



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Data may have been updated since publication. For the most current information, see [www.ers.usda.gov/publications/agoutlook/aotables/](http://www.ers.usda.gov/publications/agoutlook/aotables/).

### Farm, Rural, and Natural Resource Indicators

	2000	2001	2002	2003	2004	2005	Annual percent change		
							2002-03	2003-04	2004-05
Cash receipts (\$ billion)	192.1	200.1	195.0	216.6	241.2	239.0f	11.1	11.4	-0.9
Crops	92.5	93.3	101.0	111.0	117.8	114.1f	9.9	6.1	-3.1
Livestock	99.6	106.7	94.0	105.6	123.5	124.9f	12.3	17.0	1.1
Direct government payments (\$ billion)	22.9	20.7	11.2	17.2	13.3	23.0f	53.6	-22.7	72.9
Gross cash income (\$ billion)	228.7	235.6	221.0	249.5	271.7	279.5f	12.9	8.9	2.9
Net cash income (\$ billion)	56.7	60.1	49.5	71.6	85.5	82.8f	44.6	19.4	-3.2
Net value added (\$ billion)	91.9	95.0	78.6	101.2	125.9	119.3f	28.8	24.4	-5.2
Farm equity (\$ billion)	1,025.6	1,070.2	1,110.7	1,180.8	1,293.9	1,376.9f	6.3	9.6	6.4
Farm debt-asset ratio	14.8	14.8	14.8	14.4	13.8	13.4f	-2.7	-4.2	-2.9
Farm household income (\$/farm household)	61,947	64,117	65,761	68,597	81,480p	83,461f	4.3	18.8	2.4
Farm household income relative to average U.S. household income (%)	108.6	110.2	113.7	116.1	134.6p	na	2.1	15.9	na
Nonmetro-metro difference in poverty rate (% points)	2.6	3.1	2.6	2.1	na	na	-19.2	na	na
Cropland harvested (million acres)	314	311	307	315	312	312p	2.6	-1.0	0.0
USDA conservation program expenditures (\$ bil.) <sup>1</sup>	3.3	3.7	4.2	4.3	5.1	na	2.4	18.6	na

### Food and Fiber Sector Indicators

U.S. gross domestic product (\$ billion)	9,817	10,128	10,470	10,971	11,734	12,487	4.8	7.0	6.4
Share of GDP in agriculture and related industries (%) <sup>2</sup>	4.8	4.8	4.8	4.8	4.8	na	0.0	0.0	na
Share of GDP in agriculture (%) <sup>2</sup>	0.7	0.7	0.7	0.8	1.0	na	11.1	19.2	na
Total agricultural imports (\$ billion) <sup>1</sup>	38.9	39.0	41.0	45.7	52.7	57.7	11.5	15.3	9.5
Total agricultural exports (\$ billion) <sup>1</sup>	50.7	52.7	53.3	56.2	62.4	62.4	5.4	11.0	0.0
Export share of the volume of U.S. agricultural production (%)	17.6	17.6	16.7	17.9	16.3	na	7.2	-8.9	na
CPI for food (1982-84=100)	167.9	173.1	176.2	180.0	186.2	190.7	2.2	3.4	2.4
Share of U.S. disposable income spent on food (%)	9.8	9.8	9.5	9.4	9.5	na	-1.1	1.1	na
Share of total food expenditures for at-home consumption (%)	51.7	51.7	50.8	50.3	49.7	na	-1.0	-1.2	na
Farm-to-retail price spread (1982-84=100)	210.3	215.4	221.2	225.6	232.1	238.3	2.0	2.9	2.7
Total USDA food and nutrition assistance spending (\$ billion) <sup>1</sup>	32.6	34.2	38.0	41.8	46.2	50.9	10.0	10.5	10.2

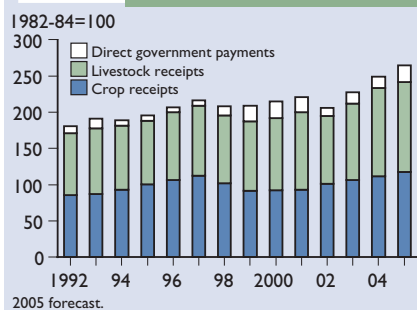
f = Forecast. p = Preliminary. na = Not available. All dollar amounts are in current dollars.

<sup>1</sup> Based on October-September fiscal years ending with year indicated.

