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Food Security Assessment: Regional Overview

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Issue. The world's resources are adequate to produce enough food for its population for at least the next few decades. Because the available food is distributed unevenly, however, many countries experience "food insecurity," with food supplies inadequate to maintain their citizens' per capita consumption or to meet their nutritional requirements. Undernutrition, while rarely viewed as an emergency, reduces a society's productivity and long-term growth. Participants at the 1996 World Food Summit pledged "to reduce the number of undernourished people to half their present level no later than 2015." More important than counting the number of hungry people is reducing the severity of food insecurity, with strategies aimed at reducing both acute hunger and the number of hungry people.

Background. Despite increased food supplies in developing countries over the last two decades, the Economic Research Service finds growing food gaps for 67 low-income developing countries, mostly in Sub-Saharan Africa and Asia, in the next decade.

■ The *status quo gap* (food needed to maintain per capita consumption at 1997-99 levels) is estimated at 7 million tons for 2000. By 2010, the gap is projected to increase by 80 percent, at which time 42 countries are expected to face declines in per capita consumption.

■ The *nutritional gap* (food needed to meet minimum nutrition levels) is estimated at 17 million tons for 2000. By 2010, the gap is projected to increase by 29 percent, at which time food consumption is projected to fall short of nutritional requirements in about half of the 67 countries.

Sub-Saharan Africa is the most vulnerable region: with only 25 percent of the population in the 67 countries, its nutritional gap accounts for 65 percent of the total gap for all 67 countries.

The main factors influencing food availability and/or food gaps of the countries are domestic food production, foreign exchange availability, and population growth. Among these factors, domestic food production is the most crucial. Domestic production contributes about 90 percent of con-

sumption in the most food-insecure countries. That relatively high figure is attributable more to financial constraints that limit imports than to adequate supplies from domestic production. During the next decade, Sub-Saharan Africa's production growth is projected to fall short of historical rates because:

■ Nearly 90 percent of the region's historical growth in grain production stemmed from area expansion. This trend is not expected to continue, as much of the region's remaining land area is marginal for agricultural purposes.

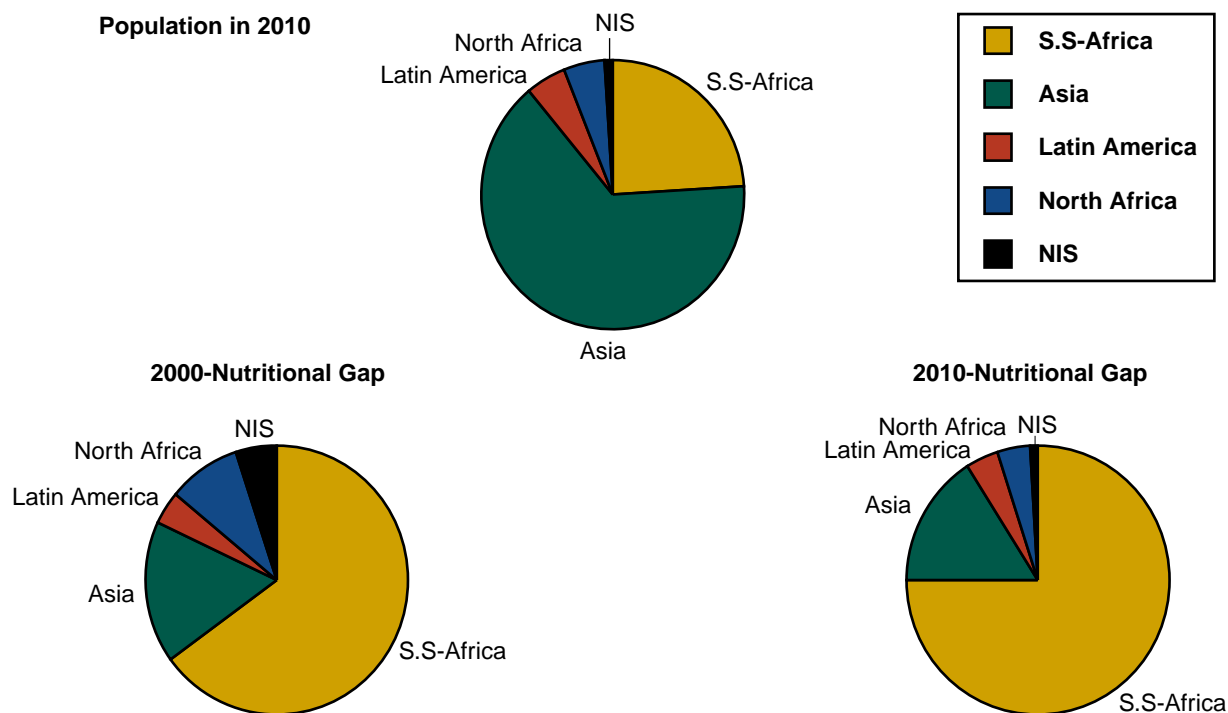
■ The decline in population growth due to the spread of HIV/AIDS is expected to reduce labor productivity. With labor being the essential factor of production, a lack of labor-saving technologies will lead to a decline in food production.

