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# FAPRI 2000 U.S. AGRICULTURAL OUTLOOK

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## Food and Agricultural Policy Research Institute

Iowa State University University of Missouri-Columbia

Ames, Iowa U.S.A.

Iowa State University University of Missouri-Columbia

Bruce A. Babcock
John Beghin
Abner W. Womack
Robert E. Young II

Samarendu Mohanty
Frank Fuller
Jay Fabiosa
Phillip Kaus

Cheng Fang Gary M. Adams
Chad Hart Brian Willott
Karen Kovarik Daniel Madison

Seth Meyer John Kruse

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#### **Abbreviations and Acronyms**

This list of abbreviations and acronyms used in the *Agricultural Outlook* is provided for the convenience of our readers. Abbreviations and acronyms typically are not spelled out in the text.

AMTA Agricultural Market Transition Act

AWP Adjusted World Price

BSE bovine spongiform encephalopathy
CAP Common Agricultural Policy
CCC Commodity Credit Corporation
CIF Cost, Insurance, and Freight
CPI Consumer Price Index

CRP Conservation Reserve Program

CSF classical swine fever cwt hundredweight

DEIP Dairy Export Incentive Program
EEP Export Enhancement Program
EPA Environmental Protection Agency

EU European Union

FAIR Act Federal Agriculture Improvement and Reform Act of 1996

FAPRI Food and Agricultural Policy Research Institute

FMD foot-and-mouth disease FMMO Federal Milk Market Order

FOB freight on board

FOR Farmer-Owned Reserve FSU Former Soviet Union

FY fiscal year

GATT General Agreement on Tariffs and Trade

GDP gross domestic product

GMO genetically modified organisms

GNP gross national product HFCS high-fructose corn syrup

kg kilogram

LDP loan deficiency payments

MERCOSUR The Common Market of the Southern Cone of South America

mha million hectares mmt million metric tons

mt metric ton

MTBE Methyl Tertiary Butyl Ether

NAFTA North American Free Trade Agreement

NFD nonfat dry milk NFI net farm income

NIS Newly Independent States
PPI producer price index
ROW Rest of World
tmt thousand metric tons
TMSB total milk-solids bases
TRQ tariff rate quota
WMP whole milk powder

WTO World Trade Organization UR Uruguay Round

URAA Uruguay Round Agreement on Agriculture

#### Overview of the 2000 U.S. Outlook

The Food and Agricultural Policy Research Institute (FAPRI), located at the University of Missouri and Iowa State University, develops long-term projections for world agriculture. The 10-year baseline results from a process that lasts several months. Initially, analysts from universities involved in the FAPRI consortium meet to determine the key assumptions that underlie the baseline. Based on these assumptions, preliminary projections are developed and then subjected to outside review. The last step is to incorporate comments from the reviewers, as well as any other changes, into the final baseline projections. Once the baseline is completed, FAPRI leaders travel to Washington, DC, for a series of briefings to congressional staff, analysts at the U.S. Department of Agriculture (USDA), and commodity groups.

#### **Summary of Baseline Assumptions**

Baseline projections are not forecasts of the most likely outcome, but rather a plausible scenario that is highly dependent on the underlying assumptions. Those assumptions generally fall into one of the following categories: macroeconomic, policy, technology, or weather.

FAPRI relies on the WEFA Group, a private forecasting firm, for the macroeconomic variables included in the projections. Compared to the recent slowdown in developing economies, the macroeconomic projections suggest a reasonably optimistic outlook. By 2001, real gross domestic product (GDP) growth in developing economies recovers to an annual rate of 5 percent, similar to levels observed in the early 1990s. Developed economies maintain growth between 2 and 3 percent annually. Crude oil prices are projected to average \$20 per barrel in 2000 and reach \$25 per barrel by 2008. In the United States, overall price inflation, as measured by the consumer price index (CPI), is projected at a modest level of 2.5 percent.

As is customary in a FAPRI baseline, current agricultural policies are assumed to hold for the duration of the baseline. By assuming constant policies, the baseline provides the "yardstick" against which alternative policies are measured. For the United States, the Federal Agriculture Improvement and Reform Act

(FAIR) is continued, with provisions for 2002 extended indefinitely. The baseline incorporates the assistance packages enacted in 1998 and 1999, but does not assume any future packages. For policies in the European Union (EU), the changes agreed upon in the Berlin Accord are incorporated into the baseline projections. FAPRI does not assume any new legislation or changes to current legislation beyond what has already been agreed upon. The current baseline does not assume expansion of the EU or a new World Trade Organization (WTO) agreement, nor does it incorporate China's accession into the WTO.

Assumptions are also made regarding rates of technological change, both for crop yields and livestock productivity. For the baseline, technological change is generally assumed to continue at rates consistent with recent history, unless there are overriding reasons to assume otherwise. Longer term, these assumptions become critical. For example, yield assumptions have a direct impact on the number of acres required for crop production. Likewise, gains in feed efficiency impact the amount of grain necessary to produce a pound of meat. The baseline projections assume "normal" weather, and as a result crop yields exhibit no year-to-year deviations from trend.

#### **Overview of the Crops Sector**

For the U.S. crops sector, the short-term projections suggest continued pressure on prices, with the long-range outlook characterized by guarded optimism. Since 1996, the crops sector has generally seen favorable yields and higher acreage levels at the same time that demand has been rather sluggish. The result has been that production has exceeded disappearance and stock levels have recovered. Subsequently, prices have fallen, and in some cases, reaching the lowest levels since the mid-1980s. Looking forward, under the assumption of trend yields, prices for wheat and feed grains are expected to show modest recovery in 2000, but still remain below historical averages. Domestic and export demand are both expected to continue to strengthen. For soybeans and cotton, little, if any, price recovery is expected for 2000. Despite low prices in 1999, acreage devoted to these two crops is

expected to increase in 2000. For soybeans, the loan rate is partially responsible for the increased acreage.

Looking toward the end of the baseline, crop prices are projected to recover to levels in line with historical averages. By 2008, corn prices reach \$2.50 per bushel, and wheat prices top \$3.50 per bushel. Income growth fuels the demand for food on a global basis, allowing U.S. exports to expand. In addition, domestic demand expands as the U.S. livestock sector increases production levels. With demand growth outpacing supply, stock levels of the major grains and oilseeds decline from their recent highs.

#### **Overview of the Livestock Sector**

The outlook for U.S. livestock shows more favorable times than what has been observed in recent years, particularly with regards to the output price. The beef cycle is in a liquidation phase, which continues to tighten the supply of feeder calves. Strengthening in prices is projected through 2003, with feeder steer prices averaging above \$90 per hundredweight (cwt). For beef, the long-term outlook depends on relatively stable domestic demand and continued growth in exports.

The U.S. pork sector has just completed two of the worst years, in terms of profitability. The result has been downsizing the breeding herd, which leads to declines in production for the 2000-02 period. While still below the levels observed in the mid-1990s, pork prices are expected to recover and average above \$40 per cwt for much of the projection period. Despite a relatively stable breeding inventory, production approaches 21 billion pounds by 2009 based on gains in productivity.

The projections for broilers and dairy are characterized by a continuation of recent trends. Broiler production is expected to grow at an annual rate of 3 percent, with the additional production finding an outlet in both the domestic and export markets. Milk production is also projected to continue its growth, as the increase in productivity more than offsets a declining herd size.

#### **Summary of Aggregate Measures**

The emergency spending packages of 1998 and 1999, together with increased loan deficiency payments (LDPs), have pushed government outlays significantly higher. For fiscal year 2000, outlays approach \$24 billion.

Longer term, outlays decline to approximately \$7 billion as Agricultural Market Transition Act (AMTA) payments decline and stronger prices limit LDP exposure.

When looking at the sector as a whole, U.S. net farm income in 1998 and 1999 has held up reasonably well, despite the low prices. To a large extent, this is due to the increased government payments resulting from the assistance packages. Assuming no additional assistance packages and the declining payments under the FAIR Act, significant pressure on farm income is projected for 2000. In fact, little recovery in aggregate farm income is expected before 2007, as rising output prices are generally offset by increased production expenses.

The growth in real food expenditures should remain modest over the baseline, with an annual growth of 1.5 percent for the 2000-09 period. This compares to an annual rate of 2 percent between 1990 and 1999.

#### **Concerns and Uncertainties**

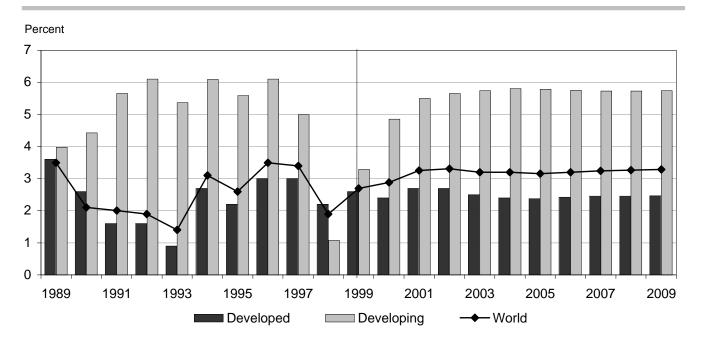
As with any projections, there are always a number of concerns and uncertainties surrounding the projections. In fact, the only certainty is that just about everything is uncertain. As mentioned earlier, a baseline is just one plausible scenario that is dependent on the underlying assumptions. Changing any of those assumptions regarding the economy, policy, or technology will alter the results. In addition to these unknowns, projections regarding the agricultural sector must be concerned with a number of other issues.

What impacts will recent and future developments in genetically modified organisms (GMOs) have on the sector? Are there long-run impacts on the supply and demand for crops? As the production of crops with specialized traits continues to grow, it may no longer be relevant to just look at a corn supply and use table, but instead projections for different types of corn. The degree that this becomes necessary in the next 10 years may ultimately depend on the consumer.

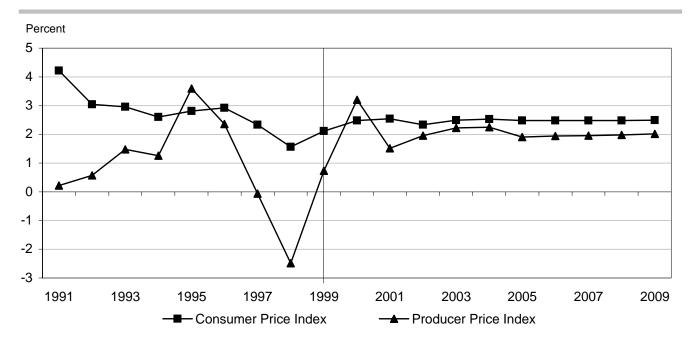
A long-run view of agriculture must also come to grips with the implications of structural change and consolidation. To what extent these changes impact some of the basic relationships that have held in the past remains unknown.

# BASELINE ASSUMPTIONS AND PRICE PROJECTIONS

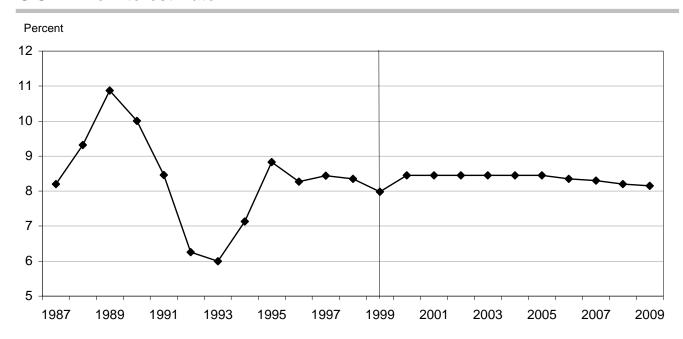
### **Real GDP Growth Rates**



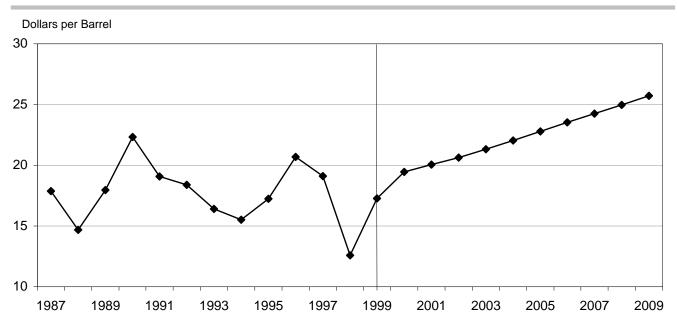
# Measures of U.S. Inflation



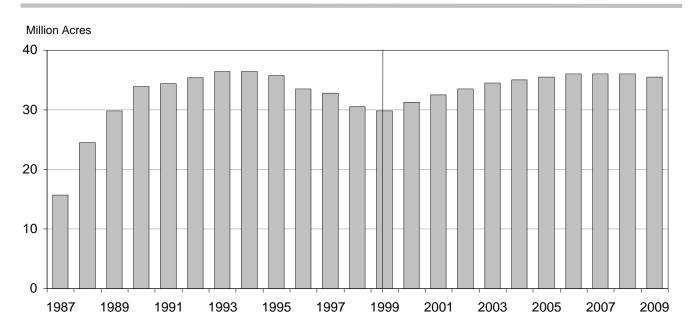
### **U.S. Prime Interest Rate**



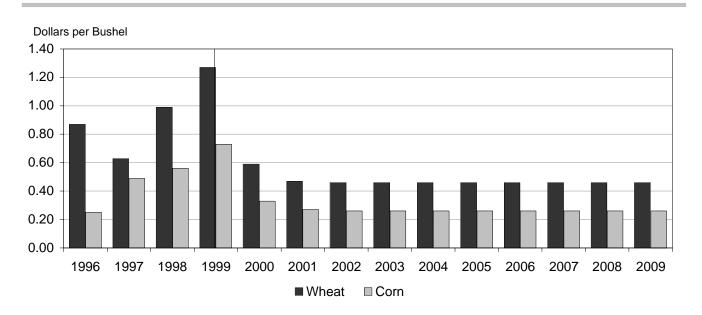
# **Crude Oil, Average Refiner's Acquisition Costs**



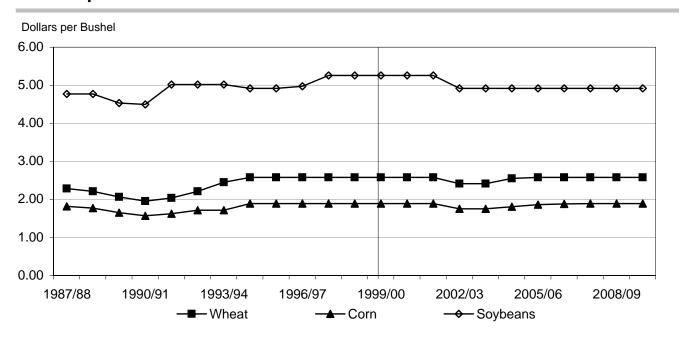
# **Conservation Reserve Program**



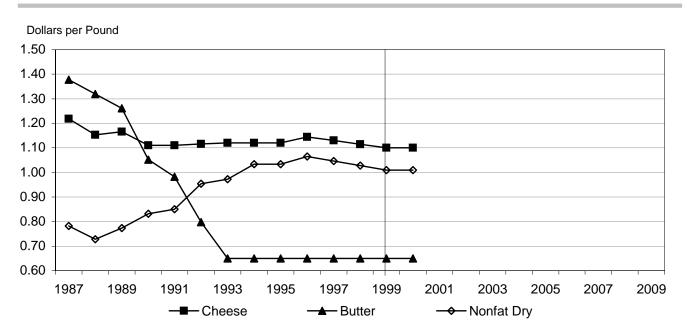
# AMTA and Market Loss Assistance Payments, Includes 1998 and 1999 Spending Package



# **U.S. Crop Loan Rates**



# **CCC Purchase Prices for Dairy Products**



# **Macroeconomic Assumptions**

- World economic growth is projected to recover and grow at 2.9 percent in 2000 with the economic recovery of Asia and Latin America. The long-run macroeconomic outlook calls for sustained and distributed global economic growth, with world GDP growing more than 3 percent annually.
- Japan is projected to have 1.4 percent real GDP growth in 2000. The United States is expected to grow at an average of 3 percent in the coming decade, with a progressive slowdown toward the end of the decade. The Euro is expected to appreciate in 2000-01, after its 1999 losses relative to the U.S. dollar.
- Former Soviet Union (FSU) countries are recovering and expected to grow by 2.2 percent or more in the coming years. In Russia, growth is expected to be modest and inflation to remain above 25 percent in the next two years.
- Most Asian countries, except Indonesia, exhibit strong growth this year and are expected to grow between 4 and 6 percent annually in the coming decade. Indonesia is expected to have a turnaround this year and have positive growth in excess of 3 percent for the remaining of the decade. Chinese economic growth has resumed its annual growth rate of 7 percent. China is expected to devalue its currency by 10 percent in 2000.
- The Latin American region faces an optimistic economic outlook. Brazil is expected to grow by 2.8 percent in 2000 and to have a modest 5 percent devaluation of its currency. Similar outlooks are projected for most major countries in the region, but with significant devaluations for Columbia, Mexico, Paraguay, and Venezuela. Latin American economies are projected to grow between 2.6 and 5.4 percent annually in the next decade.
- African and Middle Eastern countries included in the FAPRI baseline are expected to grow at healthy rates, with modest price inflation and currency devaluation.
- Population growth rates continue to fall throughout the world. World population growth will slow down from 1.3 percent in 1999 to 1.1 in 2009.

# **Domestic and International Economic Projections**

				•							
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
United States					(5)	. 0	,				
Real GDP *	3.9	3.1	3.4	3.3	(Perce	ntage Cha 3.0	ange) 3.1	2.9	2.8	2.6	2.6
Real Cons. Expenditure *	5.2	3.6	2.9	2.8	2.4	2.4	2.4	2.5	2.4	2.4	2.4
CPI, All Urban Consumers *	2.1	2.5	2.5	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PPI, All Commodities *					2.2						2.0
	0.7	3.2	1.5	2.0		2.3	1.9	1.9	2.0	2.0	
Unemployment Rate	4.2	4.4	4.3	4.6	4.6	4.7	4.7	4.7	4.6	4.6	4.6
3-Month Treasury Bill Rate	4.6	5.3	5.3	5.3	5.3	5.3	5.3	5.1	4.9	4.6	4.4
Moody's AAA Corp. Rate	7.0	7.2	7.1	7.0	6.9	6.8	6.8	6.6	6.5	6.4	6.4
Avg. Hourly Earnings Food and Kindred Products *	2.7	3.3	3.0	2.6	2.5	2.8	2.7	2.8	2.8	2.8	2.9
Federal Budget Deficit					(Billio	n U.S. Doll	lars)				
Unified Budget Basis	-172.5	-165.0	-175.8	-173.5	-161.0	-154.2	-171.0	-164.8	-153.3	-159.5	-163.6
Current Account Deficit	314.8	386.6	385.6	367.7	346.0	320.7	290.4	263.4	238.9	218.6	204.9
					(U.S. Do	ollars per E	Barrel)				
Refiners Cost of Oil	17.3	19.5	20.0	20.6	21.3	22.0	22.8	23.5	24.3	25.0	25.7
International											
Real GDP *						ntage Cha	• ,				
Argentina	-4.4	2.3	5.6	5.4	5.1	5.0	4.9	4.8	4.7	4.7	4.7
Brazil	-0.4	2.8	3.6	3.8	3.7	3.7	3.6	3.5	3.4	3.4	3.4
Canada	3.5	2.6	2.8	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6
Australia	3.8	3.4	3.5	3.6	3.7	3.6	3.6	3.6	3.6	3.6	3.6
Thailand	3.8	4.2	4.4	5.5 2.4	5.8	5.7 1.7	5.5	5.4 1.7	5.3 1.7	5.3	5.3 1.7
Japan European Union	1.3 2.0	1.4 2.8	2.3 2.6	2.4 2.5	1.8 2.5	1.7 2.5	1.7 2.5	2.5	2.5	1.7 2.5	2.5
European Union South Korea	7.5	2.0 5.9	2.6 5.7	2.5 5.6	2.5 5.5	2.5 5.5	2.5 5.4	2.5 5.3	5.2	2.5 5.2	2.5 5.2
Taiwan	7.5 5.5	6.1	6.5	6.5	6.5	6.6	6.4	6.2	6.1	6.1	6.1
Local Currency per U.S. Dollar *											
Argentina	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Brazil	59.0	5.7	1.7	1.3	1.0	0.8	0.8	0.8	0.8	0.8	0.8
Canada	0.3	-2.4	-1.8	-1.1	-0.4	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Australia	-3.1	-6.5	-5.6	-0.7	-0.7	-0.5	-0.3	-0.2	-0.2	-0.2	-0.2
Thailand	-10.9	1.1	2.7	3.8	4.0	3.9	3.8	3.7	3.7	3.7	3.7
Japan	-10.8	-1.9	-3.2	-1.7	-1.2	-1.6	-1.3	-1.1	-0.9	-0.9	-0.9
European Union	5.3	-6.7	-3.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
South Korea	-15.3	-3.0	-2.3	-1.0	0.3	1.1	1.0	0.9	0.9	0.9	0.9
Taiwan	-2.7	-8.5	-9.5	-3.7	-0.1	0.1	0.0	0.0	0.0	0.0	0.0

<sup>\*</sup> Percentage change from preceding year.

Source: The WEFA Group, Fourth Quarter 1999, and Project Link, November 1999.

Projections after 2004 are FAPRI estimates.

# U.S. and World Policy Assumptions

- The FAPRI baseline includes provisions of the 1996 U.S. FAIR Act. Land set-aside provisions, except those directed at conservation, are eliminated. Deficiency payments are replaced with declining contract payments, and planting flexibility is increased with the removal of base program areas.
- The FAIR Act also reduced Export Enhancement Program (EEP) expenditures below the General Agreement on Tariffs and Trade (GATT) allowed levels through 2000. The EEP has not been used since July 1995. The baseline assumes that EEP expenditures will not be resumed during the baseline period.
- U.S. loan rates are assumed constant for the 2000 and 2001 crops. After 2001, they are allowed to fall using the FAIR Act's formulas.
- The baseline also incorporates the provisions of the 1999 U.S. emergency spending package, but assumes that no new emergency measures will occur in the future beyond 2000.
- The 1999 Berlin Accord on the Agenda 2000 reforms of the EU's Common Agricultural Policy (CAP) brings substantial policy changes in grains, oilseeds, and livestock. Policy changes affecting dairy are more superficial.
- The EU cereal intervention price is reduced by 15 percent in two equal steps, with the first reduction occurring during the 2000/01 marketing year. Cereal producers will be partially compensated for the price support reduction as compensation payments increase from 54.3 to 63 Euro per metric ton. The base rate for compulsory setaside is 10 percent through the 2009/10 marketing year.
- Direct payments to EU oilseed producers will be progressively reduced to the level for cereals by the 2002/03 marketing year. Protein crops will receive a direct payment of 9.5 Euro per metric ton in addition to the basic direct payment.
- The EU beef intervention price is reduced by 20 percent over a three-year period. In July 2002, the intervention price will be replaced by a beef basic price of 2,224 Euro per metric ton, and a private storage aid scheme will be introduced. Lower beef prices will partly offset by a phased increase in the special premiums for steers, bulls, and suckler cows (300, 210, and 200 Euro per head, respectively). Slaughter premiums of 80 Euro per adult animal and 50 Euro per calf are introduced. Producer premiums face some regional caps, which can be supplemented nationally up to a limit established for each country.
- The current EU milk quota system is retained under Agenda 2000. In 2000 and 2001, quotas for Greece, Spain, Ireland, Italy, and Northern Ireland are increased. Quotas for all countries are increased by 1.5 percent over a three-year period beginning in 2005. Butter and nonfat dry milk (NFD) intervention prices are reduced by 15 percent in three equal steps beginning in 2005. Price reductions will be offset by the introduction of a payment of 17.2 Euro per metric ton of milk under quota.
- The Uruguay Round (UR) of the WTO continues to have a large impact on agricultural trade, especially through disciplinary actions placed on export subsidies and market access. The greatest impacts occur in markets for wheat, coarse grains, meats, and dairy products. Industrialized members of the WTO implement the last Uruguay Round Agreement on Agriculture (URAA) concessions in 2000, while developing members conclude implementation in 2004. After 2004, all WTO assumptions are held constant until 2009/10.

# **U.S. Program Provisions**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	
Contract Payments					(U.S. Do	llars per B	sushel)					
Corn	0.73	0.33	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	
Sorghum	0.87	0.40	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	
Barley	0.54	0.25	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Oats	0.06	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Wheat	1.27	0.59	0.47	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	
				(U	S. Dollars	per Hund	redweight	:)				
Rice	5.68	2.60	2.10	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	
					(U.S. Do	llars per F	ound)					
Cotton	0.157	0.071	0.057	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	
Loan Rates					(U.S. Do	llars per B	sushel)					
Corn	1.89	1.89	1.89	1.75	1.75	1.81	1.86	1.88	1.89	1.89	1.89	
Sorghum	1.74	1.74	1.74	1.61	1.61	1.67	1.71	1.73	1.74	1.74	1.74	
Barley	1.59	1.59	1.59	1.47	1.47	1.52	1.56	1.58	1.59	1.59	1.59	
Oats	1.13	1.13	1.13	1.05	1.04	1.08	1.11	1.13	1.13	1.13	1.13	
Soybeans	5.26	5.26	5.26	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	
Wheat	2.58	2.58	2.58	2.41	2.41	2.55	2.58	2.58	2.58	2.58	2.58	
		(U.S. Dollars per Hundredweight)										
Rice	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	
					(U.S. Do	llars per F	ound)					
Cotton	0.519	0.519	0.519	0.500	0.500	0.500	0.500	0.511	0.519	0.519	0.519	
Peanuts	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	
					(U.S. Ce	ents per P	ound)					
Sugarcane	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	
					(Mi	llion Acres	;)					
Conservation Reserve	29.8	31.3	32.5	33.5	34.5	35.0	35.5	36.0	36.0	36.0	35.5	
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
	-			(U	.S. Dollars	per Hund	redweight	:)				
Milk Support Price	9.90	9.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	

# **Agricultural Policy Assumptions for Crops**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
European Union											
Policy Prices					•	per Metric					
Cereal Intervention	119.2	110.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3
Rice Intervention	316	298	298	298	298	298	298	298	298	298	298
Oilseed Reference Price	196 632	196 632	196 632	196 632	196 632	196 632	196 632	196 632	196 632	196 632	196 632
White Sugar Intervention Raw Sugar Intervention	467	467	467	467	467	467	467	467	467	467	467
A Beet Minimum	467	467	467	467	467	467	467	467	467	467	467
B Beet Minimum	32	32	32	32	32	32	32	32	32	32	32
Cereals Compensatory Payment	54.3	58.7	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
Set-aside Payments	68.8	58.7	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
Subsidized Export Limits					•	on Metric 1					
Wheat Coarse Grains	18.0 12.6	16.8 12.0	15.6 11.4	14.4 10.8	14.4 10.8	14.4 10.8	14.4 10.8	14.4 10.8	14.4 10.8	14.4 10.8	14.4 10.8
	12.0	12.0	11.4	10.6				10.6	10.6	10.6	10.6
Production Aid Oilseeds	91.4	81.7	72.4	63.0	(Eur	o per Hect 63.0	are) 63.0	63.0	63.0	63.0	63.0
						sand Hec		-			-
Oilseed Base Area	5,482	5,482	5,482		(THOU	Sana nee	arcoj				
Set-aside Rate *						(Percent)					
Crops	10	10	10	10	10	10	10	10	10	10	10
Japan											
Policy Prices				(	Thousand	Yen per N	∕letric Ton	)			
Wheat Purchase	148,300		148,300			148,300					148,300
Wheat Resale (Domestic Production)	38,467	38,467	38,467	38,467	38,467	38,467	38,467	38,467	38,467	38,467	38,467
Rice Purchase	15,528	15,528	15,528	15,528	15,528	15,528	15,528	15,528	15,528	15,528	15,528
Rice Resale (Domestic Production)	17,446	17,446	17,446	17,446	17,446	17,446	17,446	17,446	17,446	17,446	17,446
Rice Tarification					(Thous	and Metri	c Ton)				
Miminmum import access commitments	644	682	682	682	682	682	682	682	682	682	682
Out of quota Tariffs	351.2	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0
South Korea											
Minimum Import Access Commitment											
Rice Corn	103 6,100	103 6,100	128 6,100	154 6,100	180 6,100	205 6,100	205 6,100	205 6,100	205 6,100	205 6,100	205 6,100
United States	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100
Policy Prices					(U.S. Doll	ars per M	etric Ton)				
Corn Loan	74	74	74	69	69	71	73	74	74	74	74
Wheat Loan	95	95	95	89	89	94	95	95	95	95	95
Barley Loan	73	73	73	68	68	70	72	73	73	73	73
Rice Loan	143	143	143	143	143	143	143	143	143	143	143
Cotton Loan	1,144	1,144	1,144	1,102	1,102	1,102	1,102	1,127	1,144	1,144	1,144
Soybean Loan	193	193	193	181	181	181	181	181	181	181	181
Cane Loan	397	397	397	397	397	397	397	397	397	397	397
Export Enhancement Program						. Dollars, I		•			
Program Expenditure	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0 (Mill	0 lion Hecta	(res	0	0	0	0
		12.7	13.2	13.6	14.0	14.2	14.4	14.6	14.6	14.6	14.4

<sup>\*</sup> Average set-aside prior to exemption for small producers.

