Data may have been updated since publication. For the most current information, see www.ers.usda.gov/publications/agoutlook/aotables/.

Farm, Rural, and Natural Resources Indicators

	1990	2000	2001	2002	2003	2004	Annual percent change 1990-2000	2002-03	2003-04
Cash receipts ($ billion)	169.5	192.0	199.8	192.9	212.4f	215.0f	1.3	10.1	1.2
Crops	80.3	92.4	93.4	99.5	106.7f	114.3f	1.4	7.2	7.1
Livestock	89.2	99.5	106.4	93.5	105.6f	100.7f	1.1	12.9	-4.6
Direct government payments ($ billion)	9.3	22.9	20.7	11.0	17.4f	10.3f	9.4	58.2	-40.8
Gross cash income ($ billion)	186.9	228.6	235.3	219.4	244.9f	240.9f	2.0	11.6	-1.6
Net cash income ($ billion)	52.7	56.5	59.2	49.1	63.0f	55.9f	0.7	28.3	-11.3
Net value added ($ billion)	80.8	92.0	94.2	76.9	98.9f	93.0f	1.3	28.6	-6.0
Farm equity ($ billion)	702.6	1,025.6	1,070.1	1,110.7f	1,160.5f	1,198.1f	3.9	4.5	3.2
Farm debt-asset ratio	16.4	14.8	14.8	14.8f	14.7f	14.6f	-1.0	-0.7	-0.7
Farm household income ($/farm household)	38,237	61,947	64,117	65,757	67,453f	66,732f	4.9	2.6	-1.1
Farm household income relative to average U.S. household income (%)	103.1	108.6	110.2	113.7	na	na	0.5	na	na
Nonmetro-Metro difference in poverty rate (%)	3.6	2.6	3.1	2.6	na	na	-3.2	na	na
Cropland harvested (million acres)	310	314	311	307	314p	na	0.1	2.3	na
USDA conservation program expenditures ($ bil.)[1]	3.0	3.4	3.7	3.5q	na	na	1.3	na	na

Food and Fiber Sector Indicators

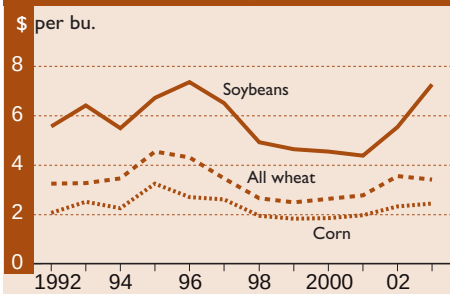
U.S. gross domestic product ($ billion current)[2]	5,803	9,825	10,082	10,446	10,863f	na	5.4	4.0	na
Food and fiber share (%)	15.1	12.6	12.3	na	na	na	-1.8	na	na
Farm sector share (%)	1.4	0.8	0.8	0.8	na	na	-5.4	na	na
Total agricultural imports ($ billion)[1]	22.7	38.9	39.0	41.0	45.7	51.5	5.5	11.5	12.7
Total agricultural exports ($ billion)[1]	40.3	50.7	52.7	53.3	56.2	61.5	2.3	5.4	9.4
Export share of the volume of U.S. agricultural production (%)	27.1	22.8	22.9	22.5	21.1p	na	-1.7	-6.2	na
CPI for food (1982-84=100)	132.4	167.9	173.1	176.2	180.0	186.5f	2.4	2.2	3.6
Share of U.S. disposable income spent on food (%)	11.2	10.1	10.2	10.1	10.1	na	-1.0	0.0	na
Share of total food expenditures for at-home consumption (%)	55.4	53.3	53.9	53.8	53.1	na	-0.4	-1.3	na
Farm-to-retail price spread (1982-84=100)	144.5	210.3	215.4	221.2	na	na	3.8	na	na
Total USDA food and nutrition assistance spending ($ billion)[1]	24.9	32.6	34.2	38.0	41.8	na	2.7	10.0	na

f = Forecast. p = Preliminary. q = 2002 Administration request. na = Not available.

[1] Based on October-September fiscal years ending with year indicated.