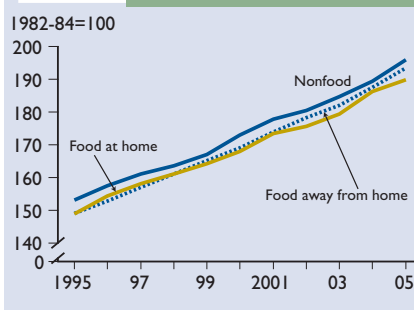
<sup>2</sup> The methodology for computing these measures has changed. These statistics are not comparable to previously published statistics.

Sources and computation methodology are available at: [www.ers.usda.gov/amberwaves/aggdp.htm](http://www.ers.usda.gov/amberwaves/aggdp.htm)

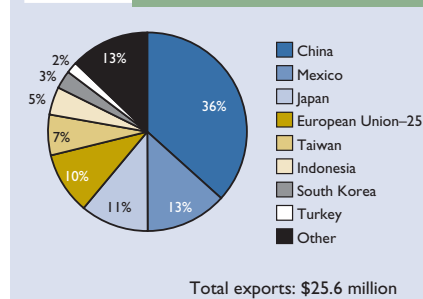
Revenue from farm commodities, 1992-2005



Consumer price indexes for food and nonfood items



Top export markets for U.S. soybeans, 2005



Behind the Data

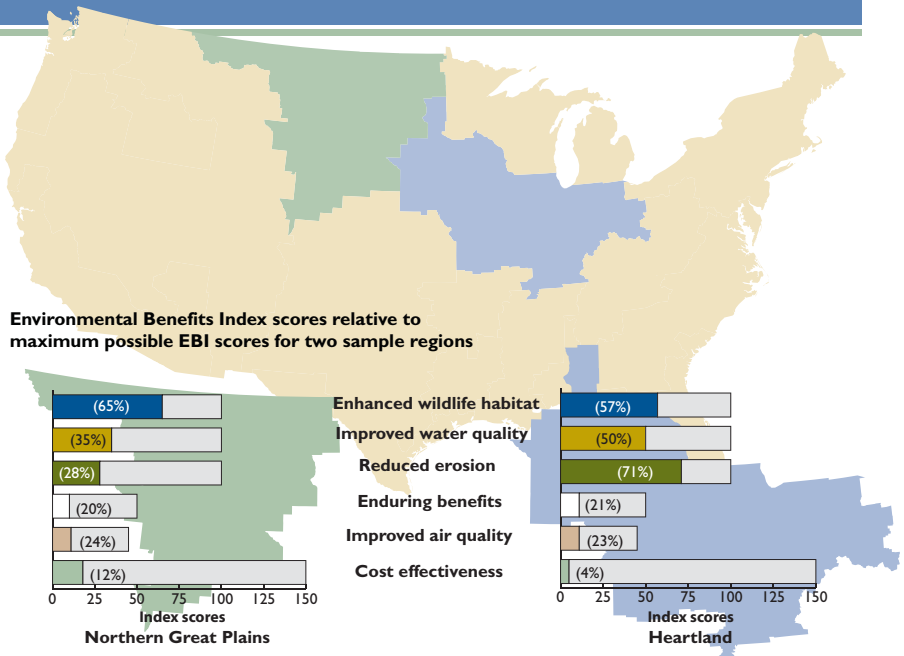
**Measuring Potential Environmental Benefits in the CRP**

Typically, programs to improve environmental performance on agricultural lands have multiple objectives, such as improving water quality and wildlife nesting grounds, and seek to achieve these objectives at the lowest cost. These programs often rely on voluntary participation and cost sharing to achieve these objectives. This means program managers need some way of choosing which program applications to enroll. An index that combines information about disparate environmental objectives and cost can serve this purpose. It can also be used to signal how well program objectives may be met.

USDA's Farm Service Agency (FSA) uses the Environmental Benefits Index (EBI) to evaluate and rank land offered for enrollment in the Conservation Reserve Program (CRP). The EBI aggregates different environmental objectives and a cost objective into a single number.

Points are first allocated to each objective based on the relative benefits of obtaining that objective. For example, the EBI in the 29th signup in 2004 included five environmental objectives. Three of these—enhancing wildlife habitat, improving water quality, and reducing erosion—were expected to provide relatively equal benefits and each was assigned 100 points, out of a total of 545 points. Improving air quality was expected to provide relatively fewer benefits, and this objective was allocated 45 points.