# **Agricultural Policy Assumptions for Livestock**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
European Union											
Policy Prices					(Euro p	er Metric	Ton)				
Beef Intervention	3,475	3,242	3,013	2,780	2,780	2,780	2,780	2,780	2,780	2,780	2,780
Pork Basic	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510
Intervention Purchase Limits					(Thousa	nd Metric	Tons)				
Beef	350	350	0	0	0	0	0	0	0	0	0
GATT Maximum											
Subsidized Exports											
Beef	885	822	822	822	822	822	822	822	822	822	822
Pork	463	444	444	444	444	444	444	444	444	444	444
Poultry	316	286	286	286	286	286	286	286	286	286	286
					(Millior	n Metric To	ons)				
Milk Delivery Quota: E-15	117	118	119	119	119	119	119	120	120	120	120
					(Euro p	er Metric	Ton)				
Target Price for Milk	310	310	310	310	310	310	301	284	266	257	257
Intervention Price for Butter	3,282	3,282	3,282	3,282	3,282	3,282	3,200	3,036	2,872	2,790	2,790
Intervention Price for SMP	2,055	2,055	2,055	2,055	2,055	2,055	2,004	1,901	1,798	1,747	1,747
SMP Feed Subsidy	75	75	75	75	75	75	75	75	75	75	75
GATT Maximum											
Subsidized Exports					(Thousa	nd Metric	Tons)				
Butter	426	408	399	399	399	399	399	399	399	399	399
SMP	292	279	273	273	273	273	273	273	273	273	273
Cheese	353	332	321	321	321	321	321	321	321	321	321
Other Milk Products	1,026	981	958	958	958	958	958	958	958	958	958
Canada					(Canadia	n Cents pe	er Liter)				
Target Price for Industrial Milk	56	57	58	58	59	60	60	61	62	62	63
					(Canadia	n Dollars <sub>l</sub>	oer Kg)				
Support Price, Butter	5.47	5.52	5.58	5.63	5.69	5.75	5.80	5.86	5.92	5.98	6.04
Support Price, NFD	4.52	4.57	4.62	4.66	4.71	4.76	4.80	4.85	4.90	4.95	5.00

# **Policy Prices and World Prices by Commodity**

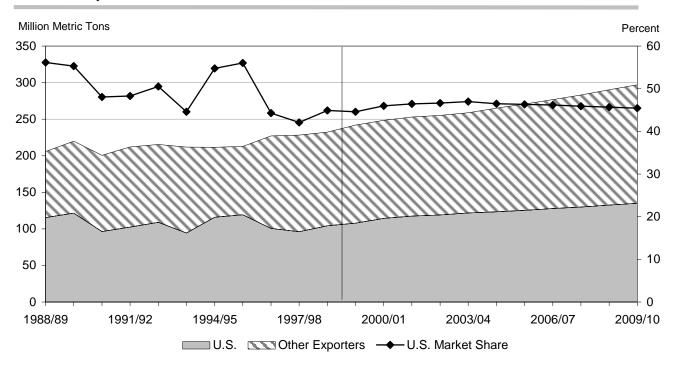
	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Wheat				(U.S. Do	llars per N	/letric Ton	, Marketin	g Year)			
EU Intervention	132	127	118	118	119	119	119	119	120	120	120
FOB U.S. Gulf	116	127	138	141	146	146	150	153	156	158	161
Canadian Thunder Bay	107	119	131	135	141	141	145	148	151	154	157
Australian Wheat Board	88	97	108	110	115	115	119	122	124	127	163
Barley											
EU Intervention	132	127	118	118	119	119	119	119	120	120	120
FOB U.S. Pacific Northwest	108	121	123	124	127	128	132	134	137	140	144
Corn											
EU Intervention	132	127	118	118	119	119	119	119	120	120	120
FOB U.S. Gulf	88	97	101	101	104	105	107	109	111	112	115
Rice											
FOB Bangkok 5% Parboiled	240	248	259	269	277	283	291	297	304	309	315
Soybeans											
U.S. Loan Rate	193	193	193	181	181	181	181	181	181	181	181
FOB U.S. Gulf	192	171	181	198	200	207	208	215	218	224	228
Rapeseed											
EU Oilseeds Reference	238	316	303	323	332	330	334	442	443	409	410
Cash Vancouver	205	181	194	208	211	213	222	223	232	235	245
Cotton											
Cotlook A Index	1,044	1,093	1,154	1,216	1,269	1,320	1,361	1,398	1,438	1,486	1,540

# **Policy Prices and World Prices by Commodity (continued)**

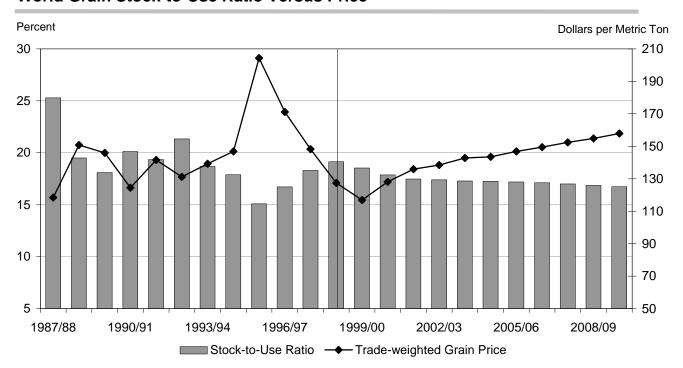
•	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	1000	2000	2001						2007		2003
Beef EU Intervention	3,708	3,708	3,560	3,294	(U.S. Doll 3,301	ars per Me 3,308	etric Ton) 3,314	3,321	3,328	3,334	3,341
Japanese Wholesale	3,700	3,700	3,300	3,294	3,301	3,300	3,314	3,321	3,320	3,334	3,341
Dairy beef	6,795	7,047	7,459	7,707	7,836	7,915	7,934	8,042	8,143	8,276	8,441
Wagyu beef	16,212	16,551	17,539	17,948	17,920	17,766	17,484	17,430	17,410	17,505	17,697
Nebraska Direct	10,212	10,001	17,000	17,040	17,520	17,700	17,404	17,400	17,410	17,000	17,007
Fed Steer Price	1,445	1,544	1,625	1,666	1,679	1,644	1,577	1,518	1,481	1,492	1,526
U.S. Retail	6,349	6,592	6,812	6,967	6,989	6,945	6,856	6,834	6,790	6,856	6,967
Pork	-,	-,	-,	-,	-,	-,- :-	-,	-,	-,	-,	-,
EU Basic	1 611	1,727	1,784	1,789	1.793	1 707	1,800	1.804	1.807	1 011	1,815
Japanese Wholesale	1,611 3,771	3,972	4,239	4,361	4,413	1,797 4,430	4,417	4,654	4,815	1,811 4,803	4,798
U.S. Barrows, Gilts	750	3,972 842	934	960	943	4,430 895	855	931	1,001	4,803 951	884
U.S. Retail	5,313	5,490	5,666	5,732	5,688	5,644	5,556	5,710	5,886	5,754	5,666
	3,313	3,430	3,000	3,732	3,000	3,044	3,330	3,710	3,000	3,734	3,000
Broilers											
EU Producer	1,137	1,231	1,240	1,250	1,282	1,308	1,334	1,358	1,385	1,412	1,440
Japanese Wholesale	2,105	2,141	2,244	2,319	2,368	2,411	2,448	2,499	2,549	2,599	2,652
U.S. 12-City Wholesale	1,281	1,260	1,265	1,256	1,243	1,233	1,227	1,229	1,231	1,230	1,230
U.S. Retail	3,404	3,375	3,392	3,391	3,382	3,373	3,344	3,349	3,349	3,332	3,320
Butter											
EU Intervention	3,496	3,747	3,871	3,882	3,890	3,898	3,808	3,620	3,431	3,340	3,347
U.S. CCC Purchase	1,433	1,453	0	0	0	0	0	0	0	0	0
U.S. Wholesale	2,770	2,400	2,502	2,457	2,523	2,543	2,534	2,612	2,607	2,613	2,591
FOB Northern Europe	1,435	1,421	1,534	1,535	1,545	1,558	1,570	1,550	1,545	1,550	1,561
Canadian Support	3,674	3,802	3,910	3,993	4,050	4,098	4,148	4,197	4,248	4,299	4,351
Canadian Retail	4,360	4,534	4,686	4,809	4,899	4,980	5,062	5,145	5,229	5,313	5,398
Australian Export	1,225	1,211	1,323	1,325	1,334	1,347	1,360	1,340	1,335	1,340	1,351
Nonfat Dry Milk											
EU Intervention	2,189	2,346	2,424	2,431	2,436	2,441	2,385	2,267	2,149	2,091	2,096
U.S. CCC Purchase	2,225	2,215	0	0	0	0	0	0	0	0	0
U.S. Wholesale	2,284	2,289	1,823	1,935	2,031	2,033	2,044	2,098	2,117	2,142	2,124
FOB Northern Europe	1,301	1,311	1,362	1,396	1,442	1,429	1,423	1,429	1,447	1,476	1,501
Canadian Support	3,041	3,147	3,237	3,305	3,352	3,392	3,433	3,474	3,516	3,558	3,601
Canadian Retail	6,518	6,736	6,919	7,056	7,145	7,222	7,299	7,377	7,456	7,535	7,616
Australian Export	1,406	1,416	1,467	1,501	1,546	1,534	1,528	1,533	1,552	1,580	1,606
Cheese											
U.S. CCC Purchase	2,426	2,426	0	0	0	0	0	0	0	0	0
U.S. Wholesale	3,128	2,775	2,832	2,853	2,873	2,880	2,900	2,909	2,924	2,936	2,958
FOB Northern Europe	1,909	2,075	2,164	2,172	2,193	2,185	2,172	2,151	2,160	2,179	2,196
Canadian Retail	8,781	9,326	9,619	9,816	9,935	10,036	10,156	10,275	10,395	10,517	10,639
Australian Export	2,136	2,301	2,390	2,398	2,419	2,411	2,398	2,378	2,386	2,405	2,422
Milk											
EU Target	330	354	365	366	367	368	358	338	318	308	309
U.S. Support	218	218	0	0	0	0	0	0	0	0	0
U.S. Farm	274	243	248	251	252	253	255	256	257	258	260
Canadian Target, Industrial	372	385	397	405	411	417	422	428	433	439	445
Canadian Fluid Milk, Ontario	402	416	428	436	442	447	452	458	463	468	473
Australian Industrial Milk	134	140 347	146	147	149	149	149	148	148	150	152
Australian Fluid Milk	335	347	359	362	366	366	366	365	366	369	372

# WORLD TRADE

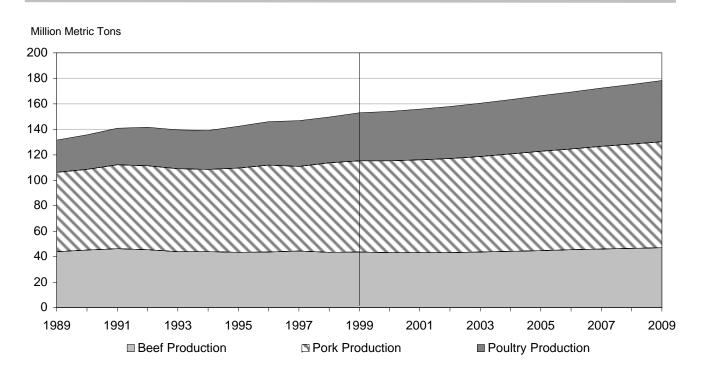
# World Crop Trade and U.S. Market Share



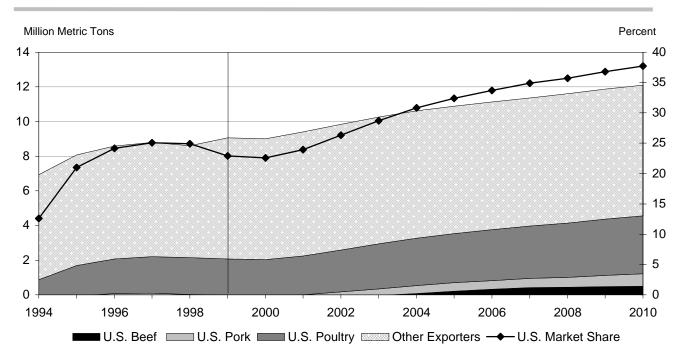
#### World Grain Stock-to-Use Ratio Versus Price



#### **World Meat Production**



### World Meat Trade and U.S. Market Share



#### **World Wheat Trade**

- World wheat area, which has been declining since its record level in 1996/97, is estimated to decline further in 1999/00 because of lower prices. However, wheat area is projected to bounce back next year by more than 2 mha because of weak oilseeds and coarse grain prices. Over the long run, wheat area is expected to increase by another 2 mha but stay well below the 1996/97 level.
- World wheat production is projected to rise at an average rate of 1.2 percent annually, increasing by approximately 70 million metric tons (mmt). World use of wheat is projected to grow neck-and-neck with production, adding little or nothing to the stock. Developing countries account for most of the projected increase in use.
- With limited land to expand production, developing nations will be forced to depend on imported wheat to meet rising domestic consumption with world wheat trade increasing by more than 20 percent. Among developing regions, Asia is expected to be the fastest growing market in the long run, with imports increasing by more than 35 percent from 23 to 32 mmt.
- Within Asia, China, once a major importer, has more or less disappeared from the world market mainly because of higher production and relatively flat per capita consumption. Over the next decade, China is not expected to import any where close to the historical level; however, its imports increase to close to 4 mmt by the end of the projection period.
- Apart from China, India has been a wild-card player, importing wheat in bad years to compensate for domestic shortfalls. However, rising per capita consumption in non-traditional wheat consuming regions and import liberalization are likely to make India a consistent wheat buyer in the international markets. Indian wheat imports are projected to increase from 1.5 mmt in 1999/00 to 2.5 mmt in 2009/10.
- High-income East Asia, which includes South Korea, Hong Kong, Taiwan, and Singapore, has been a consistently growing market for the last decade. Income growth in these countries has made them increasingly dependent on imported wheat to meet the growing domestic consumption because of limited availability of land to expand production. Imports in this region are projected to increase by more than 20 percent in the next 10 years.
- Behind Asia, Latin America, Africa, and Middle Eastern regions are likely to grow 12 to 15 percent during the projection periods. The North African countries of Algeria, Morocco, and Tunisia will continue to depend on imported wheat for a large portion of their supplies. Imports in these countries are projected to increase by 20 percent.
- Within the Middle East, Iran has established itself as the largest importer of wheat in the world for the second time in the last four years. The return of normal weather next year is likely to decrease its imports by more than 1 mmt. In the long run, increased efficiency in marketing systems brought about due to trade liberalization will reduce the high percentage of wastage in the current systems. Iran is projected to increase its imports much more slowly in the next decade, with 2009/10 import levels reaching 7 mmt.
- Latin America is projected to expand its imports by more than 14 percent. Brazil and Mexico, accounting for more than 50 percent of region's imports, are likely to expand their imports by 9 percent and 35 percent, respectively, over the next decade. Brazilian wheat area is not likely to expand in the future because of the availability of cheap Argentine wheat through MERCOSUR, and because most growing domestic consumption will be met through imports from Argentina.
- Traditional exporters, such as Argentina, Australia, Canada, the EU, and the United States, will meet most of the increased import demand from developing countries. Argentina, Australia, and Canada primarily depend on the export market to dispose their surplus wheat because of a saturated domestic market. Although total wheat area

in these countries remains flat during the baseline period, production primarily rises through yield growth, expanding exports by more than 5 mmt.

- The lower wheat price is likely to constrain the EU subsidized exports at the GATT maximum level until 2003/04. Between 2004/05 and 2009/10, the EU expands its wheat exports from 13.3 to 22.7 mmt, as world price exceeds the EU domestic price, capturing the majority of the expanded market during this period.
- U.S. wheat production in 1999/00 decreases significantly compared to the last year, but higher-than-trend yield kept production above the 60 mmt level. However, production is projected to decline by 3 mmt next year, even with 2 mha higher area, as the projected yield comes back to trend level. Over the long run, an additional 1.6 mha comes into wheat production as prices recover. U.S. wheat exports are projected to increase steadily until 2003/04, reaching 30 mmt as compared to 27.8 mmt in 1999/00. But the export growth slows down significantly for the remainder of the projection period as the EU becomes eligible to export with subsidy.

# **Wheat Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Millio	n Metric T	ons)				
Argentina	9.98	9.93	10.12	10.40	10.69	10.97	11.23	11.51	11.79	12.10	12.44
Australia	17.98	17.95	18.13	18.31	18.50	18.70	18.90	19.09	19.28	19.45	19.62
Canada	18.30	17.90	18.12	18.02	18.12	18.14	18.31	18.44	18.61	18.85	19.11
Czech Republic	0.03	-0.01	-0.15	-0.15	-0.14	-0.15	-0.16	-0.17	-0.18	-0.19	-0.21
Hungary	0.60	0.88	1.12	1.21	1.25	1.27	1.27	1.28	1.29	1.29	1.30
European Union	12.70	13.29	13.29	13.29	13.29	15.00	16.43	17.87	19.24	21.21	22.77
Ukraine	2.00	2.09	1.80	1.95	2.05	2.17	2.15	2.24	2.56	2.60	2.72
United States	26.38	27.83	28.57	28.92	29.79	29.72	30.06	30.33	30.59	30.86	31.14
Total Net Exports	87.96	89.88	91.15	92.10	93.69	95.97	98.36	100.75	103.36	106.38	109.10
Net Importers											
Japan	5.50	5.48	5.48	5.47	5.47	5.47	5.47	5.48	5.49	5.50	5.52
Russia	2.70	2.13	1.77	1.06	0.87	1.03	1.33	1.58	1.89	2.18	2.20
Other Former Soviet Union	0.68	0.88	1.43	1.78	1.96	2.01	2.10	2.20	2.27	2.35	2.46
Other Western Europe	0.43	0.39	0.38	0.39	0.39	0.41	0.42	0.43	0.45	0.46	0.47
Other Eastern Europe	0.50	0.75	0.63	0.70	0.81	1.01	1.18	1.36	1.54	1.70	1.87
Poland	0.20	0.57	0.70	0.81	0.90	0.97	1.03	1.07	1.10	1.11	1.12
Developing	76.45	78.14	79.10	80.24	81.65	83.42	85.16	86.94	88.93	91.37	93.75
China	0.20	0.97	1.33	1.53	2.31	2.53	2.88	3.20	3.46	3.75	3.99
High-Income East Asia	5.82	6.00	6.08	6.19	6.31	6.45	6.59	6.73	6.87	7.03	7.19
India	1.50	1.44	1.58	1.65	1.26	1.46	1.43	1.52	1.78	2.14	2.50
Pakistan	3.00	3.06	2.92	2.79	2.79	2.83	3.00	3.13	3.28	3.46	3.66
Other Asia	10.68	10.97	11.07	11.31	11.62	11.94	12.25	12.48	12.69	13.12	13.40
Brazil	7.00	7.14	7.18	7.21	7.24	7.29	7.35	7.41	7.49	7.56	7.64
Mexico	2.10	2.19	2.14	2.16	2.22	2.30	2.41	2.51	2.63	2.77	2.93
Other Latin America	8.37	8.69	8.64	8.69	8.81	8.98	9.17	9.36	9.58	9.81	10.09
Algeria	4.50	4.68	4.71	4.78	4.85	4.94	5.02	5.10	5.19	5.29	5.40
Egypt	6.70	7.07	7.06	7.06	7.06	7.07	7.08	7.09	7.11	7.13	7.15
Iran	6.50	5.65	5.70	5.80	5.92	6.06	6.19	6.33	6.47	6.62	6.76
Morocco	2.77	2.50	2.43	2.45	2.46	2.52	2.59	2.68	2.80	2.94	3.11
Tunisia	0.95	0.98	1.01	1.07	1.13	1.20	1.28	1.35	1.44	1.53	1.62
Other Africa/Middle East	15.95	16.35	16.76	17.03	17.11	17.24	17.28	17.35	17.42	17.46	17.50
Rest of World	0.42	0.45	0.48	0.52	0.56	0.60	0.65	0.69	0.73	0.77	0.82
Residual	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
Total Net Imports	87.96	89.88	91.15	92.10	93.69	95.97	98.36	100.75	103.36	106.38	109.10
Wheat Prices					(U.S. Dolla		etric Ton)				
U.S. FOB Gulf	115.76	126.95	138.00	141.05	146.23	146.33	149.93	152.85	155.81	158.48	161.34
Canadian Thunder Bay	107.03	119.24	131.45	134.72	140.54	140.61	144.65	147.93	151.24	154.22	157.43
Australian Wheat Board	87.71	97.13	107.70	110.48	115.38	115.41	118.85	121.65	124.47	127.01	162.66
CIF Rotterdam	136.52	149.57	162.46	166.02	172.05	172.18	176.37	179.78	183.23	186.34	189.68

## **World Coarse Grain Trade**

- World coarse grain area, which peaked in 1995/96 in response to higher price, continues its declining trend. Since 1995/96, more than 13 mha of coarse grain area has shifted to oilseeds and other profitable crops. In the next 10 years, coarse grain area increases slightly with increases in corn and barley area partially offset by a decline in sorghum area.
- World coarse grain production expands from 781 to 904 mmt, mostly through yield growth. Consumption is also expected to rise with the recovery of Asian economies, increasing coarse grain price by more than 25 percent.
- World coarse grain trade, which has been stagnant for last few years primarily because of the Asian financial crisis, is projected to expand steadily in the next decade with strong and stable income growth around the world, a more than 20 percent increase.
- Among coarse grain, corn trade tops the list by increasing by more than 25 percent over the projection period. Most of the growth in import demand is likely to come from developing countries. Asia remains the fastest growing market for corn, accounting for more than 50 percent of the total increase.
- Within Asia, Japan, South Korea, and Taiwan account for more than 90 percent of Asian corn imports. Japanese corn imports are projected to decline steadily in response to declining livestock production. Taiwan's corn imports have declined significantly since 1997 because of foot-and-mouth disease (FMD). Although Taiwan seems to have recovered from FMD, livestock production is projected to grow rather slowly because of environmental regulations. Corn imports are projected to increase by 1.1 mmt in the next decade.
- Recent economic turmoil has reduced the corn imports of Far East Asian countries, such as Thailand, Indonesia, Malaysia, the Philippines, and South Korea, by more than 40 percent. As these countries recover from the crisis, it is projected that corn imports will increase by more than 2 mmt in this region.
- China remains a wild-card player in the world corn market. China has proved everybody wrong by remaining a significant exporter of corn in last few years. However, Chinese corn area is projected to decline in next few years because of shifting Chinese policy favoring oilseeds over grains. Declining corn area and recovery in animal production is likely to make domestic consumption outpace production in the second half of the projection period, leaving the country in a net import position. By 2009/10, Chinese imports are projected to reach more than 7 mmt of corn.
- Unlike China, India is not likely to be a significant importer of corn in the next decade. However, rising poultry
  production and liberalization in corn imports are likely to force India to buy small amounts of corn from the
  world markets.
- Behind Asia, Latin American countries are likely to be the second largest growth market for corn in the next decade. Corn imports in the regions are projected to increase by more than 18 percent. Mexico is the largest importer of corn in the region and has been importing well above the TRQ level since its implementation under NAFTA. Growing feed use is likely to expand corn imports from 5.0 mmt in 1999/00 to 6.1 mmt in 2009/10. Other Latin American countries are also expected to increase their imports by around 2 mmt, mainly because of the inability of these countries to expand domestic production to meet growing domestic consumption.
- Argentine corn-planted area is projected to increase in next few years in response to weak oilseeds prices with exports expanding from 8.7 mmt in 1999/00 to 9.7 mmt in 2002/03. However, corn area stabilizes as oilseeds prices recover, with production growing mostly through yield growth. Steady production growth along with strong feed utilization limits its export growth for the remainder of the projection period. By 2009/10, Argentina is projected to export 10.4 mmt of corn.

- South Africa is back in the export market, exporting 1 mmt of corn mainly because of higher production resulting from large area and favorable weather. Assuming normal weather for the baseline period, corn exports are projected to increase from 1 mmt in 1999/00 to 1.7 mmt in 2009/10.
- Apart from Argentina and South Africa, most of the expanded market is likely to be captured by the United States. U.S. exports expand from 50 to 66 mmt, accounting for more than 70 percent of the increased import demand. The U.S. market share increases from 75 to 81 percent by 2009/10.
- Growth in barley import demand primarily comes from China and Saudi Arabia. In China, higher barley demand in the brewing industry increases imports from 2.3 to 3.8 mmt, whereas Saudi Arabia increases its barley imports from 4.7 to 6.2 mmt. The EU supplies most of the expanded barley market, whereas other major exporters, such as Australia and Canada, are limited because of lower barley production.
- In the sorghum market, import demand primarily comes from two countries, Japan and Mexico. Japanese demand is projected to decrease because of declining livestock production. Similarly, Mexican sorghum imports increase from 3.4 to 4.1 mmt during the projection period. On the export side, the United States and Argentina capture most of the expanded opportunity.

