United States Department of Agriculture

Economic Research Service

GFA-11-01
March 2000

Food Security in Latin America and the Caribbean

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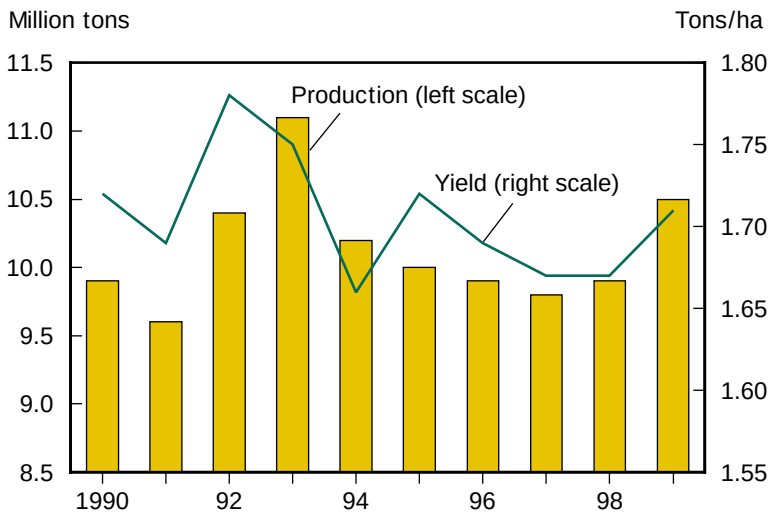
Food Security in Latin America and the Caribbean

Countries experience "food insecurity" when food supplies are not adequate to provide all people at all times with sufficient food for an active and healthy life. In our food security assessment study, we evaluate two aspects of food security—availability and access—and analyze their trends through 2009. To present a regional perspective, the analysis provides an overview for low-income Latin American and Caribbean countries with a special focus on four countries—El Salvador, Guatemala, Honduras, and Nicaragua—all of which were affected by Hurricane Mitch in the fall of 1998.

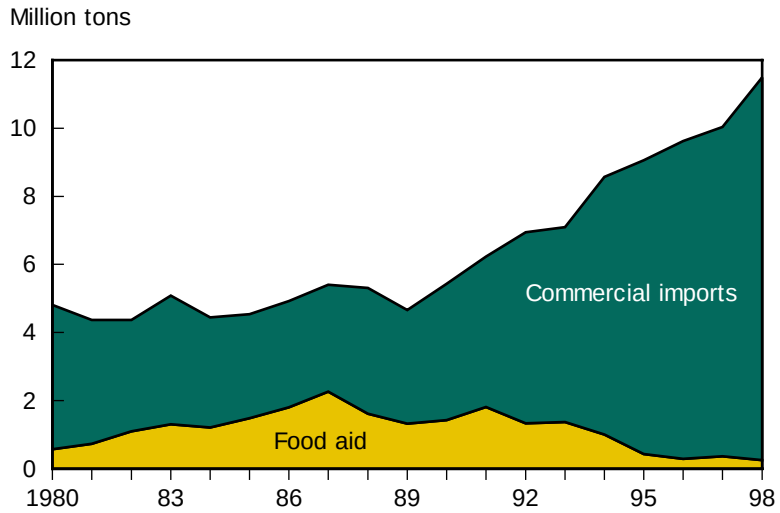
Past Performance: Regional Production and Imports

Latin America's severely skewed income distribution, which restricts access to food for the lower income segments of the population, is the major cause of *chronic* food insecurity in these countries. On the other hand, varying levels in grain production due to adverse weather conditions can result in *transitory* food security if deficits cannot be filled with imports. In Nicaragua,

Latin America's Grain Production



Latin America's Grain Imports



grain production varied from trend an average of 16 percent in the 1980's and 1990's. In Honduras, the variation measured 12 percent. By comparison, variation in many of the developing countries of Asia averaged between 3 and 9 percent.

Between 1990 and 1998, per capita consumption increased 3 percent per year. While food production did not keep pace with population growth, fast rising imports were the leading force behind the rising per capita consumption trend.