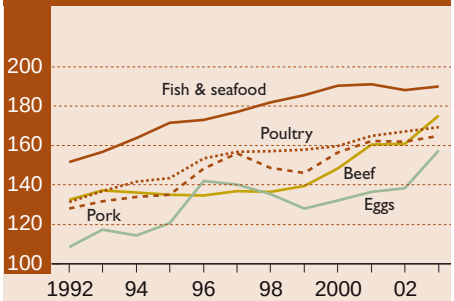
[2] Forecast for 2003 based on the Office of Management and Budget's Midsession Budget Review, July 2003.

U.S. average prices received by farmers for wheat, corn, and soybean



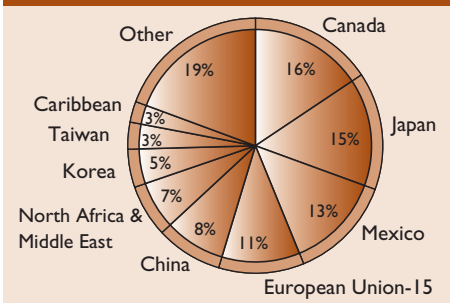
Source: Based on data from *Agricultural Prices*, published monthly by the National Agricultural Statistics Service, USDA.

Consumer price indexes for high-protein foods consumed at home



Source: Based on data provided by the Bureau of Labor Statistics.

Major markets for U.S. agricultural exports totaling $59.6 billion in 2003



Source: Foreign Agricultural Trade of the U.S.

For more information, see www.ers.usda.gov/amberwaves/

Behind the Data

Estimating Food Access and Food Gaps in Low-Income Countries

ERS contributes to the understanding of global food security, including decisions on how U.S. food aid is allocated, by providing annual estimates of food gaps. Food security, defined as access by all people at all times to enough food for an active and healthy life, requires three conditions to be fulfilled: food must be available, people must have economic access to food, and food must be properly utilized (that is, properly prepared and containing nutrients that can be absorbed by the body). The Food Security Assessment model addresses the first two conditions, as it is used to estimate food availability in order to estimate people's economic access to food. The level of food security of a country is evaluated based on the gap between estimated food supplies and the food required to meet average individual nutritional standards (approximately 2,100 calories per day per person).

The indicators cover 70 low-income developing countries—37 in Sub-Saharan Africa, 4 in North Africa, 11 in Latin America and the Caribbean, 10 in Asia, and 8 in the Commonwealth of Independent States. Total food availability is estimated from separate country models, which include three commodity groups: grains, root crops, and "other." The model structure is based on estimates of the factors affecting in-country food production and imports. Food requirements and food access are based on population projections, a minimum standard for nutritional intake per person, and income levels. The models are updated annually with data from the U.S. Department of Agriculture, the U.N. Food and Agriculture Organization, the World Food Program, and the World Bank.

The gap between food available at the national level and food needed to fulfill all nutritional requirements is called the *nutrition gap*, a food security indicator useful in assessing relative well-being across countries. However, national estimates fail to take into account that food is distributed unevenly among income groups. To capture unequal access to food within the countries, the ERS Food Security Assessment model estimates a nutrition gap for each income group within a country—the so-called *distribution gap*. Data on food consumption by different income groups within countries are spotty, but national income and consumption data are available. Data from 60 countries of different income levels are used to estimate income elasticities (percentage change in consumption for each 1-percent change in income) of food consumption. Next, these elasticities, along with per capita income and income distribution, are used to estimate food consumption in each income quintile. Where food consumption is less than nutritional requirements, the distribution gap measures the food needed to fill these gaps. The share of population with insufficient access to food is used to estimate the number of people susceptible to undernutrition and hunger.

Each year, ERS publishes food gap estimates for the current year and projections for the next 10 years. The 2003 distribution gap was estimated to be 32.5 million tons, 77 percent larger than the nutrition gap, but it is projected to decline 14 percent over the next 10 years. Sub-Saharan Africa, the region with the largest food gaps, is expected to have the highest number of hungry people by 2013, surpassing Asia, which is expected to reduce its number of hungry people.