# **Corn Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Millio	n Metric T	ons)				
Argentina	8.70	8.97	9.39	9.65	9.74	9.86	9.94	10.06	10.17	10.30	10.42
Hungary	1.50	1.66	1.62	1.65	1.65	1.65	1.66	1.66	1.66	1.65	1.64
Other Eastern Europe	0.46	0.39	0.73	0.68	0.84	0.80	0.86	0.81	0.76	0.66	0.59
South Africa	1.00	1.21	1.31	1.40	1.52	1.53	1.60	1.63	1.67	1.69	1.73
Ukraine	0.20	0.50	0.69	0.85	0.89	0.94	0.92	0.96	0.96	0.97	0.97
United States	50.32	51.46	52.14	53.99	56.44	57.95	59.53	61.15	62.81	64.75	66.51
Total Net Exports	66.68	67.29	67.77	68.48	70.15	72.74	74.51	76.28	78.03	80.02	81.85
Net Importers											
Canada	0.05	0.19	0.29	0.37	0.36	0.32	0.31	0.33	0.31	0.27	0.22
European Union	2.30	2.33	2.47	2.49	2.43	2.41	2.27	2.15	2.08	2.06	2.00
Czech Republic	0.08	0.08	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.17	0.17
Poland	0.40	0.00	0.12	0.13	0.13	0.14	0.13	0.15	0.10	0.61	0.64
Israel	0.65	0.71	0.72	0.72	0.73	0.73	0.73	0.73	0.73	0.74	0.74
Japan	16.25	15.96	15.68	15.55	15.37	15.24	15.10	14.91	14.77	14.70	14.61
Russia	0.50	0.68	0.63	0.63	0.60	0.62	0.61	0.58	0.59	0.60	0.63
Other Former Soviet Union	0.04	0.06	-0.05	-0.02	-0.03	-0.03	-0.06	-0.07	-0.09	-0.13	-0.18
Developing	43.77	44.18	44.86	45.56	47.48	50.20	52.27	54.33	56.28	58.36	60.33
Algeria	1.10	1.15	1.22	1.29	1.36	1.44	1.52	1.61	1.69	1.79	1.89
Egypt	3.70	3.71	3.73	3.75	3.76	3.78	3.79	3.82	3.84	3.87	3.90
Other Africa	2.24	2.16	2.05	2.01	1.97	1.99	1.98	1.99	2.01	2.07	2.14
Other Middle East	5.45	5.33	5.39	5.44	5.45	5.50	5.53	5.56	5.59	5.63	5.66
Brazil	0.90	0.55	0.24	0.09	0.12	0.09	0.10	0.11	0.19	0.33	0.44
Mexico	4.95	4.92	5.11	5.18	5.34	5.52	5.67	5.80	5.92	6.08	6.28
Other Latin America	8.52	8.67	8.78	8.98	9.21	9.40	9.60	9.80	10.01	10.23	10.46
China	-4.50	-3.12	-1.90	-0.26	0.93	2.74	3.90	5.03	5.92	6.82	7.51
Indonesia	0.40	0.59	0.70	0.79	0.89	1.00	1.11	1.23	1.35	1.48	1.63
Malaysia	2.60	2.59	2.60	2.65	2.70	2.76	2.83	2.91	2.99	3.09	3.19
South Korea	8.50	8.59	8.67	8.78	8.86	8.93	9.00	9.09	9.17	9.25	9.34
Taiwan	4.50	4.77	5.10	5.23	5.28	5.39	5.49	5.60	5.69	5.81	5.93
Thailand	0.25	0.35	0.39	0.43	0.46	0.51	0.53	0.55	0.55	0.55	0.56
Philippines	0.15	0.25	0.24	0.26	0.25	0.26	0.26	0.27	0.29	0.32	0.36
India	0.25	0.32	0.36	0.36	0.55	0.53	0.57	0.59	0.63	0.60	0.60
Pakistan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vietnam	0.05	0.06	0.04	0.02	0.02	0.02	0.03	0.05	0.07	0.11	0.15
Other Asia	0.27	0.25	0.27	0.32	0.33	0.36	0.37	0.39	0.41	0.43	0.45
Rest of World	0.10	0.11	0.11	0.13	0.15	0.16	0.18	0.20	0.21	0.23	0.25
Residual	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Total Net Imports	66.68	67.29	67.77	68.48	70.15	72.74	74.51	76.28	78.03	80.02	81.85
Coarse Grain Prices					(U.S. Dolla	ars per Me	etric Ton)				
Corn (FOB Gulf)	87.97	97.31	101.39	101.24	104.46	104.95	107.41	108.88	110.93	112.28	114.51
Sorghum (FOB Gulf)	81.44	90.72	94.83	95.64	98.67	99.44	101.33	102.38	103.99	105.31	107.37
Barley (Portland)	108.00	120.95	122.94	123.56	127.41	128.47	131.55	134.24	137.50	140.49	144.38

**Barley Trade** 

Daney Trade	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters	(Million Metric Tons)										
Argentina	0.03	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05
Australia	2.70	3.14	3.38	3.49	3.55	3.58	3.61	3.63	3.65	3.67	3.66
Canada	1.66	1.42	1.39	1.40	1.47	1.51	1.49	1.42	1.49	1.63	1.78
European Union	11.30	10.00	10.05	10.13	10.48	10.61	10.83	10.91	11.01	11.10	11.21
Russia	-0.05	0.69	0.77	0.60	0.50	0.51	0.50	0.55	0.62	0.66	0.73
Ukraine	0.80	0.97	0.91	1.02	0.94	0.93	0.92	1.06	1.24	1.44	1.57
United States	0.11	0.10	0.12	0.08	0.11	0.11	0.15	0.17	0.20	0.21	0.22
Total Net Exports	17.31	17.31	17.72	17.92	18.15	18.46	18.79	19.13	19.72	20.35	20.97
Net Importers											
Czech Republic	0.23	0.16	0.19	0.21	0.24	0.26	0.27	0.28	0.28	0.29	0.29
Hungary	-0.10	-0.06	-0.13	-0.16	-0.17	-0.19	-0.21	-0.23	-0.25	-0.27	-0.29
Poland	0.10	0.07	0.09	0.11	0.13	0.17	0.21	0.25	0.29	0.32	0.35
Other Eastern Europe	0.03	-0.03	-0.05	-0.09	-0.12	-0.14	-0.14	-0.14	-0.13	-0.12	-0.10
Israel	0.70	0.71	0.72	0.72	0.72	0.71	0.71	0.71	0.71	0.70	0.70
Japan	1.40	1.30	1.26	1.24	1.23	1.21	1.20	1.16	1.14	1.14	1.13
Other Former Soviet Union	-0.67	-0.92	-0.96	-1.01	-0.92	-0.99	-1.05	-1.13	-1.22	-1.33	-1.46
Developing	11.59	11.85	12.30	12.55	12.78	13.08	13.36	13.66	14.19	14.74	15.28
Algeria	0.60	0.62	0.64	0.65	0.67	0.69	0.72	0.74	0.76	0.79	0.82
Other Africa	1.40	1.37	1.40	1.43	1.45	1.49	1.51	1.54	1.57	1.60	1.63
Saudi Arabia	4.70	4.88	5.08	5.14	5.21	5.29	5.36	5.43	5.70	5.96	6.22
Other Middle East	1.93	1.89	1.90	1.92	1.92	1.93	1.94	1.95	1.96	1.97	1.98
Brazil	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Mexico	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.12	0.12
Other Latin America	0.22	0.22	0.21	0.20	0.19	0.18	0.18	0.17	0.17	0.17	0.17
China	2.30	2.40	2.61	2.71	2.82	2.97	3.11	3.28	3.46	3.68	3.88
Pakistan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Taiwan	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.24	0.25	0.26
Other Asia	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Rest of World	0.38	0.36	0.32	0.30	0.29	0.29	0.30	0.32	0.35	0.39	0.43
Residual	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
Total Net Imports	17.31	17.31	17.72	17.92	18.15	18.46	18.79	19.13	19.72	20.35	20.97
Coarse Grain Prices					(U.S. Dolla	ars per Me	etric Ton)				
Corn (FOB Gulf)	87.97	97.31	101.39	101.24	104.46	104.95	107.41	108.88	110.93	112.28	114.51
Sorghum (FOB Gulf)	81.44	90.72	94.83	95.64	98.67	99.44	101.33	102.38	103.99	105.31	107.37
Barley (Portland)	108.00	120.95	122.94	123.56	127.41	128.47	131.55	134.24	137.50	140.49	144.38

# Sorghum Trade

Conginant trade	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	
Net Exporters	(Million Metric Tons)											
Argentina	0.80	0.83	0.91	0.91	0.91	0.92	0.95	0.97	1.00	1.05	1.11	
Australia	0.25	0.24	0.21	0.20	0.21	0.23	0.27	0.31	0.35	0.41	0.46	
United States	5.33	5.48	5.65	5.73	5.81	5.87	5.93	5.94	5.99	6.07	6.13	
Total Net Exports	6.38	6.55	6.77	6.85	6.93	7.02	7.14	7.22	7.35	7.52	7.70	
Net Importers												
Israel	0.10	0.10	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	
Japan	2.30	2.21	2.21	2.17	2.15	2.13	2.12	2.06	2.03	2.03	2.03	
Developing	3.40	3.51	3.71	3.80	3.85	3.90	3.95	4.01	4.08	4.17	4.27	
Mexico	3.40	3.49	3.69	3.77	3.81	3.85	3.90	3.94	4.00	4.08	4.17	
South Africa	0.00	0.02	0.02	0.03	0.04	0.04	0.06	0.07	0.08	0.09	0.11	
Nigeria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
India	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pakistan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rest of World	0.53	0.66	0.69	0.72	0.76	0.81	0.88	0.96	1.03	1.10	1.17	
Residual	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Total Net Imports	6.38	6.55	6.77	6.85	6.93	7.02	7.14	7.22	7.35	7.52	7.70	
Coarse Grain Prices	(U.S. Dollars per Metric Ton)											
Corn (FOB Gulf)	87.97	97.31	101.39	101.24	104.46	104.95	107.41	108.88	110.93	112.28	114.51	
Sorghum (FOB Gulf)	81.44	90.72	94.83	95.64	98.67	99.44	101.33	102.38	103.99	105.31	107.37	
Barley (Portland)	108.00	120.95	122.94	123.56	127.41	128.47	131.55	134.24	137.50	140.49	144.38	

# World Soybean and Soybean Products Trade

- World oilseeds area harvested is expected to increase by 3.4 mha during 1999/00 to 140.9 mha. The total area is projected to increase to 150.3 mha by 2009/10.
- World soybean area will increase to a record 70.6 mha in 1999/00 and is projected to decline slightly in 2001/02 and 2002/03, and then increase by the end of projection period to 74.7 mha.
- Current year soybean prices are down 2.6 percent compared to last year's price of \$219 per mmt, the lowest level in the last decade. This price is projected to go down further by 9.1 percent next year and then increase throughout the projection period to \$255 per mmt. Current soy meal price increased by 4 percent in the last year, while soy oil price remains the same compared to last year's. These prices are projected to decline in the next two years before starting to increase.
- The U.S. soybean harvested area is projected to increase by 1 percent next year due to the favorable marketing loan rates for soybeans, while Argentina's and Brazil's soybean areas decrease by 1.3 percent and 1.6 percent, respectively, next year due to low world soybean price. For the long term, the soybean harvested area is projected to be 29.3 mha, 8.6 mha, and 14.0 mha, respectively, for the United States, Argentina, and Brazil in 2009/10.
- The United States' share of world soybean exports is expected to increase from 64.1 percent in current year to 69.6 percent in 2001/02 and then decline to 65 percent in 2009/10. The U.S. shares of soy meal and soy oil exports are projected to be 18.5 percent and 20.6 percent, respectively, by 2009/10.
- Due to strong per capita oil demand, demand for meal from the livestock sector, and Chinese grain policy, China emerges as the second largest importer of oilseeds, behind the EU-15. Chinese soybean net imports are projected to significantly increase from 4.2 mmt in the current year to 7.5 mmt in 2009/10. Soy meal net imports are projected to increase from 11 mmt to 16 mmt during the same period.
- The increase in the set-aside rate in 1999/00 and the changes in relative returns lead to a 30 percent reduction in EU soybean area this year. Soybean area is projected to fall gradually between 2000/01 and 2003/04 by 20 percent due to the cut in oilseed direct payments and their gradual alignment to the cereal payment. EU soybean net imports are projected to increase from 14.6 mmt in the current year to 16.7 mmt in 2009/10.
- Total soybean acreage in India is expected to grow from 5.8 mha in 1999/00 to 7.3 mha by 2009/10. The Indian government is considering further raising the import duty on refined edible oils to about 40 percent. India is expected to remain the fourth largest exporter of soy meal during the projection period. Soy meal net exports will grow from 2.6 mmt in the current year to 3.1 mmt by the end of projection period.
- Japan imports a large quantity of soybeans for its domestic crushing industry; however, imports slightly decrease from the past year. Total soybean imports are not expected to change from their current level of about 4.6 mmt.
- Taiwan also imports relatively large quantities of beans for domestic crushing to supply soy meal to its hog and poultry industries. As its hog industry recovers slowly from its recent crisis, Taiwan's soybean imports are expected to grow from 2.3 mmt in the current year to 2.5 mmt by the end of projection period.
- South Korean bean and meal demands are also projected to grow, but at a slower rate. The bean and meal imports are projected to grow by 65 thousand metric ton (tmt) and 336 tmt, respectively, by the end of the period.
- Mexican soybean and meal imports are projected to grow by about 580 tmt and 512 tmt, respectively, during the period.

# Soybean Trade

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	2,300	2,074	2,229	2,469	2,545	2,668	2,731	2,856	2,942	3,059	3,157
Brazil	7,800	6,799	7,240	7,397	7,610	7,786	7,992	8,177	8,392	8,586	8,783
Canada	616	497	495	662	646	702	687	749	761	737	718
Paraguay	2,400	2,397	2,422	2,478	2,527	2,583	2,630	2,689	2,737	2,788	2,839
United States	23,460	26,807	28,331	27,597	26,971	27,161	27,406	27,842	28,114	28,604	28,930
Total Net Exports	36,580	38,565	40,714	40,609	40,296	40,902	41,441	42,304	42,944	43,757	44,409
Net Importers											
Eastern Europe	-4	122	180	209	233	254	275	295	317	338	361
European Union	14,614	15,709	15,896	15,760	16,008	16,044	16,273	16,288	16,465	16,543	16,714
Former Soviet Union	435	436	442	448	452	456	460	463	465	468	470
Russia	190	191	190	188	186	184	181	179	176	173	170
Ukraine	20	20	27	33	40	47	53	59	66	72	79
Other Former Soviet Union	225	225	226	226	226	226	225	225	224	223	222
Japan	4,600	4,640	4,641	4,634	4,636	4,635	4,639	4,638	4,640	4,641	4,634
Developing	11,700	12,200	14,081	14,207	13,544	14,058	14,223	14,876	15,141	15,654	15,875
China	4,200	4,675	6,476	6,501	5,739	6,166	6,237	6,800	6,975	7,389	7,503
India	0	0	0	0	0	0	0	0	0	0	0
Mexico	3,700	3,746	3,802	3,860	3,918	3,978	4,037	4,097	4,158	4,219	4,280
South Korea	1,500	1,323	1,352	1,377	1,406	1,430	1,453	1,476	1,495	1,526	1,565
Taiwan	2,300	2,455	2,451	2,469	2,481	2,485	2,495	2,502	2,513	2,520	2,527
Rest of World	6,403	6,625	6,641	6,520	6,591	6,623	6,740	6,912	7,083	7,281	7,523
Residual	-1,168	-1,168	-1,168	-1,168	-1,168	-1,168	-1,168	-1,168	-1,168	-1,168	-1,168
Total Net Imports	36,580	38,565	40,714	40,609	40,296	40,902	41,441	42,304	42,944	43,757	44,409
Prices					(U.S. Dolla						
FOB Gulf	192	171	181	198	200	207	208	215	218	224	228
CIF Rotterdam	219	199	208	225	228	234	235	242	245	251	255

# **Soybean Meal Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	12,400	12,967	12,929	12,918	13,170	13,453	13,706	13,946	14,179	14,441	14,665
Brazil	10,085	10,283	9,867	10,083	10,381	10,678	10,980	11,306	11,634	11,973	12,307
India	2,600	2,573	2,598	2,665	2,724	2,786	2,841	2,900	2,955	3,010	3,061
Paraguay	306	340	344	343	370	388	418	435	463	488	512
United States	6,441	6,869	7,143	7,196	7,302	7,451	7,657	7,671	7,771	7,837	7,944
Total Net Exports	31,832	33,033	32,882	33,206	33,949	34,757	35,604	36,261	37,006	37,752	38,482
Net Importers											
Canada	660	607	656	652	643	627	605	581	565	556	549
Eastern Europe	2,169	2,070	2,085	2,111	2,139	2,167	2,197	2,228	2,261	2,295	2,331
European Union	14,907	16,067	15,895	15,674	15,850	16,001	16,216	16,387	16,583	16,777	17,009
Former Soviet Union	857	616	598	590	603	630	660	689	716	726	745
Russia	354	128	147	159	180	205	235	263	292	315	339
Ukraine	140	131	111	99	89	82	73	64	58	40	27
Other Former Soviet Union	363	357	340	332	334	342	352	361	367	371	379
Japan	950	934	900	867	853	822	799	777	761	736	717
Developing	2,655	2,438	2,471	2,485	2,482	2,630	2,848	3,030	3,261	3,458	3,696
China	1,235	933	930	878	874	948	1,068	1,177	1,286	1,347	1,429
Mexico	160	160	213	265	233	288	356	420	495	577	672
South Korea	1,250	1,336	1,321	1,336	1,370	1,388	1,418	1,428	1,473	1,526	1,586
Taiwan	10	9	7	5	5	6	6	6	6	7	8
Rest of World	11,463	12,130	12,106	12,656	13,208	13,708	14,107	14,397	14,688	15,034	15,264
Residual	-1,829	-1,829	-1,829	-1,829	-1,829	-1,829	-1,829	-1,829	-1,829	-1,829	-1,829
Total Net Imports	31,832	33,033	32,882	33,206	33,949	34,757	35,604	36,261	37,006	37,752	38,482
Prices					(U.S. Dolla	ars per Me	etric Ton)				
FOB Decatur 44%	161	144	149	161	163	168	169	173	175	179	181
CIF Rotterdam	165	149	154	166	168	172	173	177	180	183	185

# Soybean Oil Trade

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	nd Metric	Tons)				
Argentina	2,600	2,633	2,631	2,632	2,685	2,747	2,802	2,855	2,906	2,961	3,015
Brazil	1,285	1,133	1,021	1,042	1,038	1,047	1,063	1,096	1,127	1,163	1,204
European Union	1,061	1,139	1,211	1,249	1,276	1,293	1,317	1,329	1,350	1,366	1,392
Paraguay	65	67	90	91	99	104	113	118	127	134	142
United States	795	1,252	1,452	1,467	1,491	1,501	1,529	1,525	1,552	1,557	1,570
Total Net Exports	5,806	6,236	6,419	6,485	6,570	6,645	6,744	6,809	6,909	6,988	7,089
Net Importers											
Canada	-15	-5	-8	-9	-10	-11	-12	-13	-12	-13	-13
Eastern Europe	83	120	121	121	123	124	125	126	127	129	130
Former Soviet Union	83	84	91	97	104	110	117	124	131	138	146
Russia	40	43	50	56	63	69	76	83	90	96	103
Ukraine	40	40	40	40	40	40	40	40	41	41	41
Other Former Soviet Union	3	1	1	1	1	1	1	1	1	1	1
Japan	16	26	27	28	28	28	27	26	25	24	21
Developing	1,725	2,080	2,248	2,251	2,265	2,252	2,271	2,262	2,281	2,283	2,318
China	775	1,112	1,244	1,216	1,198	1,153	1,136	1,091	1,069	1,029	1,018
India	750	727	754	772	788	804	822	838	858	877	898
Mexico	80	87	90	95	101	108	115	123	132	142	153
South Korea	100	130	137	144	150	156	164	171	180	188	195
Taiwan	20	24	23	24	27	31	35	39	43	48	53
Rest of World	4,029	4,046	4,056	4,112	4,176	4,256	4,331	4,398	4,471	4,542	4,602
Residual	-115	-115	-115	-115	-115	-115	-115	-115	-115	-115	-115
Total Net Imports	5,806	6,236	6,419	6,485	6,570	6,645	6,744	6,809	6,909	6,988	7,089
Prices				,	U.S. Dolla		,				
FOB Decatur	353	337	370	400	412	428	440	457	473	491	517
FOB Rotterdam	405	391	420	448	459	474	484	500	514	531	554

## **World Rapeseed and Rapeseed Products Trade**

- World rapeseed price is expected to further decline in the next year due to low world soybean prices and historical ending stock levels in 1999/00. The price is expected to recover and increase after 2000/01 through the end of the projection period.
- World rapeseed/canola harvested area is expected to increase by 2.1 mha during this coming year. Lower prices are projected to decrease next year's area. Long-term planting area in rapeseed is expected to grow relatively slow to about 27.1 mha by 2009/10. Production and crush are expected to grow to 45.1 mmt and 42.1 mmt, respectively, by 2009/10.
- World trade in rapeseed keeps expanding after last year's record harvested area and high demand from China and Japan. Trade in rapeseed is projected to grow to 5.3 mmt by 2009/10.
- Expected relative returns in canola in the last two crop years favored greater Canadian oilseed plantings and reduced wheat and barley area. The canola planting area reached 5.6 mha in 1999/00. The area is expected to decline in the short term because of declining canola prices. However, it will recover after 2001/02 and increase over the remainder of the projection period.
- Very low rapeseed stocks encouraged EU farmers to expand planting area in rapeseed and resulted in record area in 1999/00. EU rapeseed production increased by 1.8 mmt over the previous year and 2.7 mmt over two years ago. Rapeseed area is expected to fall gradually between 2000/01 and 2002/03 with the alignment of oilseed direct payments with cereal ones, and then more slowly after 2002/03.
- As the major domestic source of vegetable oil in India, rapeseed is projected to be stable over the period. The
  production is expected to increase with yield improvements, from 6.0 mmt in 1999/00 to 7.8 mmt by 2009/10,
  and meet domestic crush demand.
- Chinese rapeseed imports hit a record of 2.8 mmt in 1999/00. By contrast, trade in both oil and meal has fallen, partly as a result of government actions limiting imports in order to protect domestic producers and crushers. The planted area is projected to increase slightly to 7.8 mha by 2009/10. The rapeseed net imports are expected to increase to 3 mmt, while rape oil imports are projected to decrease slowly.
- Primarily, the EU and Japan import canola meal from Canada for its quality. Most rape meal from China and India is not suitable for animal consumption and the latter is exported to the EU for industrial purposes. Total trade in meal is expected to increase by 10 percent in 1999/00 compared to the previous year. Trade in meal is expected to increase from 2.1 mmt in 1999/00 to 2.8 mmt in 2009/10.
- Rape oil is widely used as cooking oil in China, India, some other developing countries, and in several industrial countries. Increasing incomes in these countries are expected to drive the demand for rape oil. Future trade in rape oil is expected to be restricted by declining planting area in exporting countries, by increases in domestic oil production in importing countries, and by trade policy in favor of the raw products.

# Rapeseed Trade

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	nd Metric	Tons)				
Canada	3,540	4,294	3,816	3,725	3,825	3,896	3,964	4,084	4,198	4,354	4,537
Total Net Exports	4,787	4,810	4,496	4,527	4,650	4,761	4,847	4,970	5,078	5,191	5,312
Net Importers											
China	2,800	2,546	2,330	2,336	2,389	2,482	2,557	2,662	2,756	2,855	2,960
European Union	-806	-516	-505	-452	-379	-430	-472	-556	-624	-671	-711
India	0	0	0	0	0	0	0	0	0	0	0
Japan	2,200	2,219	2,165	2,251	2,261	2,279	2,290	2,309	2,322	2,336	2,351
Rest of World	-441	45	-174	-350	-446	-434	-410	-330	-256	-166	-64
Residual	0	0	0	-60	0	0	0	0	0	0	0
Total Net Imports	4,787	4,810	4,496	4,527	4,650	4,761	4,847	4,970	5,078	5,191	5,312
Prices				(	U.S. Dolla	ırs per Me	tric Ton)				
Cash Vancouver	205	181	194	208	211	213	222	223	232	235	245
CIF Hamburg	195	177	186	197	200	201	208	209	216	218	226

# Rapeseed Meal Trade

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	nd Metric	Tons)				
Canada	1,292	1,452	1,505	1,557	1,600	1,643	1,684	1,726	1,766	1,806	1,846
China	370	577	457	488	505	529	541	568	588	607	626
India	400	553	619	606	575	542	519	495	457	412	363
Total Net Exports	2,062	2,583	2,581	2,651	2,680	2,715	2,744	2,789	2,812	2,825	2,836
Net Importers											
European Union	273	712	829	855	915	956	1,007	1,026	1,091	1,125	1,188
Japan	175	132	123	110	103	94	88	78	71	63	51
Rest of World	2,018	2,143	2,033	2,090	2,066	2,068	2,052	2,088	2,055	2,041	2,001
Residual	-404	-404	-404	-404	-404	-404	-404	-404	-404	-404	-404
Total Net Imports	2,062	2,583	2,581	2,651	2,680	2,715	2,744	2,789	2,812	2,825	2,836
Price				(	U.S. Dolla	ars per Me	tric Ton)				
FOB Hamburg	95	99	107	110	114	117	123	128	132	137	142

# **Rapeseed Oil Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	nd Metric	Tons)				
Canada	785	801	861	904	932	955	983	999	1,030	1,050	1,087
European Union	548	470	418	360	310	282	260	237	224	195	184
Total Net Exports	1,333	1,271	1,279	1,264	1,242	1,236	1,243	1,236	1,255	1,245	1,271
Net Importers											
China	145	157	187	161	137	119	118	114	124	111	164
India	200	201	183	200	227	251	267	278	293	307	321
Japan	4	4	3	4	4	4	3	3	3	3	3
Rest of World	1,027	952	949	942	917	906	899	884	878	866	826
Residual	-43	-43	-43	-43	-43	-43	-43	-43	-43	-43	-43
Total Net Imports	1,333	1,271	1,279	1,264	1,242	1,236	1,243	1,236	1,255	1,245	1,271
Price				(	(U.S. Dolla	rs per Me	tric Ton)				
FOB Rotterdam	410	396	422	443	456	468	485	496	517	530	557

## **World Sunflower Seed and Products Trade**

- World area under sunflowers is expected to grow from 23.2 mha in 1999/00 to 27.6 mha in 2009/10. During the same period, total sunflower trade is expected to grow from 2.6 mmt to 3.2 mmt.
- Argentina is, by far, the world's largest exporter of sunflower seed, meal, and oil. Argentine area under sunflowers dropped by 8 percent in 1999/00 from the previous year because of lower world prices. This area is projected to increase by 549,000 hectares over the next decade as prices recover after 2000/01.
- With a 27 percent increase in sunflower planted area from the previous year, Russia is the world's largest exporter of sunflower seed in 1999/00. Although processing is running at less than 70 percent capacity, the oilseeds sector remains one of the healthiest of Russian agriculture because of strong demand for both vegetable oil and meal for animal feeds. The planted area is projected to increase from 5.3 mha to 6.1 mha by 2009/10.
- The EU is the largest importer of sunflower seeds and meal. Imports for both are expected to grow due to the expected decrease in planted area following the direct payment reductions.

