistance) are high relative to their export earnings (Asia).

The results under the second scenario show a significant improvement in food security in SSA. The number of food-insecure people falls by 67 percent (from 513 million in 2020 in the food security baseline to 168 million in this scenario). In the selected LAC countries, the number of food-insecure people falls to less than 10 percent in all countries except for Haiti.

## **How Was the Study Conducted?**

All historical and projected data are updated relative to the *Food Security Assessment*, 2008-09 report. Food production estimates for 2009 are based on data from the United Nations' Food and Agriculture Organization (FAO) as of February 2010. Historical production data are from FAO and food aid data are from the World Food Programme (WFP). Financial and macroeconomic data are based on the latest World Bank data, as of February 2010. Projected macroeconomic variables either are based on ERS-calculated growth rates for the 1990s through the late 2000s or are IMF and World Bank projections. Projections of food availability include food aid, with the assumption that each country will receive the 2006-08 average level of food aid throughout the next decade.