How are food gaps calculated?

Nutrition gap

(Food requirement per person * Population = R) − (Total food availability (A)) = *Nutrition gap* (if R > A)

Distribution gap—two steps

(Food requirement per person * Population in quintile i = R) − (Estimated food consumption of quintile i (i=1,..,5) (Ci)) = Food gap i of quintile i (if R > Ci)

Sum of food gaps for all quintiles $\sum_{i=1,\ldots,5}$ Food gap i = *Distribution gap*

Sub-Saharan Africa is expected to have the largest number of hungry people by 2013

	2003	2013
	Million people	
Sub-Saharan Africa	381	490
Asia	440	308
Latin America and the Caribbean	83	36
North Africa	0	19
Commonwealth of Independent States	10	18
Total	**913**	**872**

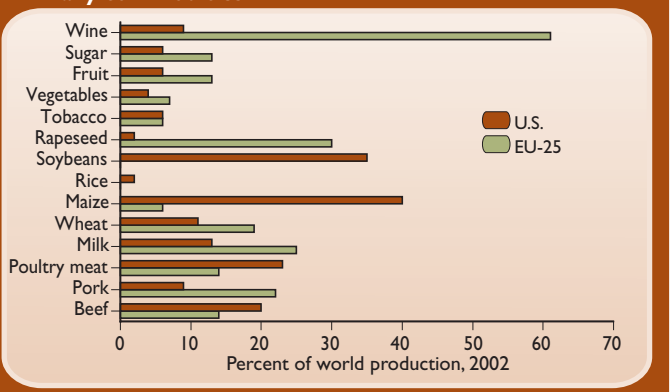
Birgit Meade, bmeade@ers.usda.gov and Stacey Rosen slrosen@ers.usda.gov

This article is drawn from…

Food Security Assessment, by Stacey Rosen and Shahla Shapouri, GFA-15, USDA/ERS, May 2004, available at: www.ers.usda.gov/publications/gfa15/

Markets and Trade

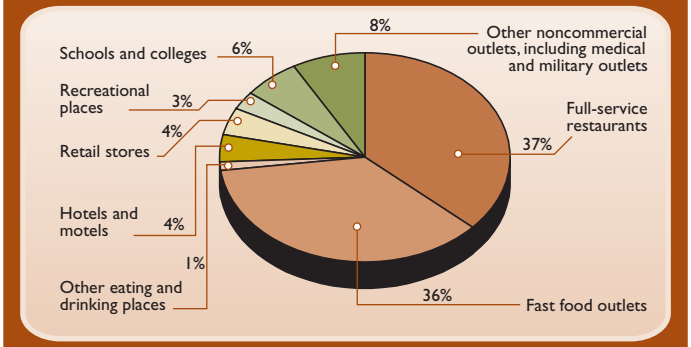
U.S. and EU-25 have large shares of world production in many commodities



Source: Food and Agriculture Organization of the United Nations.

Diet and Health

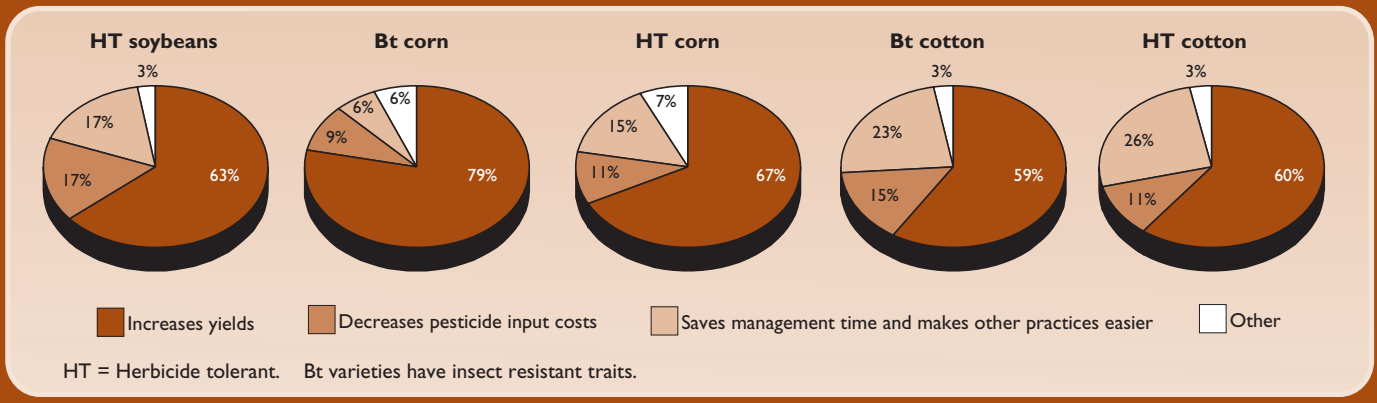
Fast food and full-service restaurants accounted for 73 percent of the $445 billion worth of foods consumed away from home in 2003