# **Sunflower Seed Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	
Net Exporters					(Thousa	nd Metric	Tons)					
Argentina	800	804	845	904	930	965	987	1,022	1,050	1,084	1,114	
China	0	-31	-29	-18	-20	-22	-28	-29	-33	-35	-38	
Russia	1,190	1,253	1,301	1,339	1,368	1,392	1,411	1,426	1,438	1,449	1,458	
Ukraine	497	500	505	510	515	520	525	530	535	540	545	
Other Former Soviet Union	115	106	107	108	108	107	110	111	113	115	141	
Total Net Exports	2,602	2,631	2,730	2,843	2,901	2,962	3,005	3,060	3,103	3,152	3,220	
Net Importers												
European Union	2,225	2,390	2,397	2,377	2,453	2,543	2,643	2,742	2,877	3,014	3,189	
Rest of World	228	92	183	317	299	270	213	169	77	-11	-118	
Residual	149	149	149	149	149	149	149	149	149	149	149	
Total Net Imports	2,602	2,631	2,730	2,843	2,901	2,962	3,005	3,060	3,103	3,152	3,220	
	(U.S. Dollars per Metric Ton)											
CIF Lower Rhine Price	253	237	244	257	259	264	265	270	272	277	280	

# **Sunflower Meal Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	
Net Exporters					(Thousa	nd Metric	Tons)					
Argentina	2,180	2,314	2,331	2,390	2,461	2,510	2,565	2,611	2,666	2,716	2,769	
China	0	16	7	-1	1	2	1	1	-2	-7	-11	
Ukraine	280	272	271	269	266	262	259	253	273	246	240	
Total Net Exports	2,460	2,602	2,609	2,658	2,727	2,774	2,824	2,865	2,937	2,955	2,998	
Net Importers												
European Union	2,068	2,264	2,283	2,235	2,286	2,310	2,354	2,364	2,385	2,397	2,419	
Russia	-10	-18	-28	-12	2	13	18	23	20	22	42	
Other Former Soviet Union	156	161	155	154	157	162	169	174	179	183	188	
Rest of World	321	269	274	356	357	363	359	378	427	428	425	
Residual	-75	-75	-75	-75	-75	-75	-75	-75	-75	-75	-75	
Total Net Imports	2,460	2,602	2,609	2,658	2,727	2,774	2,824	2,864	2,937	2,955	2,998	
	(U.S. Dollars per Metric Ton)											
CIF Rotterdam Price	84	75	78	84	85	87	88	90	91	93	94	

# **Sunflower Oil Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	
Net Exporters					(Thousa	nd Metric	Tons)					
Argentina	1,640	1,790	1,792	1,837	1,896	1,933	1,977	2,011	2,054	2,092	2,134	
China	0	0	0	0	0	0	0	0	0	0	0	
European Union	96	32	93	128	133	171	196	249	292	358	437	
Ukraine	290	380	448	498	549	598	661	718	783	853	939	
Total Net Exports	2,026	2,203	2,333	2,463	2,579	2,703	2,833	2,978	3,129	3,303	3,510	
Net Importers												
Russia	140	124	150	186	211	226	233	237	239	239	244	
Other Former Soviet Union	165	177	174	172	171	170	166	163	159	154	149	
Rest of World	1,602	1,781	1,889	1,986	2,078	2,188	2,314	2,459	2,611	2,790	2,998	
Residual	119	119	119	119	119	119	119	119	119	119	119	
Total Net Imports	2,026	2,201	2,332	2,463	2,579	2,703	2,832	2,978	3,128	3,303	3,510	
	(U.S. Dollars per Metric Ton)											
FOB NW Europe Price	472	452	484	512	522	537	546	561	575	592	616	

# **World Palm Oil Complex Trade**

- Malaysia and Indonesia are the major producers of palm oil and related products, accounting for more than 75
  percent of total production. Among the major importing countries are China, the EU, and India.
- Indonesian and Malaysian palm oil production is expected to increase by 10 and 5 percent, respectively, in 1999/00. As a result, the palm oil net exports will increase by 6.4 percent and 16.7 percent in Indonesia and Malaysia, respectively, over the previous year.
- Indonesian palm oil production is expected to increase from 6.4 mmt in 1999/00 to 8.3 mmt by 2009/10, and net exports are projected to increase from 3.2 mmt in 1999/00 to 3.5 mmt by 2009/10.
- Malaysian palm oil production is expected to increase from 10.2 mmt in 1999/00 to 12.5 mmt by 2009/10, and net exports are projected to increase from 3.2 mmt in 1999/00 to 3.5 mmt by 2009/10.
- Palm oil imports receive more favorable treatment than other vegetable oils in China, since palm oil is not produced domestically and does not directly compete with domestically produced soft oils. Palm oil imports in China are expected to increase by 4 percent in 1999/00, and they are projected to increase from 1.3 mmt in the current year to 2.2 mmt by 2009/10
- The EU accounts for almost all world trade in palm kernel meal and is expected to import an additional 470 tmt of meal by the end of the period. Its palm oil imports are expected to increase by 528 tmt by 2009/10.

# Palm Trade

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Palm Oil											
Net Exporters					(Thousa	and Metric	Tons)				
Malaysia	8,500	9,047	8,889	9,098	9,309	9,555	9,741	9,925	10,095	10,281	10,465
Indonesia	3,150	2,079	2,350	2,547	2,614	2,707	2,852	3,003	3,177	3,351	3,544
Total Net Exports	11,650	11,126	11,239	11,645	11,922	12,263	12,593	12,927	13,272	13,632	14,009
Net Importers											
China	1,300	1,504	1,624	1,677	1,735	1,804	1,875	1,949	2,028	2,113	2,202
European Union	1,957	2,029	2,066	2,132	2,170	2,218	2,266	2,312	2,366	2,417	2,485
Rest of World	5,849	6,108	6,063	6,351	6,532	6,756	6,967	7,181	7,394	7,618	7,837
Residual	1,485	1,485	1,485	1,485	1,485	1,485	1,485	1,485	1,485	1,485	1,485
Total Net Imports	10,591	11,126	11,239	11,645	11,922	12,263	12,593	12,927	13,272	13,632	14,009
Palm Kernel Meal											
Net Exporters											
Malaysia	1,476	1,530	1,579	1,632	1,662	1,700	1,729	1,764	1,794	1,825	1,855
Indonesia	785	530	824	865	871	880	886	895	893	884	868
Rest of World	23	10	16	29	27	30	27	30	30	31	31
Total Net Exports	2,284	2,070	2,419	2,526	2,560	2,609	2,643	2,689	2,717	2,739	2,754
Net Importers											
European Union	2,284	2,070	2,419	2,526	2,560	2,609	2,643	2,689	2,717	2,739	2,754
Residual	0	0	0	0	0	0	0	0	0	0	0
Total Net Imports	2,284	2,070	2,419	2,526	2,560	2,609	2,643	2,689	2,717	2,739	2,754
Palm Kernel Oil											
Net Exporters											
Malaysia	470	573	594	594	599	602	602	602	599	595	590
Indonesia	520	512	567	571	584	586	601	613	628	640	655
Total Net Exports	990	1,085	1,162	1,165	1,182	1,188	1,204	1,214	1,227	1,235	1,245
Net Importers											
European Union	507	579	624	654	675	689	700	709	716	723	729
Rest of World	384	407	439	411	409	399	404	406	412	413	416
Residual	99	99	99	99	99	99	99	99	99	99	99
Total Net Imports	990	1,085	1,162	1,165	1,182	1,188	1,204	1,214	1,227	1,235	1,245
CIF Rotterdam Prices					(U.S. Dolla	ars per Me	etric Ton)				
Palm Oil	412	378	403	411	426	439	453	468	484	499	514
Palm Kernel Oil	503	450	464	462	477	489	503	518	533	548	563
Palm Kernel Meal	76	67	70	77	78	80	81	83	84	86	88

#### **World Peanut Trade**

- World area under peanuts is projected to grow by 336 thousand hectares in the coming decade, increasing the total production to 29.7 mmt by 2009/10.
- One unique characteristic of the peanut sector is that a large amount of the production (nearly 50 percent) is consumed directly as food or in confectionery products. In addition, most of the production is either consumed or processed domestically and only about 6 to 7 percent of the total production is traded globally.
- China is the largest peanut producer and is expected to produce 12.3 mmt from 4.3 mha in 1999/00. The area is projected to increase by 285 thousand hectares, and production increases by 2.7 mmt by the end of the projection period.
- India ranks first in world harvested peanut area. However, due to extremely low productivity, total output is only 6 mmt in 1999/00.
- The EU is, by far, the largest importer of all peanut products and is expected to remain so over the projection period.
- About half of Chinese peanut output is used in direct food consumption and the other half for crush. Total Chinese meal and oil production is expected to increase by 21 percent and 24 percent, respectively. Trade in both meal and oil is negligible.
- Unlike China, most peanuts in India (80 percent) are processed for oil to meet the growing domestic demand for vegetable oils.

## **Peanut Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Peanut											
Net Exporters					(Thousa	nd Metric	Tons)				
China	350	415	425	429	429	429	427	426	424	421	419
India	41	42	43	44	45	46	48	49	50	51	52
United States	293	366	355	361	358	356	354	353	352	351	349
Total Net Exports	684	823	823	833	833	831	829	827	825	823	821
Net Importers											
European Union	479	485	482	480	480	479	479	478	477	476	475
Rest of World	160	293	295	309	308	307	305	305	303	302	301
Residual	45	45	45	45	45	45	45	45	45	45	45
Total Net Imports	684	823	823	833	833	831	829	827	825	823	821
Peanut Meal											
Net Exporters											
China	0	36	41	43	43	43	42	41	40	39	37
India	40	40	40	40	40	40	40	40	40	40	40
United States	11	11	7	7	7	5	4	3	2	1	0
Total Net Exports	154	165	163	158	157	155	154	153	152	150	149
Net Importers											
European Union	154	165	163	158	157	155	154	153	152	150	149
Rest of World	-81	-57	-53	-46	-45	-45	-46	-47	-47	-48	-50
Residual	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22
Total Net Imports	154	165	163	158	157	155	154	153	152	150	149
Peanut Oil											
Net Exporters											
United States	5	5	5	5	5	4	4	4	4	4	4
Rest of World	156	161	152	134	128	125	126	126	128	130	132
Total Net Exports	161	167	156	150	148	145	143	141	138	135	135
Net Importers											
China	0	5	2	-11	-15	-15	-13	-10	-6	-1	5
European Union	120	121	114	109	107	104	102	100	97	94	90
Residual	41	41	41	41	41	41	41	41	41	41	41
Total Net Imports	161	167	156	150	148	145	143	141	138	135	135

# **World Rice Trade**

- World rice area is projected to decline throughout the projection period from 153.7 to 152.4 mha, mainly because of competition from other cash crops and urbanization. World rice production is projected to increase by 40 mmt in the next 10 years, an increase of 10 percent, even with declining area.
- World rice consumption is projected to grow closely with production. Rice consumption around the world has been changing both in traditional and non-traditional rice consuming regions. Income growth and urbanization is shifting consumption to wheat in traditional rice consuming regions, particularly in Asian countries. On the other hand, per capita consumption has been increasing in poor African countries and non-traditional consuming regions such as United States, the EU, and Canada.
- World rice trade, which accounts for less than 5 percent of world production, is expected to increase by 5 mmt, an increase of 20 percent. Even with a 20 percent increase in trade, the world rice market is likely to remain a sensitive market, where even slight changes in the supply and demand situation in rice exporting and importing countries can have wide fluctuations in world rice prices.
- Asia, the primary rice producing and consuming region, is projected to supply most of the expanded import markets. Thailand and Vietnam, the two largest rice exporters in the world, are projected to capture more than 60 percent of the expanded market.
- In addition to Thailand, other Asian countries, such as Vietnam, India, and Pakistan, also expand their rice exports during the projection period. Vietnam has transformed itself from being an importer to the second largest exporter in the last decade. Vietnamese rice area, which has been growing in the last decade, is projected to be flat in the next 10 years because of competition from other crops and loss of rice area due to urbanization. Production increase through yield growth will rise more than consumption, expanding exports from 3.5 to 4.6 mmt in the next 10 years.
- Similar to Vietnam, Indian rice production primarily grows through yield growth with relatively flat area. Indian rice exports slow down slightly in the short run mainly because of rising consumption. However, as income grows, per capita rice consumption is projected to decline during the second half of the projection period, enabling India to expand its exports to 2.8 mmt by 2009/10.
- Unlike Vietnam and India, rice is not a staple food in Pakistan. Per capita rice consumption in Pakistan is only 17 kg and is not likely to expand in the future. Thus, most of the additional production will find its way through the export market, increasing its exports from 2 to 2.3 mmt.
- Other Asian exporters include China, Taiwan, and Myanmar, which account for a small proportion of total Asian exports. Chinese rice area is projected to decline throughout the projection period because of competition from other crops. Per capita urban consumption is projected to continue to decline with a rise in income, whereas rural per capita consumption grows at a slower pace as income rises. Slower consumption growth enables China to remain a small net exporter of rice throughout the projection period, even with declining area.
- U.S. rice area is projected to decline slightly in the next decade and production grows mostly through yield growth. Strong growth in domestic uses from steadily rising per capita consumption and slow production growth cause exports to decline to 2 mmt by 2009/10.
- MERCOSUR has enabled Argentina and Uruguay to expand their rice exports to Brazil because of dutyfree access to the Brazilian market. This is likely to continue in the future as the lower cost of production

in Argentina and Uruguay keeps Brazilian rice area in its declining trend. Over the projection period, Argentine and Uruguayan rice exports increase by more than 30 and 50 percent, respectively.

- Indonesian rice imports declined to 3 mmt in 1999/00 as compared to 6 mmt in 1997/98 as production returns to normal levels. Growing domestic demand arising from rising per capita consumption and higher population growth are likely to outpace domestic supply, requiring Indonesia to increase its imports by more than 1.6 mmt in the next 10 years.
- Under GATT minimum-access commitments, Japan and South Korea have agreed to import a minimum specified amount of rice. With declining per capita consumption, Japan and South Korea will have to reduce domestic production to accommodate imported rice.

# **Rice Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Millio	n Metric T	ons)				
Argentina	0.50	0.46	0.46	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.67
China	2.45	2.62	2.69	2.76	2.62	2.26	1.92	1.67	1.52	1.45	1.43
India	1.50	1.64	1.26	1.15	1.33	1.68	2.01	2.29	2.52	2.69	2.84
Myanmar (Burma)	0.10	0.27	0.31	0.33	0.35	0.35	0.36	0.37	0.37	0.43	0.60
Pakistan	2.00	2.35	2.19	2.22	2.24	2.26	2.28	2.29	2.31	2.33	2.35
Taiwan	0.15	0.25	0.22	0.22	0.23	0.25	0.27	0.30	0.33	0.36	0.39
Thailand	5.80	6.15	6.59	6.67	6.76	6.85	6.94	7.03	7.13	7.23	7.33
United States	2.26	2.58	2.64	2.65	2.54	2.45	2.38	2.30	2.21	2.13	2.04
Uruguay	0.74	0.76	0.78	0.80	0.83	0.85	0.89	0.93	0.98	1.04	1.10
Vietnam	4.10	4.26	4.40	4.55	4.70	4.86	5.02	5.19	5.36	5.53	5.70
Total Net Exports	19.59	21.34	21.55	21.85	22.10	22.36	22.65	22.98	23.37	23.85	24.46
Net Importers											
Brazil	1.20	1.44	1.40	1.36	1.30	1.23	1.15	1.07	0.99	0.91	0.90
European Union	0.41	0.21	0.19	0.23	0.27	0.31	0.35	0.39	0.44	0.48	0.52
Indonesia	3.00	3.27	3.11	3.22	3.35	3.51	3.69	3.90	4.13	4.38	4.65
Japan	0.32	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Phillippines	0.85	0.95	1.32	1.50	1.63	1.70	1.74	1.77	1.80	1.82	1.84
Saudi Arabia	0.72	0.79	0.83	0.86	0.90	0.93	0.95	0.98	1.01	1.04	1.07
South Korea	0.11	0.10	0.13	0.15	0.18	0.21	0.21	0.21	0.21	0.21	0.21
Rest of World	11.69	12.60	12.60	12.55	12.50	12.51	12.57	12.68	12.84	13.05	13.31
Residual	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Total Net Imports	19.59	21.34	21.55	21.85	22.10	22.36	22.65	22.98	23.37	23.85	24.46
Rice Prices					(U.S. Dolla	ars ner Me	etric Ton)				
FOB Bangkok 100% B Grade	240.00	247.84	259.33	269.33	276.85	283.04	290.64	297.38	303.86	309.41	314.81
FOB Bangkok 15% Broken	218.00	225.25	235.88	245.14	252.09	257.82	264.85	271.09	277.08	282.21	287.21
FOB U.S. Houston	306.22	323.86	338.41	351.20	360.90	368.83	378.53	387.35	395.73	403.00	410.06

#### **World All-Cotton Trade**

- Net cotton trade rebounded to 3.9 mmt in 1999/00 from last year's volume of 3.5 mmt. Some renewed strength in Brazilian and Asian markets can be seen as the areas continue to recover from the economic troubles of 1998.
- The United States saw its share of world net trade rebound in 1999/00 to 35 percent from 24 percent the previous year, the lowest share of trade in 10 years. The improvements in trade share, coupled with an expanding world trade market, result in an increase in U.S. net trade from 0.9 mmt in 1999/00 to 1.4 mmt in 2000/01.
- World cotton prices continue their downward slide with the A-index averaging \$1,044 per metric ton in 1999/00, a decline of \$547 per metric ton over the last two seasons. While prices are expected to rebound in 2000/01, prices over the projection period remain at the lower end of the historical price range.
- After a yield decline in 1999/00 that leads to lower available supplies for export, net exports out of Africa recover in the long term, expanding to 1.1 mmt.
- Australia showed a significant reversal in acreage growth in 1999/00, falling to 420 thousand hectares from 562 thousand hectares a year earlier. Acreage and production continue to decline into 2003/04 and then slowly recover, but never reach the acreage of the late 1990s. Conditions throughout the projection period clearly signal a softening of Australia's headlong expansion into cotton that occurred in the second half of the 1990s.
- After a rebound in consumption in 2000/01, world cotton consumption grows slowly during the first half of the projection period. Consumption growth exceeds 1 percent in the second half of the projection period, only then outpacing growth in population.
- Consumption growth during the projection period occurs primarily in countries with large cotton production, such as Australia, India, and Pakistan. However, projected production outpaces the growth in demand, leading to additional exports. Consumption growth in Asia's traditional importers remains relatively flat or declines throughout the projection period.
- China became a net exporter of 235 tmt of cotton in 1999/00, further depressing world prices. The change in net trade position by China comes as a result of a significant reduction of stocks, with the country disposing of 553 tmt of stocks during the year. Although China becomes a net importer in 2000/01 and remains so throughout the projection period, China is expected to reduce stock holdings by an additional 613 tmt in 2000/01, which would leave it holding a quarter of the world's cotton stocks, even after such a significant reduction.
- Uzbekistan continues to hold area at the government's stated target area of 1.5 mha. With stabilized yields, production in 1999/00 is expected to reach 1.2 mmt and remain relatively stable throughout the projection period.

#### **All Cotton Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	nd Metric	Tons)				
Africa	918	1,006	1,057	1,081	1,091	1,094	1,095	1,093	1,091	1,089	1,085
Argentina	99	59	100	132	155	171	183	191	197	201	204
Australia	561	504	448	420	416	428	450	476	505	536	568
India	-61	-50	-47	-44	-41	-38	-36	-34	-32	-29	-27
Other Former Soviet Union	281	261	267	264	258	253	249	246	244	243	243
Other Latin America	-160	-165	-174	-178	-180	-182	-183	-185	-186	-188	-189
Other Middle East	222	178	173	174	174	173	174	174	174	174	174
Pakistan	15	114	108	125	133	132	126	117	107	93	76
Turkey	-243	-307	-314	-311	-306	-300	-295	-290	-285	-280	-275
United States	1,372	1,784	1,830	1,816	1,797	1,773	1,755	1,746	1,739	1,730	1,720
Uzbekistan	891	942	960	955	950	947	945	944	944	946	948
Total Net Exports	3,895	4,326	4,409	4,433	4,447	4,453	4,463	4,479	4,498	4,513	4,526
Net Importers											
Brazil	433	497	492	500	520	542	564	583	601	616	628
Canada	76	78	79	80	80	81	82	84	85	86	87
China	-235	77	176	211	212	196	168	136	98	56	10
Eastern Europe	249	249	244	237	231	226	222	219	216	212	208
European Union	590	533	522	506	492	476	463	450	436	421	403
Japan	273	277	279	279	277	275	272	268	263	258	252
Mexico	417	458	483	502	519	536	555	576	598	620	643
Other Asia	1,188	1,213	1,215	1,221	1,233	1,248	1,268	1,293	1,321	1,355	1,393
Other Western Europe	35	36	36	36	36	36	36	36	36	36	36
Russia	214	243	224	205	189	178	172	173	178	186	196
South Korea	341	343	337	333	331	330	330	330	330	330	329
Taiwan	314	323	323	324	326	328	330	333	336	338	340
Residual	0	0	0	0	0	0	0	0	0	0	0
Total Net Imports	3,895	4,326	4,409	4,433	4,447	4,453	4,463	4,479	4,498	4,513	4,526
Cotton Prices				(	U.S. Dolla	ırs per Me	tric Ton)				
Cotlook A Index * CIF Northern Europe	1,044	1,093	1,154	1,216	1,269	1,320	1,361	1,398	1,438	1,486	1,540
U.S. Farm Price	1,013	1,036	1,056	1,103	1,150	1,198	1,239	1,274	1,310	1,352	1,399

<sup>\*</sup> The "A" index is the average of the five lowest CIF Northern European quotes of the following descriptions (Middling 1-3/32"): Memphis; Calif./Ariz.; Mexican; Central American; Paraguayan; Turkish Izmir/Antalya; Central Asian; Pakistani 1503; Indian H-4; Chinese 329; African 'Franc Zone'; Tanzanian; Greek; and Australian. Source: Cotlook, Ltd., Liverpool, England.

## **World Sugar Trade**

- Higher world sugar production and flat import demand are projected to decline the raw sugar price in 1999/00 by more than 15 percent, relative to the 1998/99 level. Sugar price is expected to rise steadily throughout the projection period, rising by approximately 75 percent, which still is below the 1996/97 level.
- World sugar beet and sugarcane area are likely to increase throughout the projection period as consumers respond to lower prices. Sugar production increases from 133 mmt in 1999/00 to 152 mmt in 2009/10, an increase of 15 percent, both through area and yield. During the projection period, sugar trade is projected to increase by more than 3 mmt.
- Brazilian sugarcane area is projected to decline slightly in 2000/01 in response to lower prices, reducing exports by 0.8 mmt. However, in the long run, cane area is projected to continue to expand, mainly because of tax benefits and lower land prices, which helps Brazil maintain its position as the world's largest supplier.
- Problems in the Brazilian alcohol sector appear to be reconciled, which will likely pull more cane into alcohol production, especially during the short term as oil prices rise.
- Per capita sugar consumption is projected to continue to grow as consumers switch to more basic foodstuffs and local economies remain tight. Long term, the industrial use of sugar, which depends on income growth, is projected to strengthen as the Brazilian economy recovers from the recent crisis.
- Sugar exports for Brazil are projected to return to 1999/00 levels by the end of the projection period.
- Growth in Australian sugarcane area during the next decade is projected to continue, although at a slower rate
  than the previous decade. Recent investment in the infrastructure of the industry will be slowed because of low
  world prices.
- Australia's sugar production in 1998/99 was greatly reduced due to adverse weather conditions and recovered dramatically in 1999/00. Sugar production will continue to increase through area expansion and yield growth.
- Extensive marketing efforts by the Australian sugar industry has help slow the per capita decline in consumption. However, sugar consumption will not keep pace with population growth, leading to larger supplies available for export. Exports are projected to increase 0.6 mmt during the decade, with the majority going to Asia.
- Thailand's sugar industry is recovering from weather difficulties suffered in 1997/98 that reduced exports. Recovery has been slowed by liquidity problems within the industry and strong export competition from Brazil.
- Thai production is projected to increase by 0.7 mmt, and raw sugar exports increase by 0.5 mmt.
- Slow growth in consumption and competition from high-fructose corn syrup (HFCS) in the soft drink and food industries results in a build-up of Thai ending stocks.
- Although the largest sugar exporter in the world in the 1980s, Cuba has been reduced to an average exporter since the early 1990s. During this period, sugarcane area has increased, but yield has decline by more than 50 percent, resulting in sugarcane production declining by more than 50 percent.
- Credit availability continues to be a problem for this sector and has been primarily responsible for the yield decline. The Cuban government is hoping to stimulate investment through privatization, and more importantly, the U.S. government has recently proposed to expand commercial ties with Cuba, ties that were severed 25 years ago.

- If these things materialize, there is every possibility for Cuba to return to its old position in world sugar market. For the projection period, Cuban sugar exports are projected to reverse their downward trend and increase by more than 0.5 mmt.
- Increased oil prices have reduced the governmental deficit shortage, allowing for increased social expenditures, which has helped decrease liquidity problems within the Mexican sugar sector.
- Mexico's sugar production is projected to increase 0.9 mmt through the next decade in response to expected
  export growth. The sequential decrease in tariff rate quota (TRQ) under the North American Free Trade Agreement (NAFTA) allows increased availability into the U.S. market.
- The FSU accounts for a large share of world sugar imports. FSU sugar production has been adversely affected since its economic liberalization in the early 1990s, and imports have increased to fill domestic shortfall.
- Sugar production is projected to increase by 0.5 mmt in the projection period, but remains 55 to 65 percent lower than the per-liberalization level. Thus, demand growth in the FSU will be met by additional imports, which are projected to increase from 5.4 to 5.95 mmt.
- Behind Brazil, India and China are the second and third largest sugar producers, respectively, in the world. Despite their status as large producers, they play a relatively insignificant role in the world sugar market. China is projected to be a small importer and India a small exporter of sugar during the projection period.