When an applicant offers to implement cover practices in any given signup, FSA evaluates them and assigns points based on the potential environmental benefits to be generated, or how well the practices are likely to contribute to each objective during the time the land is enrolled in the program. For example, an offer to plant a mixed stand of native grasses might earn 50



Note: Percentages equal the share of total possible EBI score/potential benefits provided by CRP contracts, on average, in signup 29 (2004).

out of 100 points toward enhancing wildlife habitat, whereas planting one type of an introduced grass species might earn only 10 points. For each signup, FSA totals the points each offer earns toward each objective into a single summary EBI score. Offers are then enrolled based on which have the highest EBI scores until the program acreage cap is reached.

The EBI reflects nationally determined priorities, and the same EBI is used to evaluate and enroll offers from across the country at the end of each signup. However, analysis of CRP data reveals that contracts vary by region in the environmental objectives they address. Even when contracts in different regions address the same objectives, contracts can have very different index scores, meaning they are likely to provide different levels of benefits in different regions. Scores for individual objectives, and thus potential benefits, can vary across regions due to inherent differences in land quality, as well as in the types of practices that producers find profitable to implement in exchange for the program payment.

EBI scores for each objective also reveal how much of the total possible benefits are likely to be achieved in the signup. Regions with contracts that average 50 out of 100 points for a particular objective provide 50 percent of that objective's total potential benefits.

**Cynthia Nickerson,**  
cnickerson@ers.usda.gov

**For more information ...**

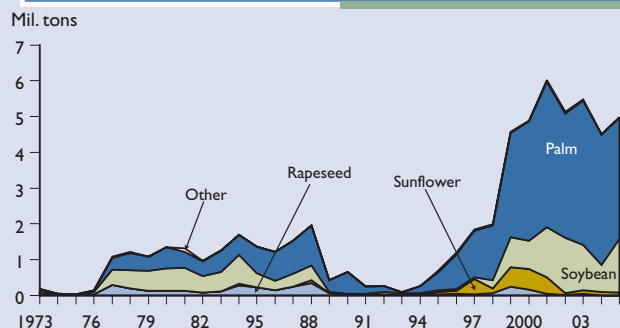
*Balancing the Multiple Objectives of Conservation Programs*, by Andrea Cattaneo, Daniel Hellerstein, Cynthia Nickerson, and Christina Myers, ERR-19, USDA, Economic Research Service, May 2006, available at: [www.ers.usda.gov/publications/err19/](http://www.ers.usda.gov/publications/err19/)

"Land Retirement," Chapter 6.2 in *Agricultural Resources and Environmental Indicators*, by Mark Smith, USDA, Economic Research Service, December 2000, available at: [www.ers.usda.gov/publications/arei/ah722/arei6\\_2/arei6\\_2landretire.pdf](http://www.ers.usda.gov/publications/arei/ah722/arei6_2/arei6_2landretire.pdf)

"Environmental Benefits Index," USDA, Farm Service Agency, September 1999, available at: [www.fsa.usda.gov/pas/publications/facts/ebiold.pdf](http://www.fsa.usda.gov/pas/publications/facts/ebiold.pdf)

### Markets and Trade

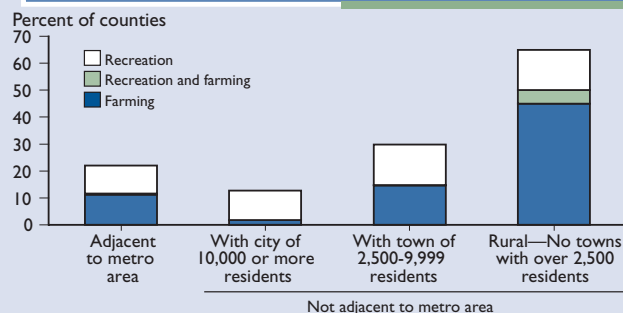
**Palm oil dominated India's edible oil imports**



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution database.