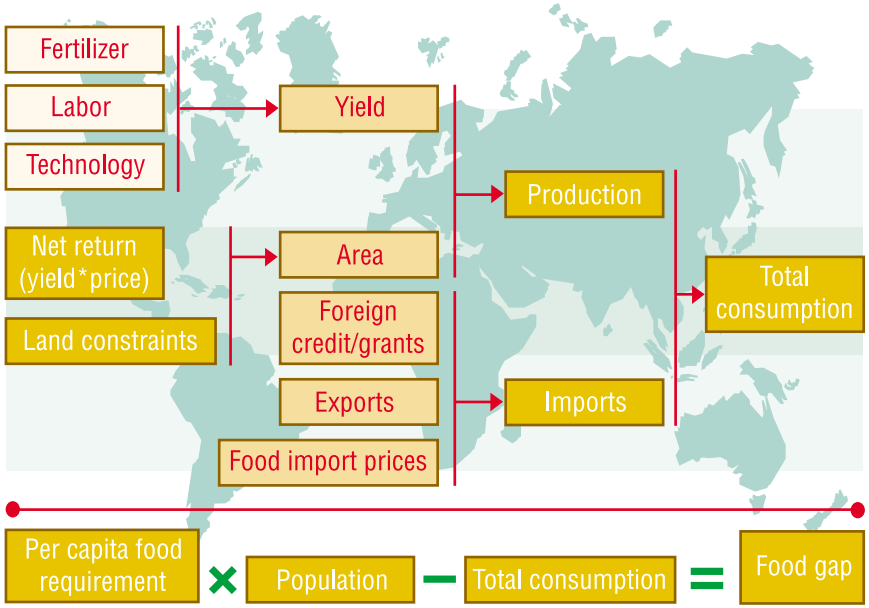
From the late 1980's to the early 1990's, food aid comprised a significant share of imports. In 1987, food aid's share of total grain imports equaled 42 percent. This share dropped to 2 percent by 1998 in response to improved commercial import capacity in the region and declining global food aid allocations.

The improved import capacity, driven by rising export earnings, has made Latin America and the Caribbean one of the most import-dependent regions in the world. During the 1980's, imports' share of grain supplies averaged around 30 percent. By 1999, it increased to 47 percent.

Factors Affecting Food Consumption and Food Gaps

Domestic food production and imports are the principal components of food availability. Domestic production for the staple commodities is the product of yield and area. Yield is deter-

Key Variables and Relationships



mined by the use of fertilizer, labor, and technology. Area responds to changes in net returns. The key determinants of commercial food imports are net foreign exchange earnings and food import prices.

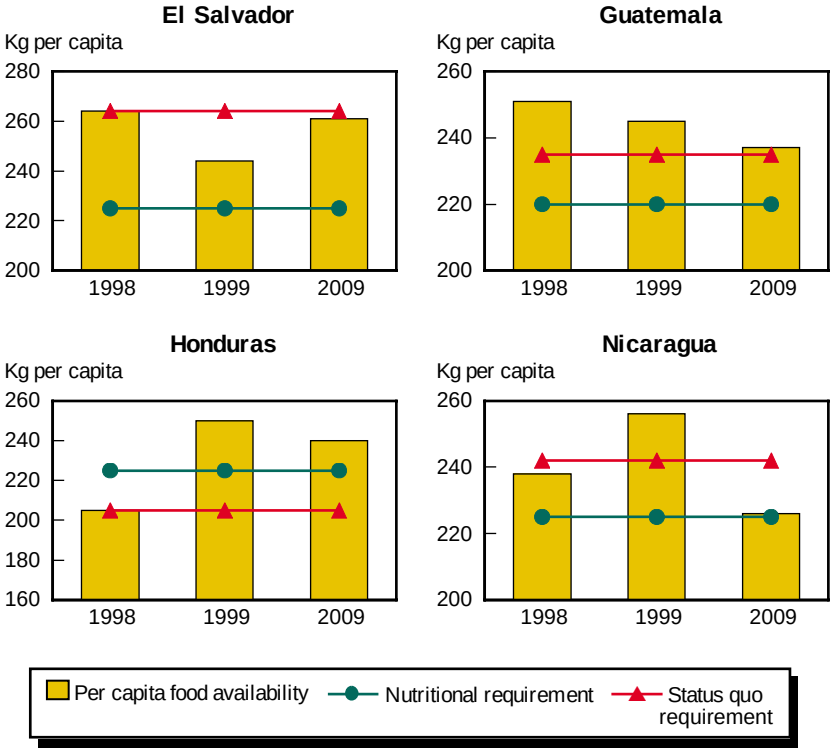
For the poorest countries, an increase in agricultural productivity is the key to improving food security. Distorted policies, limited resources, low input use, and little use of new technology are the principal factors constraining yields in some of the countries in this region.