# **Sugar Trade**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	270	150	157	176	205	231	262	289	317	347	378
Australia	4,198	4,228	4,261	4,319	4,391	4,467	4,542	4,616	4,689	4,762	4,836
Brazil	9,500	8,734	8,895	9,001	9,106	9,269	9,388	9,442	9,464	9,461	9,490
Columbia	912	949	937	935	941	950	964	971	982	997	1,016
Cuba	2,500	2,600	2,683	2,768	2,850	2,927	3,005	3,084	3,164	3,247	3,324
European Union	4,286	3,733	3,788	3,800	3,813	3,846	3,884	3,927	3,973	4,022	4,075
India	-150	100	186	259	247	196	164	138	140	116	100
Mexico	900	926	960	996	1,032	1,069	1,112	1,160	1,208	1,261	1,314
Pakistan	200	319	410	441	457	466	479	492	505	521	538
South Africa	1,270	1,250	1,253	1,273	1,295	1,322	1,352	1,383	1,416	1,451	1,486
Thailand	3,400	3,529	3,638	3,727	3,799	3,857	3,896	3,927	3,953	3,976	4,000
Total Net Exports	27,286	26,516	27,168	27,694	28,136	28,600	29,048	29,430	29,811	30,159	30,558
Net Importers											
Algeria	950	953	963	974	988	1,003	1,019	1,034	1,049	1,064	1,079
Canada	1,094	1,125	1,150	1,172	1,193	1,213	1,231	1,247	1,262	1,275	1,287
China	40	190	401	498	528	480	509	468	402	405	401
Eastern Europe	626	639	671	717	764	813	844	865	876	871	857
Egypt	765	758	902	841	836	844	854	865	878	889	901
Former Soviet Union	5,431	5,498	5,526	5,592	5,639	5,688	5,738	5,790	5,843	5,898	5,953
Indonesia	1,600	1,498	1,605	1,645	1,687	1,749	1,807	1,855	1,901	1,932	1,956
Iran	1,300	1,216	1,312	1,362	1,404	1,443	1,481	1,519	1,558	1,595	1,638
Japan	1,566	1,470	1,453	1,437	1,425	1,412	1,399	1,384	1,368	1,351	1,333
Malaysia	1,110	1,127	1,140	1,159	1,183	1,212	1,240	1,268	1,297	1,325	1,352
Morocco	450	484	489	493	494	503	517	532	547	561	578
Peru	190	358	372	384	392	399	407	419	431	443	455
Philippines	150	146	166	174	186	199	211	220	231	241	252
South Korea	1,180	1,187	1,292	1,312	1,340	1,376	1,409	1,440	1,471	1,496	1,520
Turkey	-390	143	111	135	134	157	146	148	158	150	175
United States	1,442	1,402	1,428	1,589	1,689	1,737	1,798	1,872	1,960	2,049	2,136
Venezuela	69	53	65	69	64	59	52	47	43	36	30
Rest of World	5,304	4,865	4,716	4,731	4,785	4,905	4,979	5,049	5,128	5,169	5,249
Total Net Imports	27,286	26,516	27,168	27,694	28,136	28,600	29,048	29,430	29,811	30,159	30,558
Sugar Prices					(U.S. Dolla	ars per Me	etric Ton)				
FOB Caribbean Price	135	141	168	189	205	209	215	220	224	232	240
New York Spot	487	484	484	486	487	489	490	491	493	495	496

#### **World Beef and Veal Trade**

- U.S. beef exports are projected to rise 5 percent annually over the next decade. In 2002, the United States becomes the world's largest beef exporter, as well as remaining the largest beef importer. By 2004, beef exports surpass imports, and U.S. net exports of beef are projected to increase throughout the remainder of the projection period.
- Contraction of Canadian cattle inventories and the imposition of anti-dumping duties reduced Canadian live cattle exports to the United States by 25 percent in 1999. Canadian live cattle exports to the United States are projected to remain below 1 million head for the next decade.
- Beef consumption in Mexico is projected to grow at an average rate of 1.9 percent annually over the next decade. Drought conditions in northern Mexico reduced Mexican cattle herds and beef production in 1999.
   Production and inventories are not expected to recover until 2003, making room for beef imports to rise sharply during the next three years.
- Weak demand and excess supplies prompted a more than 10 percent decline in Argentine beef prices in 1999. Beef production in Argentina is projected to decline slightly in 2000 before resuming growth at a rate of 1.3 percent annually.
- Argentina is expected to achieve FMD-free status in 2000, and Argentine beef exporters are projected to
  gradually make inroads into Asian markets, which have been previously closed to Argentina. Argentine beef
  exports are projected to rise 45.8 percent by 2009.
- The EU's elimination of the early processing scheme for calves in 1999 is expected to increase calf slaughter by 700,000 head in 2000. The average calf slaughter weight is expected rise gradually by 2.2 percent. Removal of the over-thirty-month scheme in 2001 allows cull cow slaughter to enter the beef marketing chain, increasing beef production by roughly 44 tmt in 2002.
- Implementation of the Berlin Accord reforms of the CAP lowers EU beef intervention prices in 2000 and 2001. Dramatic reductions in beef stocks in 1999 lower beef supplies in 2000 by 275 tmt, prompting beef prices to rise rather than fall.
- Russian beef imports drop more than 25 percent in 2000, reflecting the elimination of food aid supplied by the EU and the United States. Low productivity and quality feed shortages cause Russian beef output to decline an average of 3.5 percent annually until 2006. Beef consumption declines more slowly than production, causing beef imports to rise more than 8 percent annually until 2005.
- Both Wagyu and dairy beef production are expected to decline gradually in Japan, opening the door for more imported beef to satisfy growing consumption. Japanese beef imports reach 1.2 mmt by 2009.
- The liberalization of Korea's beef marketing system in 2001 is projected to increase beef imports, but levels are expected to remain below 300 tmt.
- Australia's live cattle exports to Asian countries dropped nearly 50 percent in 1998 due to the Asian financial crisis, but live cattle exports rebounded to more than 700,000 head in 1999. Australian beef exports remain stable at 1.2 mmt, but cattle exports are projected to increase to more than 1 million head by 2008.

## **Beef and Veal Trade**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Net Exporters					(Thousa	nd Metric	Tons)				
Argentina	332	342	379	397	413	424	433	444	457	479	487
Australia	1,217	1,219	1,218	1,229	1,239	1,248	1,252	1,253	1,245	1,234	1,219
Brazil	445	461	469	474	478	478	476	474	474	480	488
Canada	215	215	213	216	229	240	246	247	250	265	279
China - Mainland	65	83	85	80	71	58	44	34	26	22	18
European Union *	596	442	450	462	465	464	459	455	452	453	456
Hungary	8	7	7	6	4	3	1	-1	-2	-3	-4
Lithuania	5	6	12	13	13	11	9	7	6	5	5
New Zealand	418	434	447	456	464	470	471	472	470	469	466
Other Eastern Europe	0	6	8	9	8	5	2	-2	-5	-8	-10
Poland	24	29	28	23	18	14	10	7	6	5	5
Slovenia	3	3	3	3	3	3	2	2	2	1	1
Thailand	1	1	1	1	1	1	1	1	1	1	1
Ukraine	78	66	55	44	37	32	29	27	26	26	26
United States	-228	-277	-210	-103	-39	74	205	325	417	440	468
Total Net Exports	3,177	3,037	3,164	3,309	3,404	3,525	3,641	3,745	3,823	3,868	3,906
Net Importers											
Bulgaria	22	19	19	20	21	23	25	27	29	30	31
China - Hong Kong	48	48	49	50	51	53	55	57	59	61	62
Czech Republic	0	3	7	11	14	17	19	21	23	23	22
Estonia	1	1	1	1	1	1	2	2	3	3	4
Indonesia	12	14	16	18	20	23	26	30	33	35	37
Japan	972	966	981	998	1,013	1,040	1,072	1,110	1,141	1,153	1,157
Latvia	1	2	2	2	2	2	3	3	4	4	4
Mexico	223	307	360	420	429	431	415	402	393	394	408
Other Former Soviet Union	113	92	114	115	106	97	88	81	73	85	101
Philippines	75	71	75	81	88	97	107	116	123	128	131
Romania	1	1	1	2	2	3	4	4	5	5	5
Russia	495	364	408	455	499	534	554	562	564	561	558
Slovakia	-2	-1	-1	-1	0	0	0	1	1	1	2
South Korea	180	208	227	243	256	266	275	281	286	291	296
Taiwan	88	93	96	100	105	110	116	122	128	134	139
Rest of World	949	849	809	794	796	828	879	924	957	960	949
Total Net Imports	3,177	3,037	3,164	3,309	3,404	3,525	3,641	3,745	3,823	3,868	3,906
Nebraska Direct					(U.S. Dolla	ırs per Me	tric Ton)				
Fed Steer Price	1,445	1,544	1,625	1,666	1,679	1,644	1,577	1,518	1,481	1,492	1,526

<sup>\*</sup> Includes meat and meat equivalent of live cattle trade.

# **World Pork Trade**

- World pork output is projected to reach 83.4 mmt by 2009, an increase of 16.4 percent over 1999 levels. Nearly 69 percent of the total increase in world pork output is projected to occur in China.
- World pork trade is projected to grow 32 percent in the next decade. Low-cost feed and capital inputs coupled with high productivity enable the United States to capture 58 percent of the growth in international markets. The U.S. share of total pork trade increases from 9.3 percent in 1999 to 22.3 percent in 2009.
- New meat packing facilities in Canada siphon hogs away from live hog exports to the United States, decreasing Canadian live trade by nearly 50 percent in 2000. Consequently, Canadian pork exports increase by nearly 300 tmt over the next four years. As U.S. pork prices decline after 2003, Canadian pork exports contract but remain well above 1999 levels.
- In response to the outbreak of classical swine fever (CSF) in the Netherlands in 1997, pork production increased in several European countries in 1998. Dutch producers recovered quickly from the CSF outbreak, and EU pork output expanded an additional 1.8 percent in 1999, despite low producer prices.
- In 1998 more than 53 percent of the EU's pork exports were unsubsidized. As WTO limitations reduce subsidized exports, the high quality of EU pork enables unsubsidized shipments to grow, with total pork exports reaching 1.3 mmt by 2009.
- From its peak of 284 tmt in 1997, Polish pork exports fell 57 percent over the last two years as a consequence of the decline in Russian imports and competition from EU subsidized exports. Economic recovery in Russia and other Newly Independent States (NIS) countries boost the demand for Polish pork, but growth in domestic pork consumption keeps export growth to just below 1 percent annually.
- Following the onset of the economic crisis, Russian pork imports declined 125 tmt in 1998, and they shrank an additional 25 tmt in 1999. Low productivity and profitability in the Russian livestock sector continues to discourage producers from expanding inventories or production. Consumption is projected to decline more slowly than output, opening the door for a substantial increase in Russian pork imports during the next five years. Pork imports level off at roughly 575 tmt as production recovers in 2004.
- A 1.4 percent increase in Japanese pork production is projected to dampen imports in 2000. However, over the long run, Japanese pork production is expected to resume the downward trend of the 1990s. Pork imports rise an average of 3.2 percent each year after 2000, exceeding 1 mmt in 2008.
- Per capita pork consumption in Mainland China grows 22 percent in the next 10 years, reducing the supply of pork available for export after 2000. Consequently, Chinese pork exports contract 3 percent each year. Strong domestic demand for pork raises Chinese hog prices, reducing live hog exports to Hong Kong. Pork imports into Hong Kong grow by 6 tmt annually, compensating for the decline in live hog imports and reach 275 tmt in 2009.

## **Pork Trade**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Net Exporters					(Thousa	nd Metric	Tons)				
Australia	0	1	0	-1	-2	-3	-4	-5	-6	-6	-8
Brazil	76	81	80	78	77	78	80	80	80	81	82
Canada	505	658	740	789	799	778	745	761	782	754	711
China - Mainland	92	99	92	85	79	73	68	63	58	55	51
European Union	1,250	1,075	1,087	1,109	1,114	1,136	1,175	1,172	1,146	1,205	1,260
Hungary	53	59	59	57	55	54	54	53	52	52	52
Latvia	3	3	3	3	3	3	3	2	2	2	2
Poland	80	114	123	124	123	122	122	123	124	125	127
Other Former Soviet Union	12	16	19	21	25	27	30	33	35	31	26
Thailand	1	1	1	1	1	1	1	1	1	1	1
United States	204	178	205	282	380	466	491	501	533	575	651
Total Net Exports	2,277	2,286	2,409	2,547	2,654	2,736	2,765	2,786	2,807	2,876	2,956
Net Imports											
Argentina	65	65	65	66	66	66	66	67	67	67	67
Bulgaria	1	-1	-2	-2	-2	-1	-2	-2	-2	-2	-2
China - Hong Kong	158	155	163	172	180	189	196	203	210	215	221
Czech Republic	12	10	13	12	12	14	14	13	13	13	12
Estonia	3	0	-1	0	0	1	1	1	2	2	2
Indonesia	0	0	0	0	0	0	0	0	0	0	0
Japan	814	795	824	860	896	935	946	959	971	1,011	1,059
Lithuania	2	1	1	1	1	1	1	1	1	1	1
Mexico	85	78	72	76	83	86	94	92	90	100	112
New Zealand	7	8	8	8	8	7	7	7	7	7	7
Other Eastern Europe	44	49	52	55	56	56	55	53	52	51	50
Philippines	13	12	14	15	15	15	15	16	17	17	17
Romania	15	13	16	20	23	25	25	25	25	26	25
Russia	349	389	456	520	559	574	573	570	571	572	576
Slovakia	32	33	35	38	39	41	41	42	44	44	45
Slovenia	16	16	17	18	19	20	20	21	22	22	22
South Korea	9	5	15	20	27	34	39	45	50	55	59
Taiwan	55	60	54	52	49	45	38	30	20	19	19
Ukraine	2	2	3	4	4	4	3	3	3	3	3
Rest of World	595	596	606	611	617	624	631	638	644	653	661
Total Net Imports	2,277	2,286	2,409	2,547	2,654	2,736	2,765	2,786	2,807	2,875	2,956
Iowa-Southern Minnesota				(	U.S. Dolla	rs per Me	tric Ton)				
Barrow and Gilt Price	750	842	934	960	943	895	855	931	1,001	951	884

## **World Poultry Trade**

- Over the next 10 years, per capita poultry consumption is projected to rise an average of 1.5 percent annually. World poultry production will grow briskly at 2.4 percent each year, and poultry net exports increase 3.2 percent annually.
- Total poultry output increases 27 percent over the projection period. The United States remains the world's largest poultry producer, generating roughly 41 percent of world output.
- Broiler trade increases 37 percent from 1999 to 2009 for a total increase of more than 1.3 mmt. More than 37 percent of growth in net imports occurs in China and Japan, with additional imports by each country in excess of 250 tmt by 2009.
- U.S. exporters capture 83 percent of the increase in world broiler imports over the next decade, and Brazil secures an additional 188 tmt of exports. Abundant grain supplies and high productivity give both countries an advantage over competitors in Europe and East Asia.
- Mexican output of poultry meat climbs nearly 28 percent from 1999 to 2009; nevertheless, the complete liberalization of Mexico's broiler sector under NAFTA prompts broiler imports to rise by 50 tmt in 2003. Mexican net imports of broiler meat continue to increase 2.1 percent annually until 2009.
- Brazilian broiler exports expand an average of 2.4 percent annually; nevertheless, Brazil's share of total broiler trade declines from 19 percent in 1999 to 17.5 percent in 2009.
- EU broiler production was stagnant from 1997 to 1999; however, lower grain prices following the implementation of the Berlin Accord stimulate a 5 percent increase in broiler production from 1999 to 2002. EU broiler consumption and production grow an average of 1.1 percent annually over the projection period, limiting growth in EU broiler exports to 6.3 percent over the 10-year period.
- Russian broiler production began expanding in 1998, and output is projected to continue to increase at a rate of 2.9 percent annually throughout the next decade. As the Russian economy recovers, consumer purchases of broiler meat increase, and broiler imports gradually rise to 544 tmt by 2009.
- Chinese poultry output is projected to increase 64 percent over the next decade. Growth in poultry consumption, however, outstrips production and imports rise to more than 1 mmt by 2006. Hong Kong's net broiler imports also rise over the projection period, increasing a total of 99 tmt.
- The dramatic depreciation of the Thai Baht in 1997 and 1998 allowed Thailand's broiler exports to shoot up 47 percent in 1998. With a more gradual rate of depreciation, Thai broiler exports are projected to grow a modest 1.4 percent annually over the next decade.

## **Broiler Meat Trade**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Net Exporters	_	_	_		(Thousa	nd Metric	Tons)	_	_	_	
Australia	12	11	10	9	. 8	8	7	7	7	6	6
Brazil	700	737	753	765	778	797	816	835	853	870	888
European Union	538	529	538	545	548	552	556	562	567	572	577
Hungary	55	54	49	46	43	41	39	37	36	34	33
Slovenia	5	3	1	0	-1	-2	-3	-4	-4	-5	-6
Thailand	273	292	294	294	294	296	299	302	306	309	312
United States	2,099	2,129	2,256	2,411	2,601	2,732	2,835	2,927	3,019	3,132	3,249
Total Net Exports	3,682	3,753	3,902	4,070	4,272	4,423	4,549	4,667	4,784	4,919	5,059
Net Importers											
Argentina	35	37	37	40	42	44	45	46	47	48	50
Bulgaria	9	9	9	10	11	11	11	12	12	12	13
Canada	16	16	19	25	28	29	30	32	34	36	37
China - Mainland	499	499	527	553	582	617	649	678	707	736	766
China - Hong Kong	288	291	299	310	323	336	347	358	367	377	387
Czech Republic	5	6	7	8	10	11	12	13	13	14	15
Estonia	16	17	17	18	19	20	20	21	22	23	23
Indonesia	0	0	0	0	0	0	0	0	0	0	0
Japan	527	556	590	626	656	683	702	721	739	761	784
Latvia	12	14	14	15	15	16	16	17	17	18	18
Lithuania	9	9	8	9	10	10	11	11	11	12	12
Mexico	128	130	134	140	192	197	200	203	206	210	213
Other Eastern Europe	43	45	46	47	47	47	47	46	46	46	47
Other Former Soviet Union	84	85	84	84	83	83	82	81	80	84	90
Philippines	22	21	22	24	26	27	28	30	31	32	33
Poland	18	19	21	23	26	28	29	30	31	32	33
Romania	29	36	41	47	51	54	57	59	61	63	65
Russia	495	482	496	510	518	523	526	527	528	530	533
Saudi Arabia	245	246	242	241	240	239	237	233	230	230	230
Slovakia	0	1	1	1	1	1	1	2	2	2	2
South Korea	38	26	32	39	47	56	63	71	80	90	101
Taiwan	18	17	19	20	21	23	24	26	27	29	30
Ukraine	34	38	41	44	47	48	49	51	52	53	55
Rest of World	1,112	1,155	1,194	1,236	1,278	1,320	1,361	1,400	1,440	1,480	1,520
Total Net Imports	3,682	3,753	3,902	4,070	4,272	4,423	4,549	4,667	4,784	4,919	5,059
					(U.S. Dolla	ırs per Me	tric Ton)				
U.S. 12-City Price	1,281	1,260	1,265	1,256	1,243	1,233	1,227	1,229	1,231	1,230	1,230

## **World Dairy Trade**

- International prices for all four major dairy products declined between 11 and 22 percent from 1998 to 1999. Butter, NFD, and whole milk powder (WMP) prices are projected to dip slightly in 2000 before gradually increasing toward 1998 levels. The FOB Northern European price for cheese rises 13 percent from 1999 to 2001 due to strong demand in Asia and Latin America.
- After stagnating in the 1990s, milk production in modeled countries increases 12.2 percent in the next decade, primarily through increased yield per cow. India, the United States, and Brazil account for 48 percent of the 47.4 mmt increase. Fluid milk consumption only rises 17.4 mmt, so most of the production increase is channeled into manufactured dairy products.
- Berlin Accord reforms in the dairy sector entail a 15 percent decline in butter and NFD intervention prices from 2005 to 2007. Simultaneously, the milk quota will be raised 1.5 percent in all member countries. Increasing milk production, while lowering market support, causes EU butter and NFD prices to fall 12.7 and 10.7 percent, respectively, from 2004 to 2008. Likewise, rising output prompts cheese and WMP prices to decline by 8 and 9.6 percent, respectively.
- Butter production is projected to increase 21 percent by 2009, with 80 percent of that growth occurring in India. Production of NFD and WMP grows more modestly, rising 6.7 and 18.1 percent, respectively.
- Russian butter imports fell to 70 tmt in 1999. As the Russian economy strengthens, butter imports will recover slightly and stabilize at 110 tmt. Butter imports by the rest of the world (ROW), which includes most of Asia, Africa, and Latin America, grow 2 percent annually.
- More than 90 percent of butter exports were supplied by Australia, New Zealand, and the EU in 1999. Moderate growth in North American and Eastern European butter exports reduces the share of the major three exporters to 85 percent in 2009.
- Economic recovery in Eastern Europe, Brazil, and Asia, along with stable growth in developed countries, spurs a 1 to 2 percent annual increase in per capita cheese consumption in most countries. Total output of cheese is projected to rise 2.6 mmt.
- Rising demand coupled with stagnant domestic production prompts a 43 percent increase in Japanese cheese imports over the projection period. Mexican cheese imports grow nearly fivefold to 120 tmt by 2009, while Russian imports rise slowly to 80 tmt.
- Cheese exports from Australia and New Zealand grow an average of 2.9 percent annually, allowing these countries to capture 43 percent of the total growth in exports. Argentine cheese exports increase 378 percent, reaching 96 tmt by 2009.
- Russian NFD imports rose sharply to 90 tmt in 1999, causing Russia to become a net importer of NFD. Mexican NFD imports are expected to grow 37 percent over the projection period
- NFD exports from Canada and the United States are projected to decline 28 tmt and 35 tmt, respectively, by 2009. The EU, Australia, and Poland expand NFD exports, compensating for the decline in North American exports, as well as 40 percent of the additional growth in NFD trade.
- WMP trade is projected to grow 17 percent over the next decade. Argentina, Australia, and New Zealand are able to supply the bulk of the increase in WMP exports.

# **Dairy Product Trade**

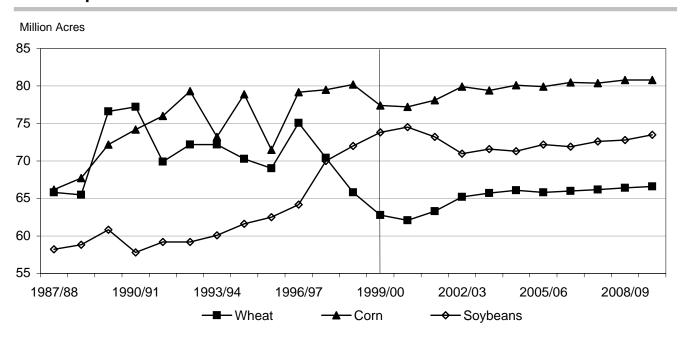
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Butter											
Net Exporters					(Thousa	nd Metric	Tons)				
Argentina	8	6	4	4	5	6	6	7	8	9	10
Australia	88	105	109	114	119	123	127	131	136	143	150
Canada	6	7	5	5	7	8	8	8	8	7	7
Czech Republic	28	27	28	28	29	30	30	30	30	31	31
European Union	101	92	100	100	98	100	107	113	116	115	114
Hungary	2	3	3	3	3	3	3	2	2	2	2
New Zealand	279	326	324	328	328	328	328	328	327	328	328
Poland	2	-1	2	1	0	2	4	6	8	11	15
Ukraine	9	9	10	9	10	10	10	11	11	11	11
United States	-7	-8	-4	-4	-2	1	2	3	5	6	7
Total Net Exports	516	564	580	588	597	608	624	639	652	663	676
Net Importers											
Brazil	11	10	10	10	9	10	10	10	9	9	8
India	4	2	3	-2	1	9	21	21	19	17	19
Japan	0	2	4	6	7	8	9	9	9	10	10
Mexico	23	21	17	15	13	12	10	9	8	6	5
Romania	1	1	1	1	1	1	1	1	1	2	2
Russia	62	78	95	102	103	99	95	97	98	100	101
Switzerland	5	4	3	3	2	2	2	2	1	1	1
Rest of World	410	447	446	453	460	468	476	490	505	518	529
Total Net Imports	516	564	580	588	597	608	624	639	652	663	676
Cheese											
Net Exporters											
Argentina	14	21	23	26	35	43	51	59	66	78	90
Australia	136	132	130	138	142	149	154	159	165	171	176
Czech Republic	3	4	3	1	-2	-3	-4	-4	-5	-6	-6
European Union	293	308	310	310	309	307	319	336	347	349	351
Hungary	8	13	15	15	16	16	16	16	15	15	16
New Zealand	240	246	268	282	290	299	305	309	314	319	323
Poland	14	16	12	10	8	6	5	5	6	5	4
Romania	0	-1	-2	-3	-4	-5	-5	-6	-7	-7	-8
Switzerland	30	36	37	38	40	41	43	44	45	47	49
Ukraine	2	-1	-2	-2	0	3	6	8	10	12	13
Total Net Exports	739	775	795	816	834	857	890	926	957	984	1,008
Net Importers											
Brazil	20	15	14	11	7	9	10	12	9	5	-1
Canada	0	-1	0	0	1	1	1	1	1	1	1
Japan	185	188	193	202	210	217	226	235	245	255	264
Mexico	25	35	35	44	55	63	75	86	98	109	120
Russia	40	42	52	54	53	53	57	62	67	72	77
United States	121	122	123	123	123	124	124	124	125	125	125
Rest of World	349	374	378	382	385	391	398	406	412	417	422
Total Net Imports	739	775	795	816	834	857	890	926	957	984	1,008

# **Dairy Product Trade (continued)**

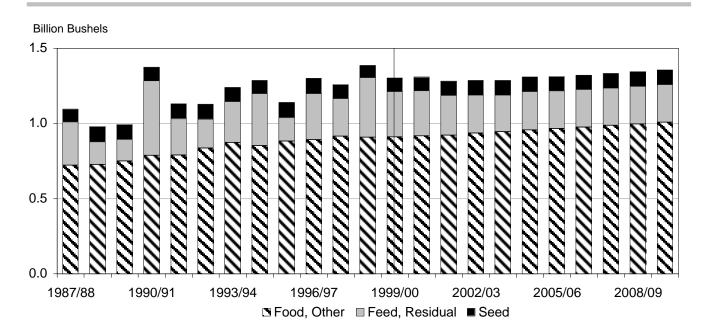
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Nonfat Dry Milk											
Net Exporters					(Thousa	ind Metric	Tons)				
Argentina	22	27	24	25	27	28	30	31	33	35	36
Australia	236	215	221	226	234	240	247	255	264	275	287
Canada	40	32	26	23	23	23	21	18	16	14	11
Czech Republic	26	24	25	26	29	30	30	31	32	34	35
European Union	167	167	173	181	190	194	201	204	204	197	190
Hungary	-1	0	0	0	0	0	0	0	0	0	1
India	1	7	11	12	12	13	14	13	12	12	11
New Zealand	205	214	213	217	218	217	216	215	215	215	216
Poland	91	92	105	94	93	96	100	105	111	117	124
Switzerland	4	3	3	4	4	4	4	5	5	5	5
Ukraine	15	15	15	15	16	16	17	18	19	19	20
United States	104	107	101	98	68	68	68	68	67	67	67
Total Net Exports	910	902	916	921	915	929	948	964	979	991	1,004
Net Importers											
Brazil	53	41	42	40	36	36	36	35	34	31	29
Japan	50	59	70	75	77	77	76	74	72	70	70
Mexico	140	145	148	151	155	161	167	173	180	186	193
Romania	12	12	13	13	14	14	14	15	15	15	15
Russia	88	84	85	86	80	74	68	64	61	59	56
Rest of World	567	560	557	556	553	567	586	603	618	630	641
Total Net Imports	910	902	916	921	915	929	948	964	979	991	1,004
Whole Milk Powder											
Net Exporters											
Argentina	125	135	136	138	141	146	152	158	164	170	176
Australia	137	141	139	140	143	148	153	159	165	172	178
European Union	517	513	503	505	507	508	511	517	518	518	519
New Zealand	362	358	388	402	416	427	435	443	450	457	463
Total Net Exports	1,141	1,148	1,166	1,185	1,206	1,228	1,251	1,276	1,298	1,317	1,336
Net Importers											
Brazil	121	96	111	115	120	117	114	111	109	107	106
Rest of World	1,020	1,053	1,055	1,070	1,086	1,111	1,137	1,165	1,189	1,210	1,230
Total Net Imports	1,141	1,148	1,166	1,185	1,206	1,228	1,251	1,276	1,298	1,317	1,336
FOB Price, Northern Europe					(U.S. Dolla	ars per Me	etric Ton\				
Butter	1,435	1,421	1,534	1,535	1,545	1,558	1,570	1,550	1,545	1,550	1,561
Cheese	1,909	2,075	2,164	2,172	2,193	2,185	2,172	2,151	2,160	2,179	2,196
Nonfat Dry Milk	1,301	1,311	1,362	1,396	1,442	1,429	1,423	1,429	1,447	1,476	1,501
Whole Milk Powder	1,564	1,558	1,618	1,629	1,646	1,429	1,423	1,429	1,662	1,680	1,697
VALIDIG IVIIIK FOWAGI	1,304	1,556	1,010	1,029	1,040	1,040	1,000	1,000	1,002	1,000	1,037