### Rural America

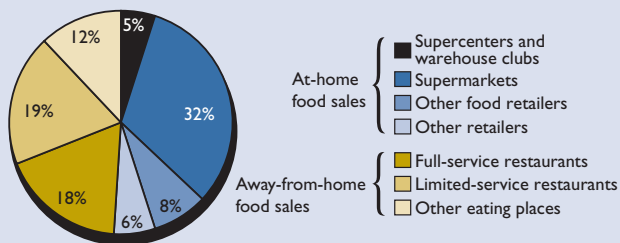
**The most remote rural counties are more likely to depend heavily on both recreation and farming, 2000**



Source: USDA, Economic Research Service, using data from the 2000 Census of Population.

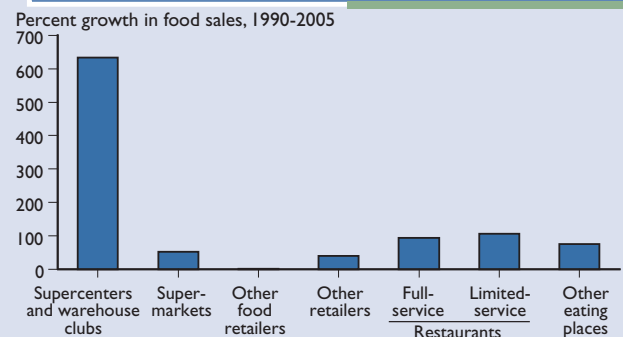
### Diet and Health

**Supercenters and warehouse clubs accounted for just 5 percent of total food sales in 2005...**



Source: USDA, Economic Research Service, Food Expenditure Series.

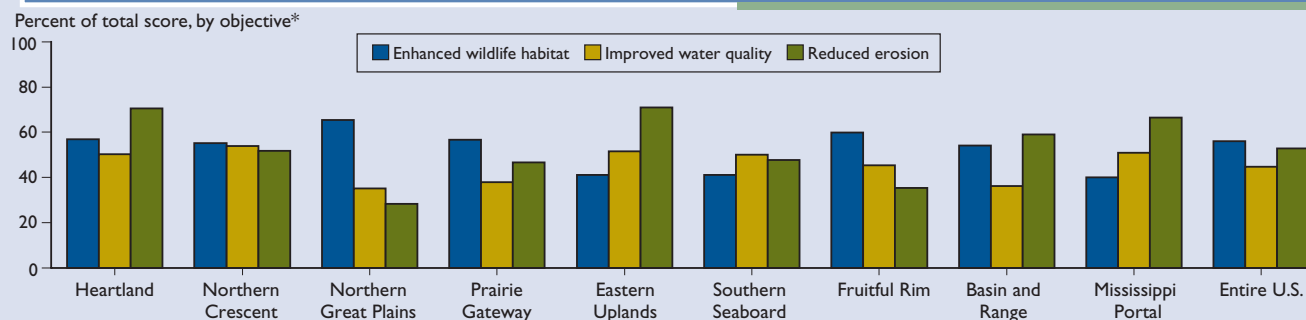
**...but they were the fastest growing category over the last 15 years**



Source: USDA, Economic Research Service, Food Expenditure Series.

### Resources and Environment

**Environmental objectives addressed by Conservation Reserve Program contracts vary by region**



\*The heights of the bars represent the percent of the total possible score for each of three Environmental Benefits Index objectives that was achieved by CRP contracts in each region, on average, in the 29th sign-up. Percentages can sum to greater than 100% within a region because each contract can address multiple objectives.

Source: USDA, Farm Service Agency contract data from Conservation Reserve Program, 29th sign-up (2004). See "Behind the Data" on page 41.