Availability of Food: Defining the Nutrition Gap and the Status Quo Gap

A *nutrition gap* is estimated to measure food insecurity. This gap represents the difference between projected food supplies and the food needed to support minimum per capita nutritional standards on the national level.

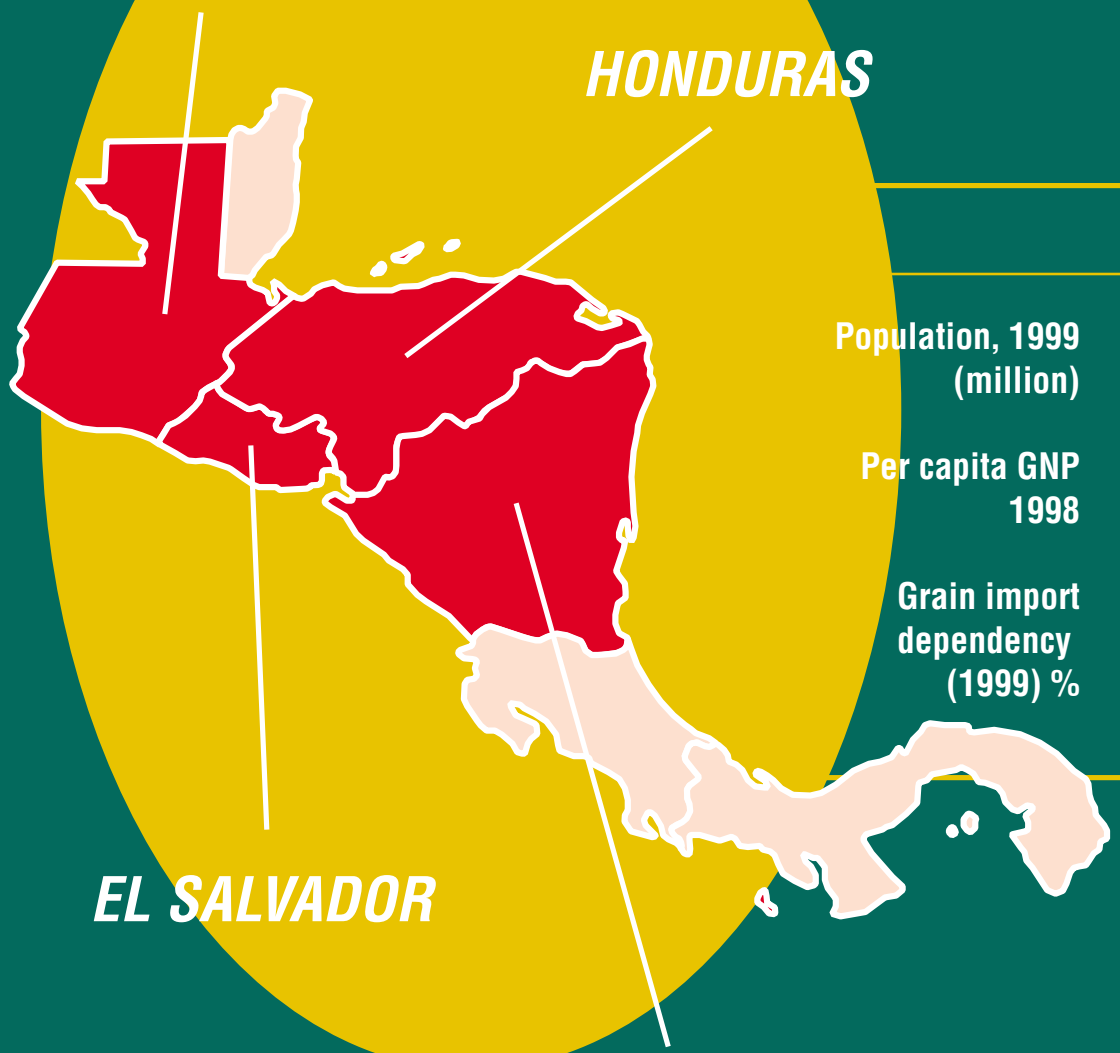
A *status quo gap* is estimated to measure changes in food security. This gap represents the difference between projected food supplies and the food needed to maintain per capita consumption of the last 3 years.