Note: Percentages do not sum to 100 because of rounding.
Source: ERS Food Expenditure series.

Natural Resources and Environment

Main reasons stated by U.S. farmers for adopting…

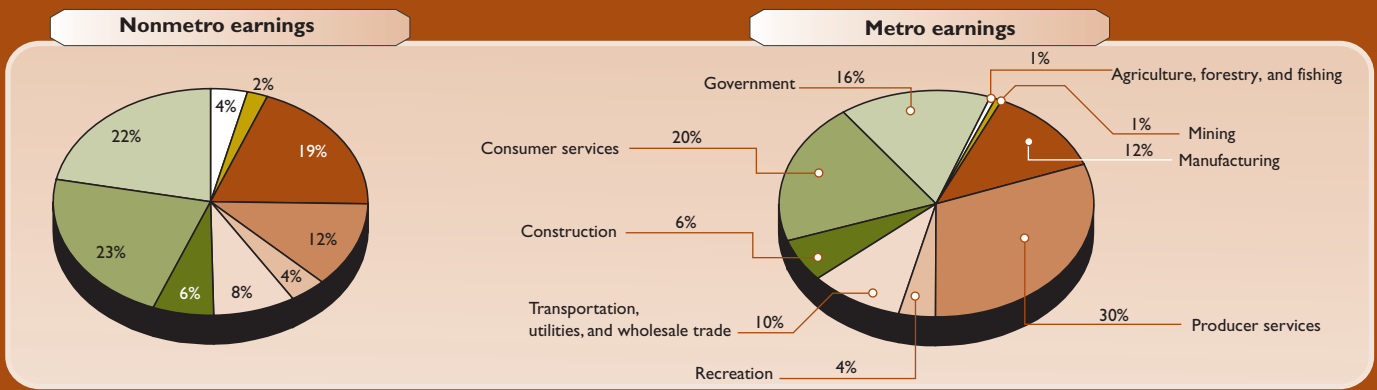


HT = Herbicide tolerant. Bt varieties have insect resistant traits.

Source: Agricultural Resource Management Survey (2001, 2002, & preliminary results for 2003), USDA.

Rural America

Manufacturing accounts for a larger share of nonmetro earnings, while producer services is the largest share of metro earnings, 2002