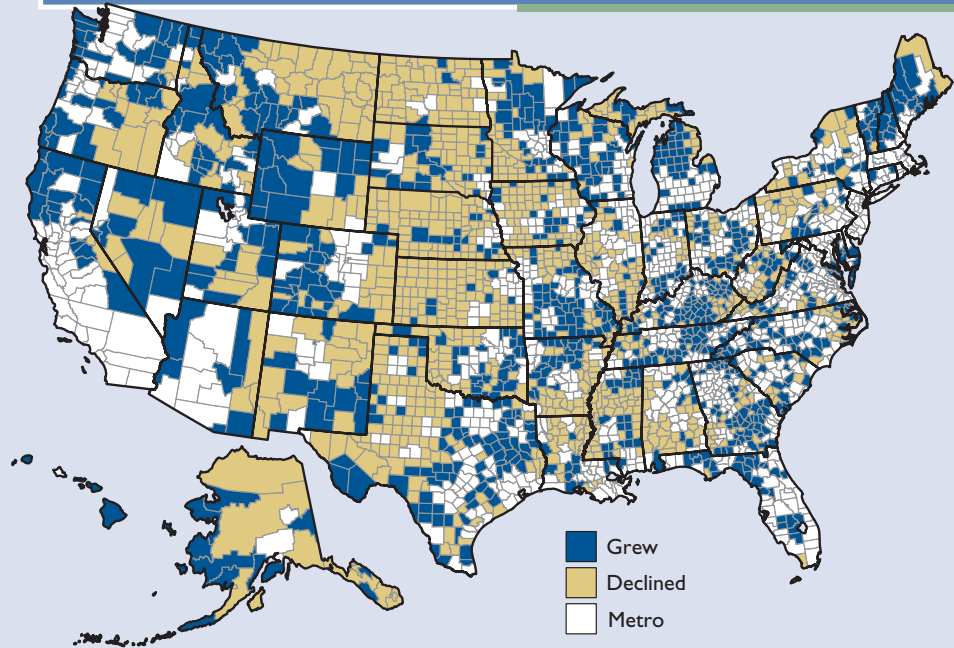
**On The Map**

**Nonmetro county population change, 2000-05: Half grew, half declined**

In the first half of the current decade, nonmetro America was almost evenly split between counties that grew in population (1,024) and those that declined (1,027). Declining counties contain only 34 percent of all nonmetro residents, however, because most are sparsely settled. Therefore, despite declining population in so many counties, total nonmetro population grew by 1.1 million from April 2000 to July 2005, to a total of 49.9 million.

**Calvin L. Beale**  
cbeale@ers.usda.gov

**Direction of nonmetro county population change, 2000-05**



Source: Prepared by Economic Research Service using Census Bureau 2005 population estimates, available on the ERS website at [www.ers.usda.gov/data/population/](http://www.ers.usda.gov/data/population/).

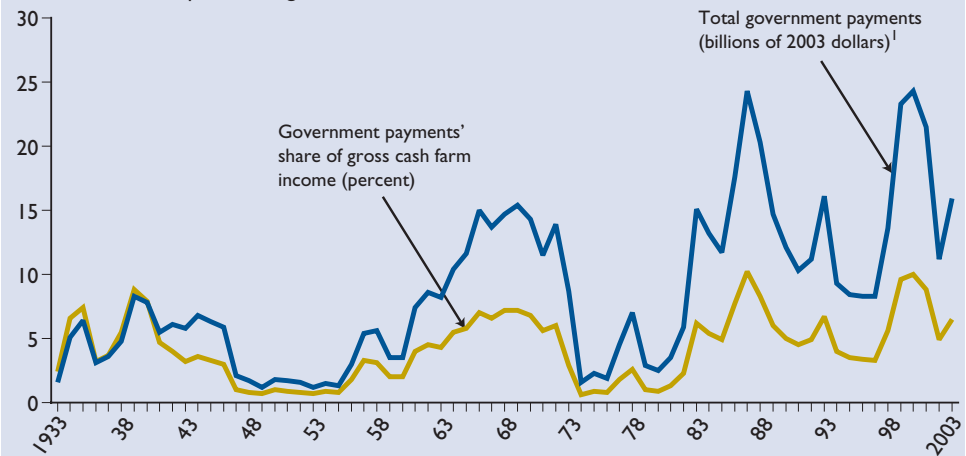
**In the Long Run**

Government payments peaked twice at \$24 billion, measured in 2003 dollars. The first peak occurred in 1987, just after the end of the farm financial crisis. The second peak occurred in 2000, due to payments enacted by Congress in response to falling export demand and regional crop failures. Payments also spiked at \$14 billion in 1993, due largely to high feed grain production and disaster payments for droughts and floods.

**Robert A. Hoppe,**  
rhoppe@ers.usda.gov  
**David E. Banker,**  
dbanker@ers.usda.gov

**Government payments and their share of gross cash farm income, 1933-2003**

Bil. 2003 dollars or percent of gross cash farm income



<sup>1</sup>Deflated with GDP chain-type price index. Deflating with the GDP price index shows the purchasing power of government payments.

Source: USDA, Economic Research Service, U.S. and State Farm Income Data, as reported in *Structure and Finances of U.S. Farms: 2005 Family Farm Report (EIB-12)*, May 2006.