Total Food Availability Versus Requirements in Selected Latin American Countries



- While 1999 grain production in El Salvador rebounded from 1998 levels, imports fell considerably, resulting in lower availability; for the long term, production is projected to keep pace with the 1.75 percent per year growth in population.
- Very strong import growth in Guatemala will not be sufficient to compensate for the weak—1.1 percent per year—growth in grain production; as a result, per capita food availability is projected to decline during the next decade; however, nutritional needs will still be met.
- Grain production in Honduras fell nearly 20 percent in 1998 and food availability fell below nutritional requirements; in 1999, production rebounded and imports rose, allowing per capita availability to rise above base per capita consumption levels and nutritional requirements.
- In Nicaragua, production and import gains increased food availability in 1999; import growth is projected to keep pace with population growth through 2009; per capita food availability is projected to decline in 2009, however, as grain output growth is expected to average less than 1 percent per year.

FOUR COUNTRIES AFFECTED BY HURRICANE MITCH



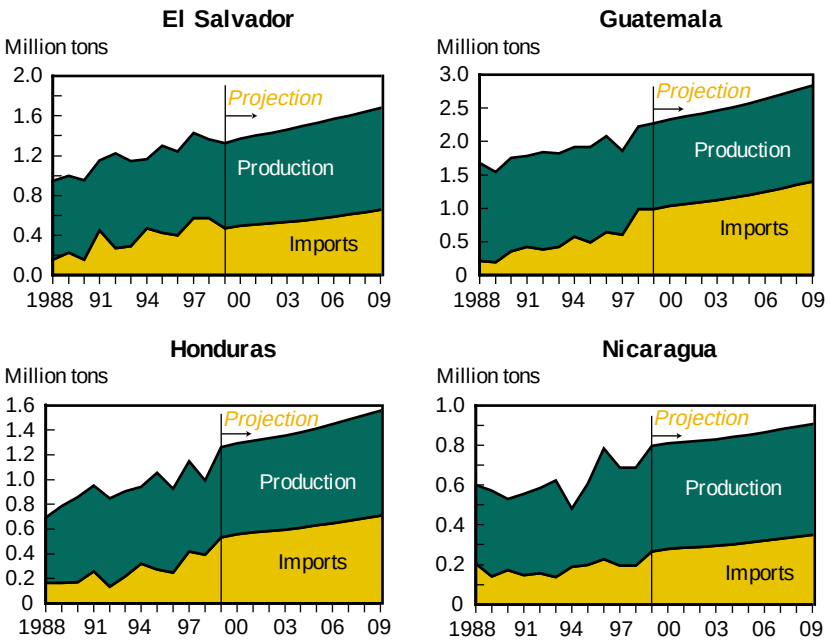
Indicators

	El Salvador	Guatemala	Honduras	Nicaragua
Population, 1999 (million)	6.2	11.1	6.3	4.9
Per capita GNP 1998	$1,850	$1,640	$730	$390
Grain import dependency (1999) %	35	39	35	23

Grain Production and Commercial Imports in Selected Latin American Countries

In the four Central American countries, imports have become increasingly important in supplementing grain supplies, making up a third of total grain supplies. This share is projected to remain stable over the next decade.

Grain Production and Imports



Distribution of Food Within Countries: Defining the Distribution Gap

Inadequate economic access is the most important cause of chronic undernutrition among developing countries and is related to income levels. In this model, the total projected amount of available food is allocated among different income groups using income distribution data. The consumption data, by income group, are compared with nutritional requirements. The *distribution gap* measures the difference between actual food consumption and the amount of food needed to increase food consumption in food-deficit income groups to a level to meet nutritional requirements.

The Dangers of Skewed Income Distribution

One of the most difficult dimensions of food security in Latin American countries is the unequal distribution of food within countries, which stems from wide disparities in income levels. While food availability on the aggregate level may be adequate to meet nutritional requirements, insufficient incomes for the lower income groups in many countries limit the ability to purchase food.

The situation in Guatemala, Honduras, and Nicaragua is expected to be particularly severe as food insecurity is projected to affect an increasing proportion of the population through the next decade if current trends persist.