# U.S. CROPS

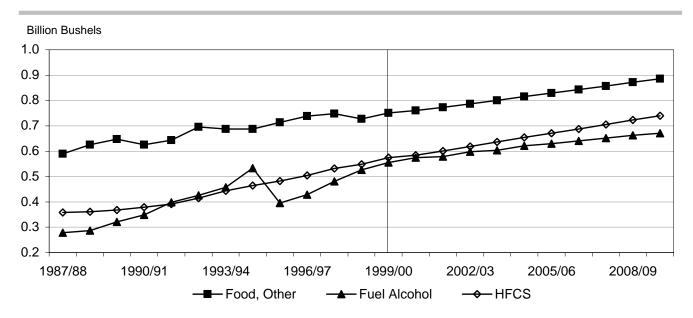
# **U.S. Crop Planted Area**



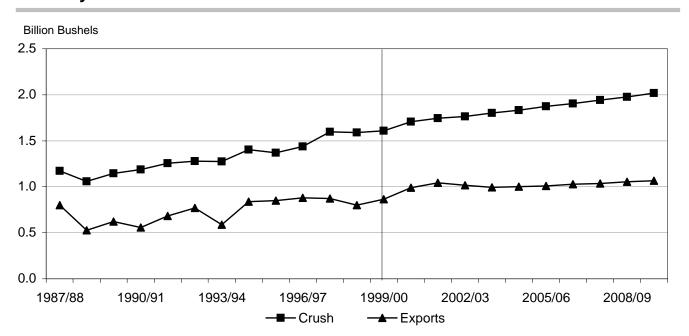
#### **U.S. Wheat Domestic Use**



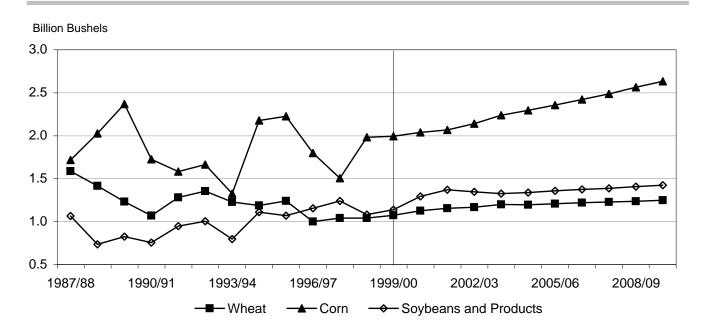
U.S. Corn
Food and Industrial Use



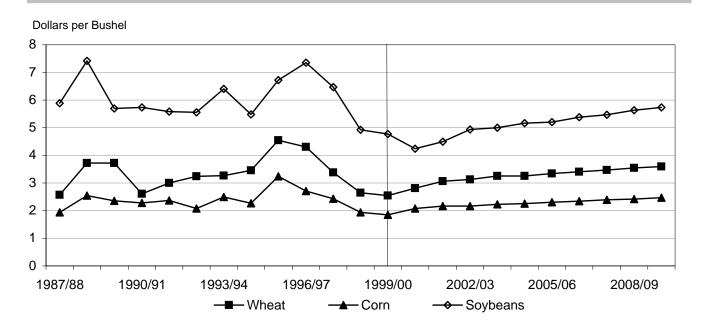
# U.S. Soybean Utilization



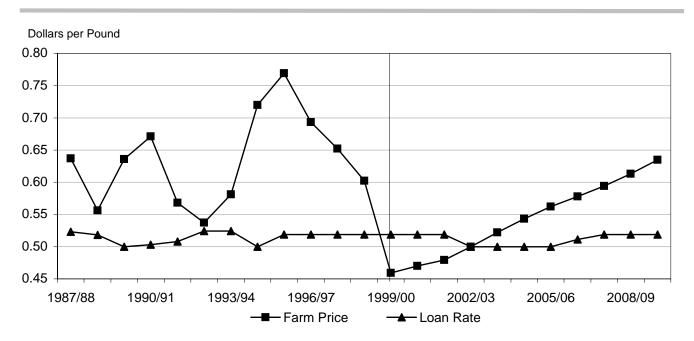
# **U.S. Crop Exports**



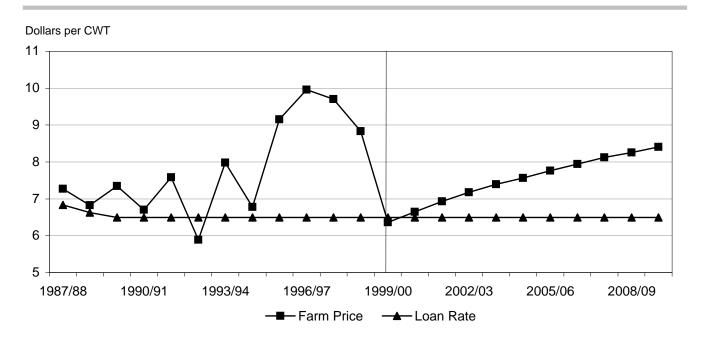
## **U.S. Crop Prices**



#### **U.S. Cotton Prices**



#### **U.S. Rice Prices**



#### U.S. Wheat

- Wheat planted area fell to 62.8 million acres in 1999/00. A further decline, down to 62.1 million acres, is expected for the 2000/01 crop. By 2009/10, wheat area planted is projected to grow to 66.6 million acres as prices recover.
- Wheat area enrolled in the Conservation Reserve Program (CRP) totaled 10 million acres for the 1997/98 marketing year. As contracts expired in calendar year 1998, the total wheat enrollment fell to 9.5 million acres and by 1999 hit 9.3 million acres. New enrollment starts with the 1999/00 marketing year, and by the final year of the baseline, wheat CRP area is 11 million acres.
- A new record was set in 1998/99 for wheat yields, as the national average hit 43.2 bushels per acre. For 1999/00, yields decreased to 42.7 bushels per acre. For the 2000 crop year, a trend-line yield of 40 bushels per acre is assumed. Longer term, yields rise with genetic improvement to 42.2 bushels per acre by 2009/10.
- Increased beginning stocks pushed 1999 wheat supplies sharply higher, surpassing 3.3 billion bushels. (Total all-wheat production hit 2.3 billion bushels.) Assuming trend yields, lower production will occur in 2000 due to substantial declines in area.
- Wheat feed and residual use is projected to decrease to 301 million bushels in 1999/00. An ample supply of feed wheat keeps feed use level in 2000. Feed use falls in the last half of the baseline as wheat prices increase, and bottoms out at 249 million bushels in the 2006/07 crop year.
- Domestic food use is projected to continue to increase on a per-capita basis. Food use accounts for more than 1 billion bushels of disappearance by the 2009 crop year.
- U.S. wheat exports for 1999/00 are projected to increase to 1.1 billion bushels, and further increases are anticipated in 2000/01. Action by the EU impacts wheat exports greatly during the baseline. Exports build to 1.2 billion bushels by 2003. After that increase, exports by the EU dampen U.S. trade.
- Ending stocks of wheat for 1999/00 increase to 972 million bushels. Stocks decline in each year of the baseline, hitting 642 million bushels at the end of the 2009 crop year.
- Increased supplies and ending stocks pressured prices lower again in 1999. As total supply has been above 3 billion bushels since the 1996/97 crop year, season-average farm prices have fallen. The season-average farm price for 1999/00 is projected to be \$2.55 per bushel. Prices are projected to strengthen in 2000/01 due to reduced area. By the final year of the baseline, the U.S. wheat price rises to \$3.60 per bushel.
- Market net returns over variable production costs rise slowly throughout the projection period, as increases in market prices and yield are nearly offset by cost increases. In 1999/00, market net returns plus LDPs stand at \$44.09 per acre. By the end of the baseline, wheat returns rise to \$62.17 per acre.

# U.S. Wheat Supply and Utilization

o.o. Timeat capp	ny ana	• t=c									
	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(Mi	Ilion Acres	s)				
Contract Area	78.5	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
CRP Idled	9.3	9.7	10.1	10.4	10.7	10.9	11.0	11.2	11.2	11.2	11.0
Planted Area	62.8	62.1	63.3	65.2	65.7	66.1	65.8	66.0	66.2	66.4	66.6
Harvested Area	53.9	54.9	56.1	57.7	58.2	58.6	58.3	58.5	58.7	58.8	59.0
Yield					(Bush	nels per Ad	cre)				
Actual	42.7	40.0	40.2	40.4	40.7	41.0	41.2	41.5	41.7	42.0	42.2
Program	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
					(Mill	ion Bushe	ls)				
Supply	3,348	3,267	3,184	3,182	3,199	3,214	3,215	3,221	3,228	3,236	3,247
Beginning Stocks	946	972	831	746	728	713	708	693	679	666	654
Production	2,302	2,195	2,253	2,336	2,370	2,401	2,407	2,427	2,449	2,470	2,493
Imports	100	100	100	100	100	100	100	100	100	100	100
Domestic Use	1,302	1,309	1,283	1,286	1,286	1,309	1,312	1,322	1,333	1,343	1,356
Feed, Residual	301	299	265	254	243	256	250	249	249	249	251
Seed	91	92	95	96	97	96	97	97	97	98	98
Food, Other	910	918	922	936	946	957	966	976	986	997	1,008
Exports	1,074	1,128	1,155	1,168	1,200	1,197	1,210	1,219	1,229	1,239	1,249
Total Use	2,376	2,436	2,437	2,454	2,485	2,506	2,522	2,541	2,562	2,582	2,605
Ending Stocks	972	831	746	728	713	708	693	679	666	654	642
FOR, Special Program	0	0	0	0	0	0	0	0	0	0	0
CCC Inventory	100	100	100	100	100	100	100	100	100	100	100
9-Month Loan	65	92	82	65	58	70	67	64	61	58	56
"Free" Stocks	808	639	564	563	555	539	526	516	506	495	485
Prices and Returns					(U	.S. Dollars	)				
Farm Price/bu.	2.55	2.81	3.06	3.13	3.25	3.25	3.34	3.41	3.47	3.54	3.60
Loan Rate/bu.	2.58	2.58	2.58	2.41	2.41	2.55	2.58	2.58	2.58	2.58	2.58
FOB Gulf Price/mt	115.76	126.95	138.00	141.05	146.23	146.33	149.93	152.85	155.81	158.48	161.34
Contract Payment/bu.	1.27	0.59	0.47	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Variable Expenses/a.	76.97	80.32	80.69	81.86	82.83	83.94	85.07	86.10	87.32	88.60	89.97
Gross Market Returns/a.	108.76	112.21	122.98	126.67	132.43	133.38	137.65	141.28	145.00	148.46	152.14
LDP Returns/a.	12.31	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mkt+LDP Net Returns/a.	44.09	34.09	42.29	44.82	49.60	49.44	52.57	55.18	57.68	59.86	62.17
Contract Payment/a.	37.18	17.17	13.83	13.42	13.43	13.43	13.43	13.43	13.43	13.43	13.43

#### U.S. Corn

- U.S. corn farmers decreased planted area to 77.4 million acres in 1999/00. Corn area is expected to fall again in the spring of 2000 to 77.2 million acres. Corn is expected to gain from worldwide food demand during the baseline; by the 2009/10 crop year, FAPRI projects 80.8 million acres will be planted to corn. Corn's share of planted area in the United States increases during the baseline.
- Corn area enrolled in the CRP totaled 3.6 million acres for the 1997/98 marketing year. As contracts expired in calendar year 1998, the total corn enrollment fell to 3.1 million acres. For the 1999 crop year, CRP area had fallen to 2.9 million acres. By the final year of the baseline, corn CRP area is projected to be 3.5 million acres.
- The national average corn yield fell to 133.8 bushels per acre in 1999/00. Assuming normal weather, corn yields come back down to the trend-line level of 133.1 bushels per acre in 2000/01. Corn yield is expected to grow at a rate of 1.3 percent per year. This growth rate assumes technological progress that can generate an increase of 1.8 bushels per acre per year.
- Higher feed use is projected for the 1999/00 marketing year at 5.6 billion bushels. Feed usage decreases slightly in 2000/01, but steady growth in several livestock categories and stable crop prices cause feed usage to rise during the baseline period, reaching 6.2 billion bushels in 2009/10.
- Corn used for fuel alcohol production is projected to require 671 million bushels by 2009/10, up from the projected 1999/00 number of 555 million bushels. Federal tax exemptions for ethanol are assumed to continue at the current level of \$0.54 per gallon. The outlook for ethanol is surrounded with uncertainty given recent proposed changes by Environmental Protection Agency (EPA) regarding the use of Methyl Tertiary Butyl Ether (MTBE), ethanol's major competitor. Growth in other domestic uses of corn, such as high fructose corn syrup, is modest.
- U.S. corn exports in 1999/00 are projected to increase to 2 billion bushels. Improvements in Asian economies and the decline in U.S. prices increase the quantity of U.S. corn exported. Projected exports rise markedly throughout the remainder of the baseline. By the last year, U.S. corn exports are more than 2.6 billion bushels.
- Corn ending stocks for the 1999/00 marketing year are projected fall to 1.7 million bushels. With a return to normal weather, ending stocks fall, slowly reaching 1.4 billion bushels by 2009/10. The quantity of stocks in the nine-month loan program at the end of each marketing year is modest, although higher levels during a given marketing year are possible.
- Abundant supplies and relatively high levels of stocks in 1999/00 pressure corn prices. The farm price is projected to average \$1.85 per bushel. For 2000/01, the farm price is expected to rise to \$2.07 per bushel, as fewer acres are planted and exports rise.
- Market transition payments average \$0.26 per bushel during the baseline. On a per-acre basis, the payments average nearly \$24 during the baseline period. Market net returns over variable costs are projected to rise during the baseline. Increases in yield offset higher production costs in each year. As prices strengthen, the returns rise.

## **U.S. Corn Supply and Utilization**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(M	illion Acres	s)				
Contract Area	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5
CRP Idled	2.9	3.1	3.2	3.3	3.4	3.5	3.5	3.6	3.6	3.6	3.5
Planted Area	77.4	77.2	78.1	79.9	79.4	80.1	79.9	80.5	80.4	80.8	80.8
Harvested Area	70.5	70.7	71.5	73.2	72.9	73.6	73.4	74.1	74.0	74.4	74.5
Yield					(Busl	hels per A	cre)				
Actual	133.8	133.1	134.9	136.5	138.5	140.3	142.2	143.9	145.8	147.5	149.3
Program	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6
					(Mill	ion Bushe	ls)				
Supply	11,239	11,126	11,190	11,483	11,602	11,785	11,914	12,110	12,239	12,410	12,546
Beginning Stocks	1,787	1,708	1,527	1,471	1,491	1,450	1,463	1,440	1,438	1,416	1,413
Production	9,437	9,407	9,653	10,002	10,102	10,325	10,441	10,660	10,792	10,983	11,123
Imports	15	10	10	10	10	10	10	10	10	10	10
Domestic Use	7,535	7,558	7,651	7,852	7,916	8,025	8,116	8,250	8,335	8,433	8,520
Feed, Residual	5,635	5,620	5,678	5,827	5,855	5,915	5,967	6,056	6,101	6,154	6,202
Fuel Alcohol	555	575	578	598	603	621	629	641	651	663	671
HFCS	575	584	601	619	636	654	671	688	705	723	740
Seed	20	20	20	20	20	20	20	20	21	21	21
Food, Other	751	760	773	787	800	815	829	843	857	872	886
Exports	1,996	2,041	2,068	2,141	2,237	2,296	2,358	2,422	2,488	2,564	2,634
Total Use	9,531	9,599	9,718	9,992	10,153	10,322	10,474	10,672	10,823	10,997	11,154
Ending Stocks	1,708	1,527	1,471	1,491	1,450	1,463	1,440	1,438	1,416	1,413	1,392
FOR, Special Program	0	0	0	0	0	0	0	0	0	0	0
CCC Inventory	15	15	15	15	12	9	6	3	0	0	0
9-Month Loan	350	378	354	288	258	291	294	299	288	283	269
"Free" Stocks	1,343	1,134	1,103	1,187	1,180	1,163	1,140	1,136	1,128	1,129	1,123
Prices and Returns					`	.S. Dollars	,				
Farm Price/bu.	1.85	2.07	2.16	2.16	2.23	2.25	2.30	2.34	2.39	2.42	2.47
Loan Rate/bu.	1.89	1.89	1.89	1.75	1.75	1.81	1.86	1.88	1.89	1.89	1.89
FOB Gulf Price/mt	87.97	97.31	101.39	101.24	104.46	104.95	107.41	108.88	110.93	112.28	114.51
Contract Payment/bu.	0.73	0.33	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Variable Expenses/a.	170.74	176.17	177.57	180.52	183.23	186.20	189.33	192.08	195.19	198.36	201.75
Gross Market Returns/a.	247.39	275.16	291.75	294.79	309.48	315.06	327.47	336.46	347.72	356.50	368.58
LDP Returns/a.	30.22	3.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mkt+LDP Net Returns/a.	106.86	102.94	114.19	114.27	126.25	128.86	138.14	144.37	152.54	158.14	166.84
Contract Payment/a.	63.31	29.10	23.43	22.74	22.74	22.74	22.74	22.74	22.74	22.74	22.74

## **U.S. Sorghum**

- Reduced area in the Southern Plains states pushed total sorghum planted area lower in 1999, down to 9.3 million acres. Sorghum planted area falls to 8.9 million acres by 2009/10 as sorghum loses area to other crops.
- Sorghum area enrolled in the CRP totaled 2.3 million acres for the 1997/98 marketing year. As contracts expired in calendar year 1998, the total sorghum enrollment fell to 2.2 million acres. For the 1999 crop year, 2.1 million acres of former sorghum land were enrolled in the program. By the final year of the baseline, sorghum CRP area grows to 2.5 million acres, reducing acres planted.
- The U.S. average sorghum yield increased to 69.7 bushels per acre in 1999/00. Sorghum yield is projected to reach 74.8 bushels per acre by 2009/10. Genetic improvement increases average sorghum yield 0.6 bushels per acre per year, an annual growth rate of 0.9 percent per year.
- Sorghum feed use is projected to be 340 million bushels in 1999/00. The falling price of sorghum and rising feedlot placements explain the increase in feed use. Feed use of sorghum falls during the baseline, hitting 311 million bushels in 2008/09.
- Exports of U.S. sorghum in 1999/00 are projected to be 210 million bushels. The volume of exports grows in each year of the baseline, reaching 241 million bushels by 2009/10. Worldwide demand for feed grains increases sorghum exports. Potential problems with importing countries accepting genetically modified feed grains could aid grain sorghum exports, as grain sorghum is not currently genetically modified.
- Sorghum ending stocks decreased in 1999/00 to 55 million bushels, down from 65 million bushels the previous year. The FAIR Act eliminated the Farmer Owned Reserve (FOR) program, and the market is the only holder of stocks in the baseline. With a return to normal weather, ending stocks are generally expected to remain below 60 million bushels during the baseline.
- Despite the decline in ending stocks and rise in export volume in 1999/00, the season-average sorghum farm price fell to \$1.60 per bushel. Falling prices of other feed grains weigh heavily on sorghum prices. Prices are projected to increase in 2000/01 to \$1.81 per bushel. Sorghum prices will maintain a fairly constant relationship to corn prices, rising to \$2.18 per bushel by 2009/10.
- Gross market returns fell in 1999/00, but net returns over variable costs plus government payments increase relative to the previous year. Market net returns plus LDPs for 1999 were \$50.16 per acre. In the future, net returns are projected to rise as the growth rate of yields and prices more than outpace the growth in costs. In the 2009/10 marketing year, market returns hit \$66.09 per acre. Wheat returns are competitive with this, as are cotton returns when adjusted for risk.

# U.S. Sorghum Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(Mi	Ilion Acres	s)				
Contract Area	13.6	13.6	13.6	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
CRP Idled	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.4
Planted Area	9.3	9.4	9.3	9.2	9.1	9.1	9.1	9.1	9.0	9.0	8.9
Harvested Area	8.5	8.5	8.4	8.3	8.3	8.3	8.2	8.2	8.1	8.1	8.1
Yield					(Bush	nels per Ad	cre)				
Actual	69.7	69.0	69.9	70.6	71.2	71.9	72.4	73.1	73.6	74.2	74.8
Program	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
					(Mill	ion Bushe	ls)				
Supply	660	644	641	640	639	642	645	647	646	649	651
Beginning Stocks	65	55	56	51	51	47	47	46	47	46	45
Production	595	589	585	589	588	595	597	600	600	603	606
Imports	0	0	0	0	0	0	0	0	0	0	0
Domestic Use	395	373	367	364	364	363	365	366	365	365	365
Feed, Residual	340	320	314	310	311	310	312	313	312	311	312
Food, Seed, Ind.	55	53	53	53	53	53	53	53	54	54	54
Exports	210	216	222	226	229	231	233	234	236	239	241
Total Use	605	589	589	589	593	594	598	600	601	603	607
Ending Stocks	55	56	51	51	47	47	46	47	46	45	44
FOR, Special Program	0	0	0	0	0	0	0	0	0	0	0
CCC Inventory	2	2	2	2	0	0	0	0	0	0	0
9-Month Loan	6	7	8	5	4	5	5	5	5	5	4
"Free" Stocks	48	46	42	44	42	42	41	41	40	40	40
Prices and Returns					(U.	S. Dollars	)				
Farm Price/bu.	1.60	1.81	1.90	1.92	1.98	2.00	2.04	2.07	2.10	2.13	2.18
Loan Rate/bu.	1.74	1.74	1.74	1.61	1.61	1.67	1.71	1.73	1.74	1.74	1.74
Sorghum/Corn Ratio	0.86	0.87	0.88	0.89	0.89	0.89	0.89	0.88	0.88	0.88	0.88
FOB Gulf Price/mt	81.44	90.72	94.83	95.64	98.67	99.44	101.33	102.38	103.99	105.31	107.37
Contract Payment/bu.	0.87	0.40	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Variable Expenses/a.	82.19	85.14	85.86	87.29	88.56	89.93	91.41	92.56	93.92	95.30	96.84
Gross Market Returns/a.	111.39	124.71	132.66	135.26	141.32	143.82	148.06	151.04	154.89	158.29	162.93
LDP Returns/a.	20.96	7.87	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mkt+LDP Net Returns/a.	50.16	47.43	49.00	47.97	52.76	53.88	56.65	58.47	60.97	62.98	66.09
Contract Payment/a.	42.08	19.34	15.57	15.12	15.12	15.12	15.12	15.13	15.13	15.13	15.12

## U.S. Barley

- Barley planted area is projected to rise for the 2000/01 season to 5.3 million acres. By marketing year 2009/10, barley planted area is projected to decline to 5 million acres. Barley loses some of its share of total U.S. cropland, continuing a long, ongoing trend. Land formerly devoted to barley production is planted to other crops, including soybeans, minor oilseeds, and corn.
- Barley CRP has fallen to 2.5 million acres by 1999/00. Thereafter, new CRP sign-ups are projected to add to barley CRP area. By the end of the projection period, barley CRP area increases to 3 million acres.
- U.S. barley yield in 1999/00 was 59.2 bushels per acre. Barley yields go up slowly during the baseline period, reaching 69 bushels per acre by 2009/10. This assumes an annual growth rate of 0.9 percent.
- Barley imports are projected to be 25 million bushels in 1999/00. Import levels are expected to be 30 million bushels per year thereafter, making the United States a small net exporter of barley.
- Total domestic use for barley is projected to be relatively stable. Feed use, currently at 125 million bushels, will increase as prices for other feed grains go up. Barley food uses will grow only modestly, from 171 million bushels in 1999/00, to 178 million bushels in 2009/10.
- U.S. barley exports increased by 2 million bushels in 1999/00 to 30 million bushels. Exports grow slowly during the baseline, reaching 40 million bushels by the end of the projection period. The EU increases its exports of barley during the baseline.
- Barley ending stocks in 1999/00 stood at 122 million bushels, down from the previous year's level of 142 million bushels. The projection for 2000/01 is 121 million bushels. Stocks are projected to fall during the baseline, supporting the barley price.
- The 1999/00 U.S. season-average barley farm price is projected to be \$2.05 per bushel, up from \$1.98 per bushel in the prior year. Barley prices rise continually during the baseline. As corn prices rise in the end of the baseline, barley prices are pulled upward. By 2009/10, barley prices are projected to reach \$2.42 per bushel.
- Market net returns over variable costs shrunk to \$39.82 per acre in 1999/00 due to lower prices, but are projected to recover for 2000/01. Yield increases more than offset cost-of-production increases through the remainder of the baseline, resulting in higher market net returns. Barley returns reach \$61.14 per acre in 2009/10.