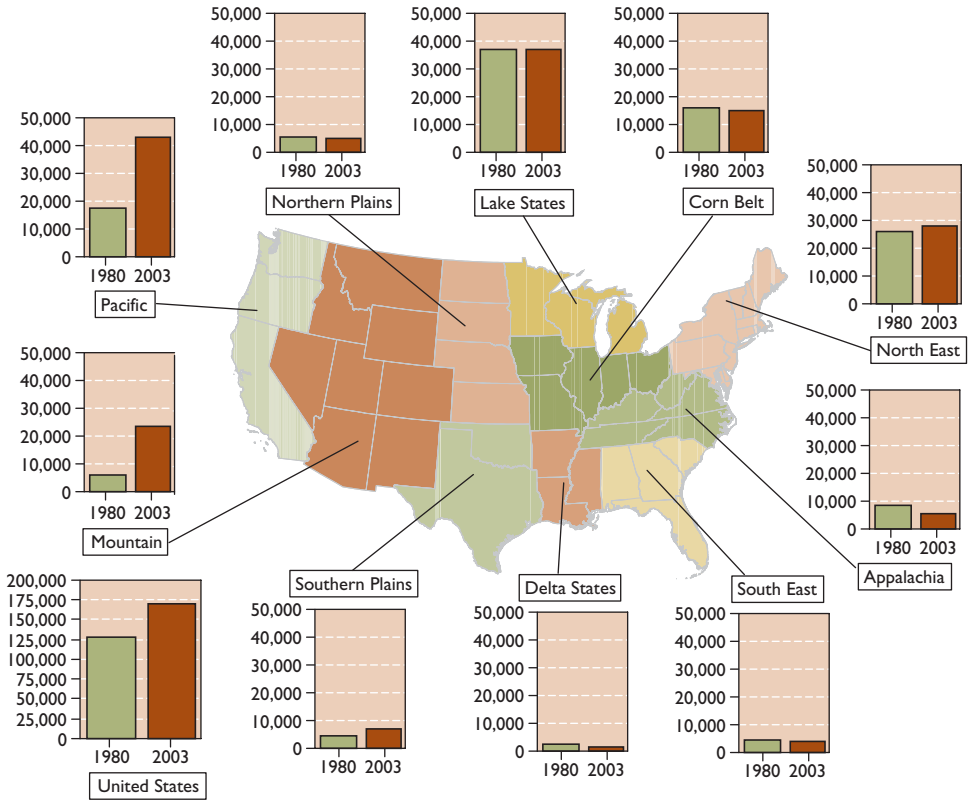
Source: Calculated by ERS from data from the Bureau of Economic Analysis.

On the Map

Milk production shifts West.
Since 1980, milk production in the U.S. has increased almost 33 percent. Regional production growth has been most pronounced in the Pacific and Mountain regions, the result of development of low-cost systems of milk production in the Pacific region and some Mountain States. Growth has been much slower in the Northeast and Southern Plains, and the other six regions have seen essentially flat or declining production.

Donald Blayney
dblayney@ers.usda.gov

Milk production, 1980 and 2003



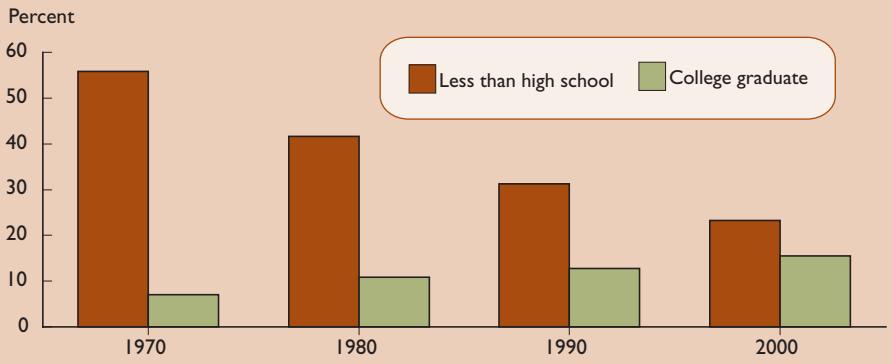
Note: Units are million pounds of milk.
Source: Compiled by ERS from National Agricultural Statistics Service data.

In the Long Run

Nonmetro educational attainment.
From 1970 to 2000, the share of nonmetro adults age 25 and older who did not complete high school fell by more than half—from 56 percent to 23 percent—while the share with at least a 4-year college degree more than doubled, from 7 percent to 16 percent. At the current rate of change, nonmetro educational attainment will reach a historic milestone early in the next decade, as adult college graduates will outnumber adults without a high school diploma. Nevertheless, nonmetro college completion rates remain well below the national average of 24 percent.

Robert Gibbs
rgibbs@ers.usda.gov

Nonmetro educational attainment, 1970-2000



Note: Metro status is based on the definition of Standard Metropolitan Areas as of June 1993.
Source: 1970, 1980, 1990, and 2000 Census of Population.