Ratio of Consumption to Nutritional Requirements

Regions	*Lowest 20%*	*Second*	*Third*	*Fourth*	*Highest 20%*
			Income quintiles		
Honduras					
1998	0.62	0.74	0.82	0.90	1.04
1999	0.84	0.94	1.02	1.11	1.31
2009	0.81	0.91	0.98	1.07	1.27
Nicaragua					
1998	0.79	0.92	1.01	1.09	1.25
1999	0.84	0.96	1.05	1.15	1.42
2009	0.74	0.83	0.91	1.00	1.23
Guatemala					
1998	0.71	0.92	1.03	1.13	1.32
1999	0.78	0.92	1.01	1.11	1.35
2009	0.75	0.88	0.97	1.06	1.30
El Salvador					
1998	0.84	1.01	1.11	1.19	1.35
1999	0.87	0.97	1.03	1.10	1.25
2009	0.94	1.04	1.11	1.18	1.35

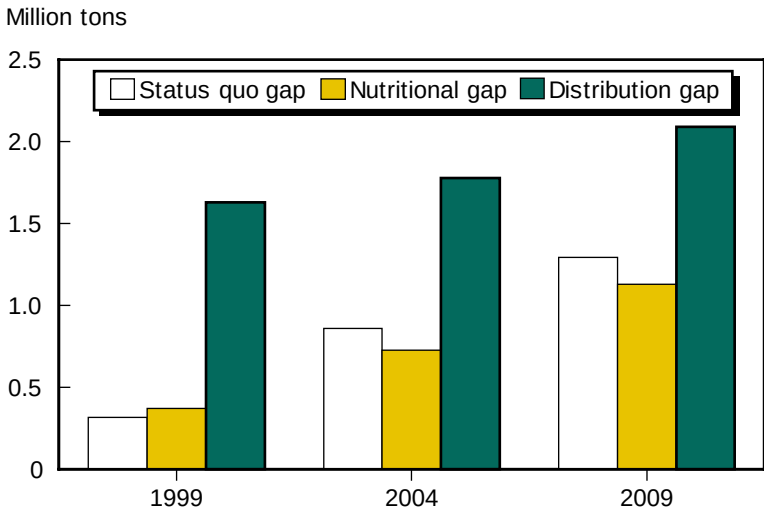
- With the exception of El Salvador, the food security situation is projected to deteriorate across nearly all income groups for each country during the next decade.
- In 2009, consumption in only the top two income groups is projected to exceed the minimum nutritional requirement in Honduras, Nicaragua, and Guatemala.

Comparisons of Food Gaps for the Region

Food gaps in Latin America and the Caribbean are projected to rise sharply over the next decade. The status quo gap, estimated at 300,000 tons in 1999, is projected to quadruple by 2009 and the nutritional gap to triple from 370,000 tons in 1999.

The region's distribution gap is projected to rise from 1.6 million tons in 1999 to 2 million tons in 2009, almost double the average nutrition gap. Our projections show that the number of people unable to consume the nutritional minimum will increase from 54 million in 1999 to 63 million by 2009. The growth of the distribution gap surpasses the growth in the number of people becoming food insecure over the next decade, meaning that distribution-related nutritional problems will intensify more than they will spread.

Food Gaps in Latin America



Conclusion

A key problem in this region is not only the inadequate supply of food, but access to food, particularly by the low-income population. This means that raising productivity of the agricultural sector, which employs most of the poor, is expected to have a greater impact on food security than increasing imports.

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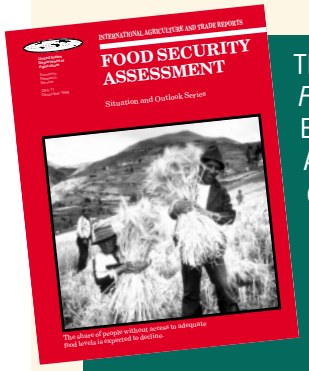

This publication is a supplement to the annual *Food Security Assessment* published as part of ERS' Situation and Outlook Series of International Agriculture and Trade Reports. The annual assessment covers 67 low-income, developing countries. This is the first in a series of quarterly publications to be produced as part of the food security program under the Hurricane Reconstruction activities of the U.S. Department of Agriculture.

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