## U.S. Barley Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(Mi	llion Acres	s)				
Contract Area	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
CRP Idled	2.5	2.6	2.8	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.0
Planted Area	5.2	5.3	5.2	5.1	5.1	5.1	5.0	5.0	5.0	5.0	5.0
Harvested Area	4.8	5.0	4.9	4.9	4.8	4.8	4.8	4.8	4.7	4.7	4.7
Yield					(Bush	nels per Ad	cre)				
Actual	59.2	63.7	64.3	65.0	65.6	66.2	66.7	67.3	67.9	68.4	69.0
Program	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
					(Milli	ion Bushel	ls)				
Supply	449	471	468	465	464	465	466	466	466	468	470
Beginning Stocks	142	122	121	118	118	116	116	115	115	114	113
Production	282	319	317	317	316	319	320	321	322	324	327
Imports	25	30	30	30	30	30	30	30	30	30	30
Domestic Use	297	315	315	314	313	314	314	313	313	315	318
Feed, Residual	125	143	142	141	140	140	139	138	137	138	140
Food, Seed, Ind.	171	172	172	173	173	174	175	175	176	177	178
Exports	30	34	35	34	35	35	37	38	39	40	40
Total Use	327	349	350	347	348	349	351	351	353	355	358
Ending Stocks	122	121	118	118	116	116	115	115	114	113	112
FOR, Special Program	0	0	0	0	0	0	0	0	0	0	0
CCC Inventory	1	1	0	0	0	0	0	0	0	0	0
9-Month Loan	8	9	10	10	9	10	10	10	10	10	9
"Free" Stocks	113	111	109	108	107	106	105	104	104	103	102
Prices and Returns					(U.	S. Dollars	)				
Farm Price/bu.	2.05	2.10	2.18	2.20	2.26	2.27	2.30	2.32	2.35	2.38	2.42
Loan Rate/bu.	1.59	1.59	1.59	1.47	1.47	1.52	1.56	1.58	1.59	1.59	1.59
Contract Payment/bu.	0.54	0.25	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
FOB Portland/mt	108.00	120.95	122.94	123.56	127.41	128.47	131.55	134.24	137.50	140.49	144.38
Variable Expenses/a.	90.75	94.33	94.86	96.12	97.27	98.69	100.15	101.30	102.72	104.18	105.84
Gross Market Returns/a.	121.28	133.67	140.33	142.82	148.28	150.23	153.59	156.38	159.79	162.86	166.98
LDP Returns/a.	9.29	7.75	4.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mkt+LDP Net Returns/a.	39.82	47.08	49.54	46.70	51.01	51.54	53.44	55.08	57.07	58.67	61.14
Contract Payment/a.	21.51	9.98	8.04	7.80	7.80	7.81	7.81	7.81	7.81	7.81	7.81

#### U.S. Oats

- Oats area planted decreased in 1999/00, down to 4.7 million acres. Planted area is projected to decrease again in 2000/01 because of lower prices. In the longer term, oats continue to lose area to other feed grains and oilseeds. In the last year of the baseline, oats planted area stands at 4.2 million acres.
- Harvested area in 1999/00 fell from a year ago to 2.5 million acres. Declining area devoted to oats has been an ongoing trend, and by the last year of the baseline, harvested area is projected to fall to 2.2 million acres. Oat CRP area in 1999 stood at 1.1 million acres. Oats CRP area increases to 1.3 million acres by the last year of the baseline.
- Oat yields decreased to 59.6 bushels per acre harvested in 1999/00. Yields show little growth in the baseline. Trend yield generates an annual increase of 0.3 bushels per acre, just under 0.5 percent.
- Imports of oats are projected to fall to 100 million bushels in 1999/00. Oat exports are projected to be 2 million bushels per year. Imports remain between 107 and 110 million bushels over the baseline period.
- Oat feed use is projected to be 149 million bushels in 1999/00 and then increase until oat prices rise above \$1.30 per bushel. At the end of the baseline, oat feed use will have fallen to 140 million bushels. This feed use path couples with slowly growing food use to produce flat to declining total use.
- Food use of oats continues the trend of the past four years and does not increase significantly during the baseline. Total oat food use reaches 102 million bushels by 2009/10.
- Oat ending stocks are projected to be 80 million bushels for the 1999/00 marketing year, weighing heavily on prices. Stocks decline during the baseline, down to 74 million bushels by the last year.
- The season-average farm price for oats in 1999/00 is projected to be \$1.11 per bushel. Oat prices are projected to be higher in 2000/01 due to higher overall commodity prices. As prices of other feed grains rise during the baseline, oat prices are pulled along, reaching \$1.33 per bushel in 2009/10. Oat contract payments average \$0.02 per bushel during the baseline.
- Market net returns over variable costs in 1999/00 are projected to be \$16.84 per acre, a decrease from the previous year for the third year in a row. Net returns are projected to rise throughout most of the projection period. Rising prices in the latter years of the baseline help offset rising costs and flat yields. By 2009/10, per acre net returns for oats rise to \$17.44.

#### U.S. Oat Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(Mil	lion Acres	)				-
Contract Area	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
CRP Idled	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Planted Area	4.7	4.6	4.6	4.5	4.4	4.4	4.4	4.3	4.3	4.2	4.2
Harvested Area	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2
Yield					(Bush	els per Ac	re)				
Actual	59.6	59.8	60.0	60.4	60.6	60.9	61.2	61.4	61.7	61.9	62.2
Program	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
					•	on Bushel	,				
Supply	327	334	335	332	330	328	326	324	322	320	318
Beginning Stocks	81	80	80	80	79	78	77	76	76	75	75
Production	146	147	148	144	143	142	141	139	137	136	134
Imports	100	107	107	108	108	108	108	109	109	109	110
Domestic Use	245	252	253	251	250	248	248	246	245	243	242
Feed, Residual	149	156	156	153	152	150	148	146	144	142	140
Food, Seed, Ind.	96	96	97	97	98	99	99	100	101	101	102
Exports	2	2	2	2	2	2	2	2	2	2	2
Total Use	247	254	255	253	252	250	250	248	247	245	244
Ending Stocks	80	80	80	79	78	77	76	76	75	75	74
FOR, Special Program	0	0	0	0	0	0	0	0	0	0	0
CCC Inventory	0	0	0	0	0	0	0	0	0	0	0
9-Month Loan	1	1	1	1	1	1	1	1	1	1	1
"Free" Stocks	79	79	79	78	77	76	75	75	74	74	73
Prices and Returns						S. Dollars	)				
Farm Price/bu.	1.11	1.18	1.21	1.22	1.26	1.27	1.29	1.30	1.32	1.32	1.33
Loan Rate/bu.	1.13	1.13	1.13	1.05	1.04	1.08	1.11	1.13	1.13	1.13	1.13
Contract Payment/bu.	0.06	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Variable Expenses/a.	57.10	59.06	59.38	60.16	60.67	61.35	62.06	62.66	63.41	64.18	65.03
Gross Market Returns/a.	65.89	70.80	72.88	73.79	76.46	77.32	78.93	79.91	81.15	81.68	82.47
LDP Returns/a.	8.06	3.86	2.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mkt+LDP Net Returns/a.	16.84	15.60	15.76	13.63	15.79	15.98	16.87	17.25	17.74	17.50	17.44
Contract Payment/a.	2.59	1.15	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90

# U.S. Hay

- Hay area harvested rose to 63.2 million acres in 1999/00. Drought conditions in the Southern Plains increased the number of acres that needed to be harvested for hay. During the baseline, the beef cycle and beef prices play an important part in determining hay area harvested. After declining in the early years, area harvested rises to 60.6 million acres by 2009/10.
- Hay yields fell in 1999/00 to 2.5 tons per acre. Assuming normal weather, yields are projected to increase at a rate of less than 1 percent per year.
- Hay disappearance is projected to increase in 1999/00 to 157.3 million tons. Use decreases to 156.9 million tons in 2000/01 and then shows modest growth every year of the baseline. In the last year of the projection period, hay domestic use is projected to have risen to 162.9 million tons.
- Hay ending stocks in 1999/00 rose to 26.6 million tons. Ending stocks remain near 24 million tons longer term.
- The U.S. average all-hay price fell to \$75.95 per ton in 1999/00, but it is projected to rise to a season-average farm price of \$76.97 per ton in 2000/01.
- The U.S. average alfalfa hay price fell to \$84.74 per ton in 1999/00. For the 2000/01 crop year, alfalfa prices are expected to fall again to \$81.07 per ton. The alfalfa hay price averages more than \$5.10 per ton higher than all-hay prices during the baseline.

## **U.S. Hay Supply and Utilization**

Cicinicity Completi												
	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	
					(Mil	lion Acres	)					
Area	63.2	60.8	60.1	60.1	60.1	60.2	60.2	60.3	60.5	60.5	60.6	
					(Ton	s per Acre	e)					
Yield	2.52	2.57	2.59	2.60	2.62	2.63	2.64	2.65	2.67	2.68	2.69	
					(Mi	llion Tons	)					
Supply	183.8	183.0	181.7	181.5	182.2	183.0	183.8	184.7	185.5	186.2	187.0	
Production	159.1	156.4	155.6	156.4	157.2	158.1	159.1	160.1	161.1	162.1	162.9	
Beginning Stocks	24.8	26.6	26.1	25.2	25.0	24.9	24.7	24.6	24.3	24.1	24.1	
Disappearance	157.3	156.9	156.5	156.5	157.3	158.3	159.3	160.3	161.4	162.2	162.9	
Ending Stocks	26.6	26.1	25.2	25.0	24.9	24.7	24.6	24.3	24.1	24.1	24.1	
Prices	(U.S. Dollars)											
All-Hay (crop year)	75.95	76.97	79.00	79.46	80.14	80.86	81.61	82.62	83.56	84.05	84.36	
Alfalfa (calendar year)	84.74	81.07	83.04	84.36	85.07	85.93	86.83	87.92	89.09	89.91	90.37	

#### U.S. Peanuts

- The U.S. quota poundage increased to 2.4 billion pounds for the 1999/00 crop year. Increases in domestic food use during the baseline period cause the quota to grow 20 million pounds per year.
- Planted area is projected to shrink to 1.5 million acres in 2000/01, as producers respond to weaker price signals. As prices recover and the quota expands, area is projected to recover to more than 1.5 million acres by the end of the baseline.
- The U.S. average peanut yield rose to 2,711 pounds per acre for the 1999/00 crop, a record yield. Using the assumption of trend yields, peanut yields per acre are projected to grow from 2,613 pounds in 2000 to 2,713 pounds by 2009.
- Domestic use of peanuts is projected to grow from 3.2 billion pounds in 1999/00 to 3.5 billion pounds in 2009/10. Food use of peanuts contributes the majority of the growth. However, the growth only keeps pace with the growth in population, implying per-capita use is flat.
- Increased supplies pressured the farm price of peanuts down to \$0.26 per pound in 1999/00. As supplies shrink, prices are expected to strengthen from 2000 to 2001. Prices remain relatively flat after 2001.

# U.S. Peanut Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Program					(Mill	ion Pound	ds)				
Quota Poundage	2,360	2,360	2,380	2,400	2,420	2,440	2,460	2,480	2,500	2,520	2,540
Area					(Tho	ousand Ac	re)				
Planted Area	1,533	1,494	1,492	1,531	1,527	1,525	1,529	1,534	1,537	1,541	1,544
Harvested Area	1,428	1,468	1,466	1,505	1,501	1,499	1,503	1,508	1,511	1,515	1,517
					(Pou	nds per A	cre)				
Yield	2,711	2,613	2,625	2,631	2,644	2,656	2,668	2,679	2,690	2,702	2,713
					(Mill	ion Pound	ds)				
Supply	5,431	5,410	5,384	5,459	5,479	5,494	5,518	5,547	5,573	5,600	5,624
Beginning Stocks	1,392	1,408	1,369	1,333	1,346	1,346	1,343	1,341	1,342	1,341	1,342
Production	3,870	3,836	3,849	3,961	3,968	3,982	4,010	4,040	4,066	4,094	4,117
Imports	169	165	165	165	165	165	165	165	165	165	165
Domestic Use	3,212	3,233	3,268	3,318	3,343	3,367	3,396	3,426	3,456	3,485	3,512
Food	2,180	2,210	2,270	2,305	2,327	2,350	2,376	2,402	2,429	2,453	2,476
Crush	715	713	689	702	706	707	710	714	718	722	726
Seed, Feed, & Residual	317	310	310	310	310	310	310	310	310	310	310
Exports	811	807	782	795	790	784	781	779	776	773	770
Total Use	4,023	4,040	4,051	4,113	4,133	4,151	4,177	4,205	4,232	4,258	4,283
Ending Stocks	1,408	1,369	1,333	1,346	1,346	1,343	1,341	1,342	1,341	1,342	1,341
Prices and Returns					(U	.S. Dollars	s)				
Season Avg. Price/lb.	0.261	0.258	0.272	0.270	0.268	0.269	0.270	0.270	0.271	0.271	0.271
Quota Loan Rate/lb.	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
Variable Expenses/a	394.11	406.64	409.86	416.67	422.93	429.78	437.01	443.37	450.53	457.85	465.67
Average Net Returns/a	314.52	267.64	305.48	292.72	285.85	284.48	282.54	280.43	278.11	274.50	269.68

#### U.S. Soybeans and Soybean Products

- Soybean planted area rose in 1999/00 to 73.8 million acres. Despite lower prices, soybean planted area is expected to expand again in 2000, as net returns per acre still compare favorably with competing crops. The government loan rate for soybean shifts some land from other crops into soybeans. Longer term, soybean plantings range between 71 and 74 million acres.
- Soybean area enrolled in the CRP totaled 2.8 million acres for the 1998/99 marketing year. By the final year of the baseline, soybean CRP area tops 3.4 million acres.
- Soybean yields stood at 36.5 bushels per acre for 1999/00. Assuming average rainfall and temperatures during the baseline period, soybean yields grow to 44.8 bushels per acre by 2009/10. This is a growth rate of almost 1.4 percent per year.
- Production in 1999/00 came in at 2.6 billion bushels. For the 2000/01 crop, the high area and trend yield combine to produce a record crop of 2.9 billion bushels. By 2009/10, the United States is expected to produce 3.2 billion bushels of soybeans.
- High product demand and ample supplies of soybeans caused crush use to rise to 1.6 billion bushels in 1999/00, and the strong demand is projected to continue. Steady domestic use and export demand for soybean products cause crush to increase steadily in every year of the baseline period, reaching 2 billion bushels by the last year of the baseline. For the 2000/01 marketing year, crush is projected to be 1.7 billion bushels. Over the baseline, crush expands at an average rate of 1.8 percent annually.
- Soybean oil domestic use increased in 1999/00, exceeding 15.7 billion pounds. For the coming marketing year, domestic use is projected at almost 16.4 billion pounds. With slow growth assumed for many competing fats and oils, domestic use continues to increase through 2009/10, topping 19.4 billion pounds.
- Domestic soybean meal use rose in 1999/00 to 31.1 million tons and is expected to rise again in 2000/01 to 32.9 million tons. Increases in livestock numbers during the projection period keep soybean meal use rising during the baseline period. Meal domestic use rises above 39 million tons in the last year of the baseline.
- Exports of soybeans increase at an average rate of 1 percent per year. For the 1999/00 crop year, exports of soybeans are projected to be 865 million bushels. In the final year of the baseline, exports are projected to be 1.1 billion bushels.
- The soybeans season–average farm price moved sharply lower in 1999, on the heels of successive large crops in the United States and South America. The 1999/00 price is projected to be at \$4.77 per bushel. The potential for LDPs continues. Assuming trend yields, soybean prices are expected to average below the loan rate in 2000 and 2001. The soybean loan rate is assumed to be lowered beginning with the 2002 crop, down to the minimum of \$4.92 per bushel. Using the formula set in the 1996 FAIR Act, the soybean loan rate would rest on the minimum during the remainder of the baseline.
- Soybean net returns, including government payments, remain strong throughout the projection period as price and yield increases more than offset rising costs of production. Soybeans remain competitive with cotton in the Southeast and Delta, and with wheat in the Northern Plains and Lake States, but soybeans have difficulty competing with corn in the Midwest.

## **U.S. Soybean Supply and Utilization**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(Mi	Ilion Acres	s)				
CRP Idled	2.8	3.0	3.1	3.2	3.3	3.4	3.5	3.5	3.5	3.5	3.4
Planted Area	73.8	74.5	73.2	71.0	71.6	71.3	72.2	71.9	72.6	72.8	73.5
Harvested Area	72.5	73.5	72.2	70.0	70.6	70.3	71.1	70.9	71.5	71.8	72.4
						nels per A	•				
Yield	36.5	39.9	40.6	41.4	41.9	42.5	42.9	43.5	43.9	44.4	44.8
					(Mill	ion Bushe	els)				
Supply	2,994	3,296	3,372	3,324	3,339	3,367	3,420	3,453	3,499	3,538	3,586
Beginning Stocks	348	363	438	420	380	378	365	368	354	349	337
Production	2,643	2,929	2,930	2,899	2,955	2,985	3,051	3,081	3,141	3,185	3,245
Imports	3	4	4	4	4	4	4	4	4	4	4
Domestic Use	1,766	1,870	1,907	1,925	1,967	1,999	2,042	2,072	2,113	2,147	2,190
Crush	1,607	1,706	1,745	1,763	1,803	1,834	1,875	1,903	1,943	1,975	2,016
Seed, Residual	159	163	162	162	163	165	167	168	170	172	174
Exports	865	989	1,045	1,018	995	1,002	1,011	1,027	1,037	1,055	1,067
Total Use	2,631	2,858	2,952	2,944	2,961	3,001	3,053	3,098	3,150	3,202	3,257
Ending Stocks	363	438	420	380	378	365	368	354	349	337	329
CCC Inventory	5	5	5	5	5	3	1	0	0	0	0
9-Month Loan	45	37	39	64	65	73	72	73	66	55	49
"Free" Stocks	313	396	377	311	307	290	294	281	284	281	280
Prices and Returns					(U	.S. Dollars	s)				
Farm Price/bu.	4.77	4.24	4.49	4.94	5.00	5.17	5.20	5.38	5.47	5.63	5.74
Loan Rate/bu.	5.26	5.26	5.26	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92
III. Proc. Price/mt	180.64	162.28	170.79	186.26	188.37	194.33	195.32	201.43	204.43	209.81	213.77
Bean/Corn Ratio	2.58	2.05	2.07	2.29	2.24	2.30	2.26	2.30	2.29	2.33	2.33
Variable Expenses/a.	94.78	97.21	98.00	99.52	101.02	102.53	104.14	105.52	107.13	108.75	110.48
Gross Market Returns/a.	174.08	168.92	182.06	204.47	209.43	219.68	223.21	233.87	240.11	249.77	257.38
LDP Returns/a.	30.78	53.46	45.07	14.59	12.36	5.69	4.59	0.00	0.00	0.00	0.00
'99 Assistance Pymts/a.	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mkt+LDP Net Returns/a.	116.10	125.17	129.13	119.54	120.77	122.83	123.67	128.35	132.98	141.02	146.90
48% Meal Price/ton	152.44	136.88	142.33	153.31	155.28	159.43	160.42	164.42	166.80	170.29	172.13
Oil Price/cwt	16.02	15.28	16.77	18.14	18.68	19.44	19.96	20.73	21.43	22.29	23.46
Crushing Margin/bu.	0.51	0.56	0.63	0.62	0.67	0.70	0.75	0.77	0.83	0.86	0.93

# U.S. Soybean Meal Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Tho	usand To	ns)				
Supply	38,539	40,827	41,775	42,219	43,157	43,891	44,865	45,542	46,472	47,251	48,228
Beginning Stocks	330	251	286	286	281	283	283	286	286	288	290
Production	38,159	40,526	41,439	41,882	42,826	43,558	44,531	45,206	46,136	46,913	47,888
Imports	50	50	50	50	50	50	50	50	50	50	50
Domestic Use	31,138	32,919	33,565	33,955	34,775	35,346	36,089	36,750	37,568	38,272	39,127
Exports	7,150	7,622	7,924	7,982	8,099	8,263	8,490	8,506	8,616	8,689	8,807
Total Use	38,288	40,541	41,489	41,937	42,874	43,608	44,579	45,256	46,184	46,961	47,934
Ending Stocks	251	286	286	281	283	283	286	286	288	290	294
Prices, 48% Protein					(U	.S. Dollars	s)				
Decatur/ton	152.44	136.88	142.33	153.31	155.28	159.43	160.42	164.42	166.80	170.29	172.13
Decatur/mt	168.04	150.88	156.89	168.99	171.16	175.74	176.83	181.24	183.87	187.71	189.74

# U.S. Soybean Oil Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	lion Pound	ds)				
Supply	19,673	21,432	22,049	22,263	22,698	23,076	23,558	23,912	24,371	24,767	25,248
Beginning Stocks	1,520	2,091	2,264	2,258	2,234	2,255	2,264	2,286	2,293	2,307	2,312
Production	18,073	19,282	19,725	19,945	20,403	20,761	21,234	21,566	22,019	22,400	22,875
Imports	80	60	60	60	60	60	60	60	60	60	60
Domestic Use	15,751	16,347	16,529	16,734	17,096	17,443	17,840	18,197	18,583	18,963	19,426
Exports	1,832	2,821	3,262	3,294	3,347	3,369	3,431	3,422	3,481	3,492	3,521
Total Use	17,583	19,168	19,791	20,029	20,443	20,812	21,272	21,620	22,064	22,455	22,947
Ending Stocks	2,091	2,264	2,258	2,234	2,255	2,264	2,286	2,293	2,307	2,312	2,300
Prices	(U.S. Dollars)										
Decatur/cwt	16.02	15.28	16.77	18.14	18.68	19.44	19.96	20.73	21.43	22.29	23.46
Decatur/mt	353.20	336.89	369.77	399.82	411.80	428.47	440.03	457.03	472.52	491.37	517.11

#### U.S. Rice

- U.S. rice planted area expanded to 3.6 million acres in 1999/00, up from 3.4 million acres in 1998/99. This is significant because rice area has expanded every year of the FAIR Act since the first year decline to 2.8 million acres. Lower than expected returns for rice in 2000/01 will decrease area to 3.5 million acres. Rice area continues to fall during the baseline, reaching 3.3 million acres by 2009/10.
- U.S. rice harvested area yielded 5,908 pounds per acre in 1999. Yields are projected to show growth throughout the projection period, reaching 6,409 pounds per acre in 2009/10. Changes in planted area aid this growth; as fewer acres are seeded, marginal rice land is taken out first, boosting yields. Also, as area declines faster in the South than in the West, the relative weight of higher yielding California rice rises.
- Assuming trend yields, decreased area will push 2000 rice production down slightly to 206 million cwt. Production is projected to be 207.4 million cwt by the end of the baseline, as area falls faster than yield increases.
- Imports are expected to continue to increase over the projection period. For the 1999/00 marketing year, 11.3 million cwt are expected to be imported. By 2009/10, 16.4 million cwt per year will be imported.
- While both food use and brewing use are projected to increase throughout the projection period, the majority of the increase is in the food category, with brewing use flat on a per-capita basis. Increases in domestic use exceed the growth in production, limiting U.S. exports.
- Ending stocks of rice for 1999/00 are projected to increase to 40.6 million cwt. Stock levels and stock-to-use remain near their present values during the baseline.
- The U.S. average farm price is projected to decrease to \$6.36 per cwt for marketing year 1999/00 due to larger supplies. Prices strengthen slowly to \$6.65 per cwt by 2000/01, as production holds flat. Longer term, rice prices increase, reaching \$8.41 by the end of the projection period. These prices are much lower than the averages of the past five years.
- Weak market prices have pushed net returns lower the last three years. Market net returns over variable production costs remain flat during the baseline as higher market returns are offset by lower LDPs.

## **U.S. Rice Supply and Utilization**

U.S. Rice Supply	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(Mi	Ilion Acres	s)				
Contract Area	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17
CRP Idled	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Planted Area	3.58	3.45	3.46	3.48	3.41	3.39	3.36	3.34	3.30	3.29	3.26
Harvested Area	3.56	3.42	3.44	3.45	3.38	3.36	3.34	3.32	3.28	3.26	3.24
Yield					(Pou	nds per A	cre)				
Actual	5,908	6,028	6,056	6,088	6,147	6,189	6,236	6,278	6,325	6,365	6,409
Program	4,817	4,817	4,817	4,817	4,817	4,817	4,817	4,817	4,817	4,817	4,817
					(Million	Hundredw	veight)				
Supply	243.8	258.7	263.8	266.4	264.5	263.7	263.4	263.2	262.3	262.3	262.1
Beginning Stocks	22.1	40.6	43.4	43.5	43.2	41.9	41.0	40.2	39.5	38.8	38.3
Production	210.5	206.3	208.1	210.1	208.0	208.0	208.1	208.2	207.4	207.7	207.4
Imports	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.9	15.4	15.9	16.4
Domestic Use	120.3	123.0	125.5	127.8	130.2	132.6	135.0	137.4	139.9	142.3	144.8
Food	90.1	92.3	94.6	96.9	99.2	101.5	103.8	106.1	108.5	110.8	113.2
Seed	4.2	4.3	4.4	4.3	4.2	4.2	4.2	4.1	4.1	4.0	4.0
Brewing	16.0	16.3	16.5	16.7	16.8	16.9	17.0	17.2	17.3	17.4	17.6
Residual	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Exports	82.9	92.4	94.8	95.5	92.4	90.1	88.2	86.3	83.7	81.7	79.5
Total Use	203.2	215.3	220.3	223.3	222.6	222.7	223.3	223.7	223.6	224.0	224.3
Ending Stocks	40.6	43.4	43.5	43.2	41.9	41.0	40.2	39.5	38.8	38.3	37.9
CCC Inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
"Free" Stocks	40.6	43.4	43.5	43.2	41.9	41.0	40.2	39.5	38.8	38.3	37.9
Prices and Returns					(U	.S. Dollars	s)				
Season Avg. Price/cwt	6.36	6.65	6.93	7.18	7.39	7.56	7.76	7.94	8.12	8.26	8.41
Loan Rate/cwt	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
FOB Houston/cwt	13.89	14.69	15.35	15.93	16.37	16.73	17.17	17.57	17.95	18.28	18.60
Contract Payment/cwt	5.68	2.60	2.10	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Adjusted World Price/cwt	4.87	5.08	5.36	5.60	5.77	5.91	6.09	6.23	6.37	6.48	6.59
Variable Expenses/a	381.61	392.37	395.92	401.56	406.81	412.60	418.66	424.60	431.19	438.11	445.45
Gross Market Returns/a.	375.71	401.17	419.65	437.01	454.11	467.61	483.86	498.33	513.38	525.98	538.96
LDP Returns/a.	118.08	108.79	93.57	80.48	71.31	63.67	54.13	46.01	38.18	31.95	25.74
Market Net Returns/a.	112.18	117.59	117.31	115.93	118.62	118.69	119.33	119.74	120.37	119.81	119.25
Contract Payment/a.	232.56	106.34	86.01	83.53	83.53	83.53	83.53	83.53	83.53	83.53	83.53

#### **U.S. Upland Cotton**

- Farmers seeded 14.6 million acres to upland cotton in 1999. For the 2000/01 marketing year, planted area is expected to rise to 14.8 million acres planted, due to weaker competition from other crops and optimism about the export market. Longer term, cotton area falls as cotton returns lag behind corn and soybeans. Planted area is expected to decline, reaching 13.6 million acres by the last year of the baseline. The decoupled payment plan of the FAIR Act, as well as competition from corn in the Southeast and soybeans in the Delta, cause the fall.
- The national-average cotton yield fell to 596 pounds per acre in 1999. Poor yields in the Southern Plains were a major cause of the decline. Longer term, cotton yields grow, but at a rate of less than 1 percent per year. In the last year of the baseline, the national-average cotton yield is projected to be 690 pounds per acre.
- U.S. imports of upland cotton totaled 0.4 million bales during the 1998/99 crop year. The level of imports is projected to be lower, at 60,000 bales, for 1999/00 and then fall further to 50,000 bales during the rest of the baseline.
- Increased textile imports pressured mill use lower in 1999, and only modest growth is projected over the baseline. Mill use in 2000/01 is projected to recover to 10.4 million bales. As consumer demand slowly grows, mill use should continue to increase throughout the projection period. In 2009/10, projected mill use is 11.4 million bales. This implies flat per-capita use of domestically milled cotton.
- Weaker global demand and the absence of Step 2 payments limited cotton exports in 1998/99. For the 1999/00 crop year, exports rebounded, but only to the level of 6 million bales. For the 2000/01 crop year, Step 2 payments are assumed to be in effect, and exports reach 7.8 million bales. Longer term, increased competition from abroad limits U.S. exports of cotton. Exports are projected to be 7.6 million bales by 2009/10.
- Reflecting weaker demand and an increase in stocks, cotton prices are projected to average sharply lower in 1999 and 2000. The season-average farm price projection for 1999/00 is \$0.46 per pound and for 2000/01, \$0.47 per pound. A weak adjusted world price (AWP) leads to significant LDPs between 1999 and 2001.