Domestic food production is less critical to food security if a country can import required foods, but financial constraints limit imports in many of the 67 countries. In North Africa, Latin America, and Asia, the food gaps are quite small relative to commercial imports. If imports grew at a slightly higher rate than projected, these regions' food gaps could be closed entirely. For Sub-Saharan Africa to close its average nutrition gap, however, its food imports would have to grow by more than 9 percent per year during the next decade. Such growth is extremely unlikely, given the region's historical import growth rate of less than 5 percent.

A high rate of population growth is the principal factor stimulating food demand. The most recent data show slower population growth in Sub-Saharan Africa due mainly to the devastating impact of AIDS. The region's population growth rate has declined from 2.8 percent to 2.5 percent per year. Even with slower population growth, the outlook for food security will remain bleak, absent any increase in agricultural productivity and/or increase in import capacity.

A final requirement for achieving food security goals is political stability. Common elements among the most food-insecure countries are dysfunctional economies and war. Continued political instability in Afghanistan, Haiti,

Food needs greatest in Sub-Saharan Africa



Liberia, the Democratic Republic of Congo, the Central African Republic, Sudan, Somalia, Rwanda, Burundi, Angola, and Zimbabwe dampens the region's prospects for improving food security.

Alternatives. Sustained improvements in agricultural performance require consistent long-term incentives to assure farmers they will be rewarded for their labor as well as innovative technologies to increase productivity of both land and labor.

To improve food security, the first step is to identify policies and institutions that lead to sustainable agricultural growth, particularly in countries where the agricultural sector accounts for a large share of the economy (i.e., Sub-Saharan Africa). Increased agricultural production, by increasing food availability, raises the purchasing power of the rural community; increased export earnings of agricultural products can, in turn, finance food imports.

In addition, investments must be made in labor-saving technology. Labor is the principal factor of production in the poorest countries. The high prevalence of HIV/AIDS in many of these countries threatens the labor supply by reducing not only the quantity of labor but also the quality of labor through illness. The use of improved technologies, in addition to a direct impact on production, has a strong

link to population growth, by reducing the traditional reliance on human labor and therefore the desirability of large families. Such technologies are available throughout the region. By adopting high-yielding corn varieties, for example, Kenya and Zimbabwe significantly increased their yields over the last two decades. Improved farm management and production practices such as mixed cropping can be used to increase yields further.

For developing countries, institutions matter as well. The constant pressure of civil unrest and wars in many of these countries undermines institutional attention to the farm sector. Inappropriate policies from dysfunctional institutions can actually impede agricultural growth, with devastating impact on the food-insecure segment of the population.

International financial assistance and food aid can help to improve food security by boosting long-term investment and short-term support for targeted nutritional programs, but they will be ineffective if inappropriate policies remain in place.

Information Sources. More information can be found in ERS in *Food Security Assessment 2000* (<http://www.ers.usda.gov/publications/gfa12/>) and *Food Security Assessment: Why Countries Are at Risk* (AIB-754, 1999, <http://www.ers.usda.gov/publications/aib754/>).

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