# U.S. Upland Cotton Supply and Utilization

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_	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Area					(Mi	illion Acre	s)				
Contract Area	16.44	16.44	16.44	16.44	16.43	16.43	16.43	16.43	16.43	16.43	16.43
CRP Idled	1.24	1.31	1.33	1.37	1.41	1.43	1.45	1.47	1.47	1.47	1.45
Planted Area	14.57	14.76	14.37	14.02	13.90	13.76	13.74	13.77	13.75	13.68	13.61
Harvested Area	13.09	13.99	13.62	13.29	13.18	13.05	13.03	13.05	13.04	12.96	12.90
Yield					(Pou	nds per A	cre)				
Actual	596	648	652	656	661	666	671	677	681	686	690
Program	600	600	600	600	600	600	600	600	600	600	600
					(M	illion Bales	s)				
Supply	20.16	23.01	23.32	22.93	22.52	22.09	21.81	21.67	21.52	21.29	20.99
Beginning Stocks	3.84	4.08	4.76	4.71	4.32	3.94	3.54	3.22	2.97	2.71	2.39
Production	16.26	18.88	18.51	18.17	18.15	18.11	18.22	18.40	18.51	18.53	18.55
Imports	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Domestic Use											
Mill Use	10.05	10.40	10.55	10.61	10.68	10.75	10.87	11.02	11.17	11.30	11.41
Exports	5.98	7.84	8.05	7.99	7.90	7.79	7.71	7.67	7.63	7.59	7.55
Total Use	16.03	18.24	18.60	18.59	18.58	18.54	18.58	18.69	18.81	18.89	18.95
Unaccounted	-0.05	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Ending Stocks	4.08	4.76	4.71	4.32	3.94	3.54	3.22	2.97	2.71	2.39	2.03
CCC Inventory	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
"Free" Stocks	4.08	4.76	4.71	4.32	3.94	3.54	3.22	2.97	2.71	2.39	2.03
Prices and Returns					(U	.S. Dollars	s)				
Season Avg. Price/lb.	0.459	0.470	0.479	0.500	0.522	0.543	0.562	0.578	0.594	0.613	0.635
Loan Rate/lb.	0.519	0.519	0.519	0.500	0.500	0.500	0.500	0.511	0.519	0.519	0.519
Contract Payment/lb.	0.157	0.071	0.057	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
Cotlook A Index/lb.	0.474	0.496	0.523	0.552	0.576	0.599	0.617	0.634	0.652	0.674	0.698
Adjusted World Price/lb.	0.334	0.358	0.382	0.407	0.428	0.448	0.464	0.479	0.495	0.514	0.535
Variable Expenses/a.	316.64	330.01	334.78	341.58	347.36	353.70	360.56	366.97	374.06	381.38	389.13
Gross Market Returns/a.	313.56	342.18	355.16	377.08	395.18	414.74	431.16	447.00	462.72	481.17	501.35
LDP Returns/a.	120.49	116.06	101.89	74.36	61.73	49.48	39.47	37.78	33.32	21.10	7.24
Mkt+LDP Net Returns/a.	117.41	128.23	122.28	109.86	109.55	110.52	110.07	117.80	121.98	120.90	119.46
Contract Payment/a.	80.17	36.29	29.22	28.36	28.36	28.37	28.37	28.37	28.37	28.37	28.37

# U.S. Cottonseed Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10		
	(Thousand Tons)												
Supply	6,915	7,904	7,784	7,647	7,641	7,623	7,668	7,740	7,783	7,792	7,802		
Beginning Stocks	393	475	500	500	500	500	500	500	500	500	500		
Production	6,422	7,399	7,254	7,117	7,111	7,093	7,138	7,210	7,253	7,262	7,272		
Imports	100	30	30	30	30	30	30	30	30	30	30		
Domestic Use	6,370	7,324	7,204	7,067	7,061	7,043	7,088	7,160	7,203	7,212	7,222		
Crush	3,207	3,712	3,688	3,680	3,701	3,727	3,771	3,842	3,889	3,920	3,954		
Other	3,164	3,611	3,516	3,387	3,361	3,316	3,317	3,318	3,315	3,292	3,268		
Exports	70	80	80	80	80	80	80	80	80	80	80		
Total Use	6,440	7,404	7,284	7,147	7,141	7,123	7,168	7,240	7,283	7,292	7,302		
Ending Stocks	475	500	500	500	500	500	500	500	500	500	500		
Prices and Returns					(U	.S. Dollars	s)						
Farm Price/ton	81.01	71.52	80.37	91.19	93.29	97.34	98.35	101.44	103.81	107.65	111.90		
Meal Price/ton	115.95	101.61	107.50	118.02	119.77	123.47	123.96	126.79	128.48	131.40	132.90		
Oil Price/cwt	20.65	20.13	21.73	23.20	23.78	24.59	25.15	25.96	26.71	27.62	28.87		
Crushing Margin/ton	37.31	39.02	37.99	36.64	37.19	37.41	38.40	39.21	39.99	40.39	40.81		

# U.S. Cottonseed Meal Supply and Utilization

	• • •												
	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10		
	(Thousand Tons)												
Supply	1,467	1,720	1,724	1,719	1,726	1,738	1,758	1,791	1,813	1,828	1,843		
Beginning Stocks	24	34	49	48	46	46	46	47	47	48	48		
Production	1,443	1,685	1,675	1,671	1,680	1,692	1,712	1,744	1,765	1,780	1,795		
Imports	0	0	0	0	0	0	0	0	0	0	0		
Domestic Use	1,318	1,570	1,575	1,573	1,580	1,592	1,612	1,643	1,665	1,680	1,695		
Exports	115	100	100	100	100	100	100	100	100	100	100		
Total Use	1,433	1,670	1,675	1,673	1,680	1,692	1,712	1,743	1,765	1,780	1,795		
Ending Stocks	34	49	48	46	46	46	47	47	48	48	48		
Prices					(U	.S. Dollars	s)						
Memphis/ton	115.95	101.61	107.50	118.02	119.77	123.47	123.96	126.79	128.48	131.40	132.90		
Memphis/mt	127.81	112.01	118.50	130.09	132.02	136.11	136.64	139.76	141.62	144.84	146.49		

# U.S. Cottonseed Oil Supply and Utilization

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10		
	(Million Pounds)												
Supply	1,112	1,278	1,280	1,275	1,281	1,289	1,303	1,325	1,340	1,350	1,361		
Beginning Stocks	76	75	85	83	82	81	81	81	81	81	80		
Production	1,027	1,188	1,180	1,177	1,184	1,193	1,207	1,229	1,244	1,254	1,265		
Imports	9	15	15	15	15	15	15	15	15	15	15		
Domestic Use	927	1,068	1,072	1,069	1,074	1,083	1,097	1,119	1,135	1,145	1,156		
Exports	110	125	125	125	125	125	125	125	125	125	125		
Total Use	1,037	1,193	1,197	1,194	1,199	1,208	1,222	1,244	1,260	1,270	1,281		
Ending Stocks	75	85	83	82	81	81	81	81	81	80	80		
Prices					(U	.S. Dollars	s)						
Valley Points/cwt	20.65	20.13	21.73	23.20	23.78	24.59	25.15	25.96	26.71	27.62	28.87		
Valley Points/mt	455.23	443.74	479.17	511.53	524.33	542.17	554.41	572.40	588.84	608.95	636.40		

## U.S. Sugar

- With weaker prices of competing crops, sugar beet harvested area is expected to increase to almost 1.6 million acres in 2000. If realized, this would be the fourth consecutive year of increase in beet area. Cane area should also show a modest increase, rising above the 1 million acre mark. After 2000, beet area is projected to grow at a slower rate, as competing crop prices rise. Expansion in cane area will be even more modest.
- With growth in domestic use expected to exceed production, additional imports will be required. Total imports for fiscal year 2000 are estimated to be 1.7 million tons. By 2009, imports are projected to rise to 2.6 million tons.
- Sugar domestic disappearance is projected to continue to increase on a per capita basis. Over the projection period, total domestic use expands from 10.3 million tons in 2000 to 11.5 million tons in 2009.
- Ending stocks are expected to reach 16 percent of domestic use by the end of fiscal year 2000 due to increased production. These stock levels and the prospects of increased production in the coming year will make forfeitures of sugar loans a threat. Stocks show a gradual decline after 2002, falling to 14 percent of disappearance by 2009.
- Raw sugar prices are expected to average \$0.22 per pound in 2000. Some recovery is expected in the long run, but near-term price pressure cannot be ignored. During the remainder of the baseline, raw sugar prices range between \$0.22 and \$0.23 per pound.

# **U.S. Sugar Crop Production**

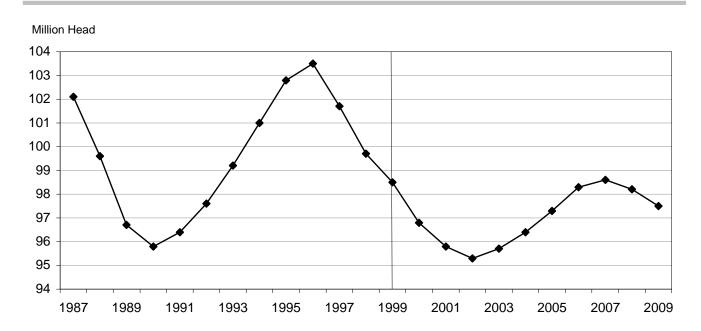
	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Sugar Beets											
Harv. Area (1,000 a.)	1,527	1,560	1,564	1,563	1,567	1,571	1,577	1,582	1,588	1,593	1,599
Yield (tons/a.)	21.82	21.17	21.19	21.22	21.24	21.27	21.29	21.32	21.35	21.37	21.40
Prod. (1,000 tons)	33,319	33,020	33,142	33,157	33,288	33,403	33,585	33,734	33,889	34,047	34,211
Sugarcane											
Harv. Area (1,000 a.)	991	1,013	1,026	1,033	1,038	1,042	1,046	1,049	1,052	1,055	1,057
Yield (tons/a.)	36.04	36.16	36.16	36.17	36.17	36.18	36.18	36.18	36.19	36.19	36.20
Prod. (1,000 tons)	35,721	36,640	37,087	37,364	37,561	37,712	37,839	37,954	38,063	38,170	38,276

# U.S. Sugar Supply and Utilization

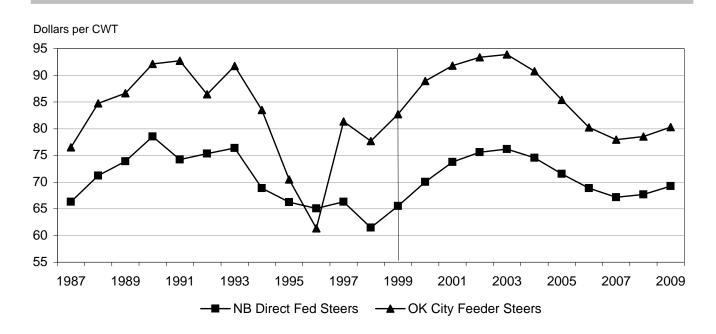
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
	(Thousand Short Tons, Raw Value, Fiscal Year)												
Supply	11,873	12,184	12,312	12,577	12,726	12,822	12,922	13,043	13,170	13,300	13,428		
Beginning Stocks	1,679	1,639	1,684	1,698	1,700	1,696	1,691	1,684	1,676	1,667	1,658		
Production	8,374	8,750	8,804	8,876	8,915	8,961	9,000	9,045	9,085	9,124	9,164		
Imports	1,820	1,795	1,824	2,002	2,112	2,165	2,232	2,314	2,410	2,509	2,605		
Quota	1,252	1,225	1,324	1,502	1,612	1,665	1,732	1,814	1,910	2,009	2,105		
Non-Quota	568	570	500	500	500	500	500	500	500	500	500		
Utilization	10,296	10,500	10,613	10,877	11,030	11,131	11,238	11,367	11,503	11,642	11,779		
Disappearance	10,066	10,250	10,363	10,627	10,780	10,881	10,988	11,117	11,253	11,392	11,529		
Exports	230	250	250	250	250	250	250	250	250	250	250		
Error Adjustment	-62	0	0	0	0	0	0	0	0	0	0		
Ending Stocks	1,639	1,684	1,698	1,700	1,696	1,691	1,684	1,676	1,667	1,658	1,649		
Prices				(U.S	S. Cents p	er Pound,	Fiscal Yea	ar)					
N.Y. Spot Raw Sugar	22.07	21.94	21.95	22.04	22.11	22.16	22.22	22.29	22.36	22.44	22.52		
Cane Loan Rate	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00		

# U.S. LIVESTOCK AND DAIRY

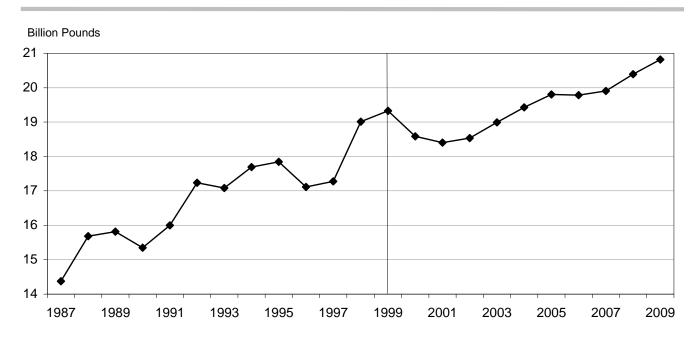
#### **U.S. Cattle and Calves**



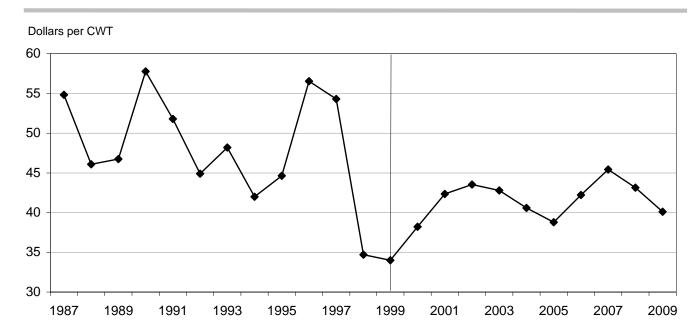
#### **U.S. Cattle Prices**



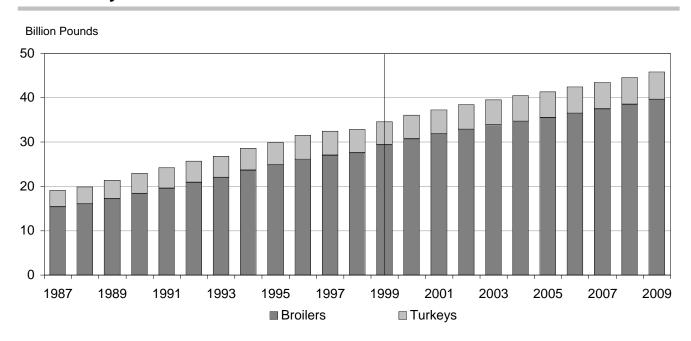
#### **U.S. Pork Production**



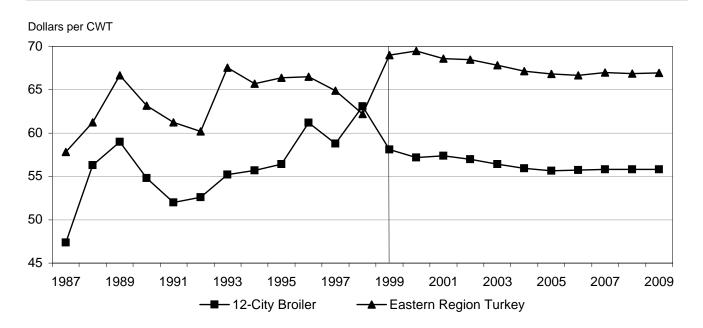
#### IA-So. MN Barrow and Gilt Price



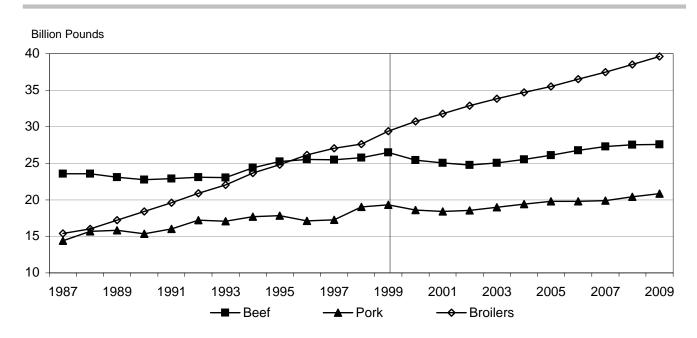
# **U.S. Poultry Production**



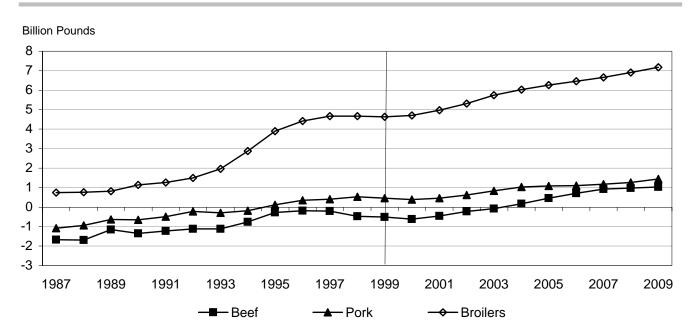
# **U.S. Poultry Prices**



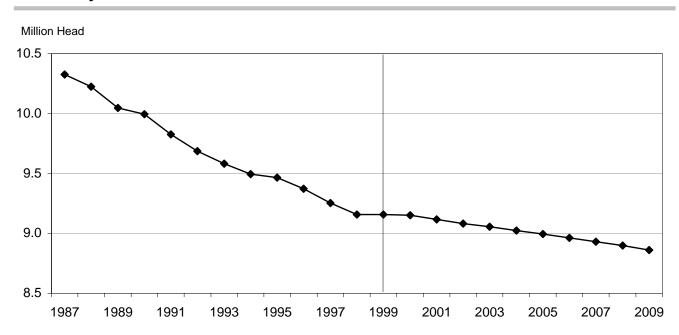
#### **U.S. Livestock Production**



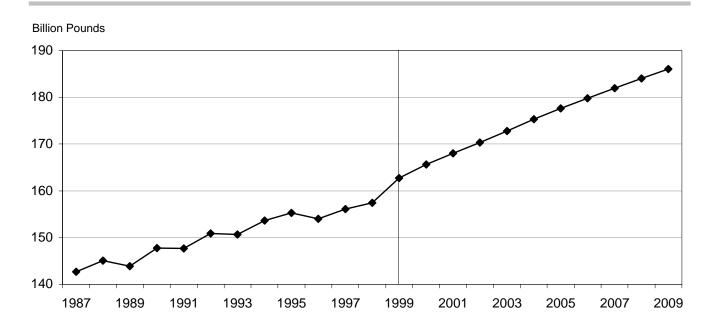
# **U.S. Meat Net Exports**



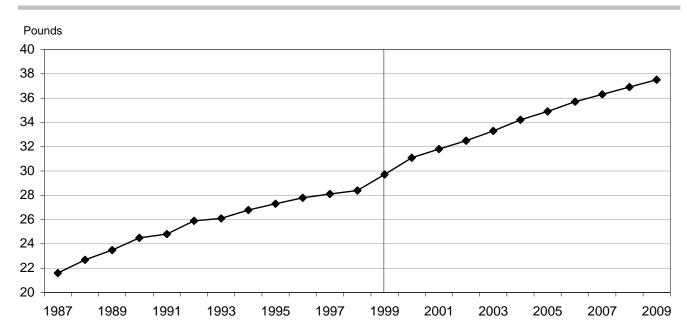
# **U.S. Dairy Cows**



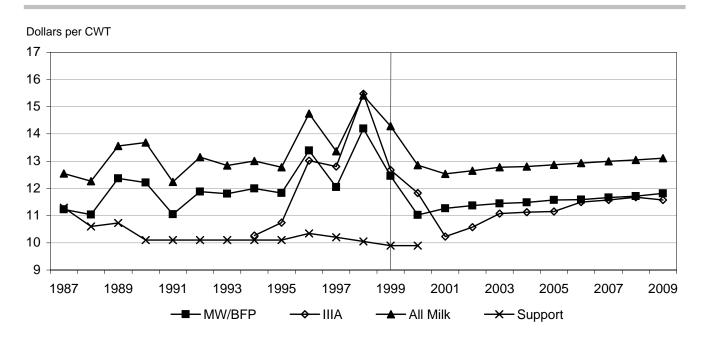
#### **U.S. Milk Production**



# **U.S. Cheese Consumption per Person**



#### **U.S. Milk Prices**



#### U.S. Beef

- The inventory of cattle and calves in the United States fell for the fourth year in a row to 96.8 million head at the start of 2000. The baseline shows that the liquidation phase of the cattle cycle will continue through 2002, when total cattle and calf inventories fall to 95.3 million head. The next cattle cycle in the baseline peaks at 98.6 million head, far less than the previous cycle peak of 103.5 million head.
- Beef production is expected to decline in 2000, as available supplies of slaughter cattle diminish. The decline in beef production is less than many expect as slaughter weights continue to remain at large levels. Beef production is expected to decline through 2002 as cattle inventories decline. The next expansion phase of the cattle industry shows beef production increasing by more than 2 billion pounds.
- Domestic beef consumption generally follows the production cycle. Beef consumption declines by 5 pounds on a per capita basis by 2003 relative to the 1999 level of 69.2 pounds. The decline in per capita beef consumption halts after 2003, and consumption per person remains near 63 pounds for the remainder of the baseline.
- Movement of beef outside U.S. borders is expected to increase in the FAPRI baseline. An increase in exports of more than 1.5 billion pounds can be associated with strong income growth in many countries and a continued opening of foreign markets to U.S. beef products.
- The price outlook for the cattle sector is optimistic. Nebraska direct fed steer prices are expected to average near \$70 per cwt for 2000. This price strength can be attributed to both firm domestic demand for beef, as well as the beginning of the reduction in supplies of beef. Prices for cattle are expected to continue their upward path for the next few years. By 2003, fed steer prices are projected to surpass \$76 per cwt.
- Returns to the cow-calf portion of the cattle industry are expected to increase for the next few years, as supplies
  of cattle continue to tighten. Feeder cattle prices are expected to increase more than \$10 per cwt over the 1999
  to 2003 period.

## **U.S. Beef Supply and Utilization**

O.S. Deel Supply	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
	(Million Head)											
Cattle and Calves (Jan. 1)	98.5	96.8	95.8	95.3	95.7	96.4	97.3	98.3	98.6	98.2	97.5	
Beef Cows (Jan. 1)	33.5	33.3	33.0	33.1	33.6	34.2	34.7	35.1	35.1	34.8	34.4	
Total Cattle Slaughter	36.3	34.7	34.0	33.5	33.6	34.0	34.6	35.3	35.8	35.8	35.6	
					(Mill	lion Pound	ds)					
Supply	29,766	28,827	28,456	28,222	28,518	28,954	29,463	30,067	30,529	30,693	30,769	
Beginning Stocks	393	400	367	366	366	371	377	381	385	389	388	
Imports	2,877	3,014	3,056	3,086	3,103	3,046	2,988	2,918	2,836	2,790	2,821	
Production	26,496	25,412	25,034	24,770	25,049	25,537	26,098	26,767	27,308	27,514	27,560	
Disappearance	29,366	28,460	28,091	27,856	28,147	28,577	29,082	29,682	30,140	30,305	30,382	
Domestic Use	26,992	26,056	25,499	24,996	25,130	25,368	25,643	26,048	26,385	26,545	26,530	
Exports	2,374	2,404	2,592	2,860	3,017	3,209	3,439	3,634	3,755	3,760	3,852	
Ending Stocks	400	367	366	366	371	377	381	385	389	388	387	
Per Capita Consumption						(Pounds)						
Carcass Weight	99.0	94.9	92.1	89.6	89.3	89.5	89.7	90.4	90.8	90.6	89.9	
Retail Weight	69.2	66.3	64.4	62.6	62.4	62.5	62.7	63.2	63.5	63.3	62.8	
Change	1.6%	-4.1%	-2.9%	-2.8%	-0.3%	0.1%	0.3%	0.8%	0.5%	-0.2%	-0.9%	
Prices												
1100-1300 lb.				(U	.S. Dollars	per Hund	dredweight	i)				
Nebraska Direct Steers	65.55	70.03	73.73	75.57	76.16	74.57	71.51	68.85	67.16	67.67	69.24	
Change 600-700 lb.	6.6%	6.8%	5.3%	2.5%	0.8%	-2.1%	-4.1%	-3.7%	-2.5%	0.8%	2.3%	
Oklahoma City Feeder Steers	82.68	88.90	91.79	93.39	93.87	90.73	85.38	80.26	77.93	78.51	80.29	
Change	6.4%	7.5%	3.3%	1.7%	0.5%	-3.3%	-5.9%	-6.0%	-2.9%	0.7%	2.3%	
Utility Cows, Sioux Falls	38.25	41.41	43.43	44.28	44.84	43.23	40.18	37.74	35.40	36.34	38.35	
Change	5.7%	8.3%	4.9%	1.9%	1.3%	-3.6%	-7.1%	-6.1%	-6.2%	2.6%	5.5%	
					(U.S. Do	ollars per l	Pound)					
Beef Retail	2.88	2.99	3.09	3.16	3.17	3.15	3.11	3.10	3.08	3.11	3.16	
Change	3.9%	4.0%	3.0%	2.3%	0.5%	-0.7%	-1.1%	-0.4%	-0.7%	0.9%	1.6%	
Net Returns	4.05	00.04	20.42	04.04	,	ollars per	,	40.04	FF 07	50.50	45.00	
Cow - Calf	-1.25	20.31	30.16	34.31	32.45	14.36	-14.16	-40.64	-55.27	-53.56	-45.90	

#### U.S. Pork

- Prices for barrows and gilts are expected to average well above the depressed levels that occurred in 1998 and 1999. For 2000, the national base, 51-52 percent lean equivalent, barrow and gilt prices are expected to average over \$38 per cwt. The FAPRI baseline suggests that over the next 10 years, barrow and gilt prices are expected to average \$5 per cwt lower than what occurred over the previous 10-year period. That projection is conditioned on continued cheap feed costs.
- Pork production for 2000 is expected to fall below the record setting 19.3 billion pounds in 1999. By 2004, pork production is expected to again be at record-setting levels suggesting that processing capacity could again be a problem at that time.
- International markets continue to provide an outlet for additional U.S. pork products. During the next 10-year period, pork exports are expected to grow more than 1 billion pounds, as demand in many Asian countries remains strong.
- Retail pork prices are expected to remain near \$2.50 per pound over the baseline period, moving in the opposite direction of pork production. Retail pork prices increase much slower than the general rate of consumer price inflation.
- With tighter margins expected over the next few years, it is important for pork producers to minimize the risks associated with increasing feed costs from a short crop. Feed costs on a per-cwt basis remain below \$30 throughout the baseline period.
- Per capita consumption of pork is expected to decline by 2.6 pounds this year from the record level of 54 pounds in 1999. Over the baseline period, per capita pork consumption remains near 50 pounds per person.

# U.S. Pork Supply and Utilization

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Hogs on Farms					(M	illion Head	d)						
Market (Dec. 1)	53.2	53.5	54.6	55.6	56.0	56.8	56.8	57.6	58.5	59.0	59.5		
Breeding (Dec. 1)	6.24	6.25	6.25	6.28	6.38	6.45	6.37	6.27	6.23	6.27	6.30		
Total Hog Slaughter	101.6	97.1	95.7	95.8	97.7	99.5	100.9	100.2	100.4	102.3	104.0		
	(Million Pounds)												
Supply	20,731	19,934	19,829	19,965	20,412	20,844	21,242	21,247	21,371	21,845	22,265		
Beginning Stocks	586	500	517	503	512	532	543	555	543	543	564		
Imports	822	846	906	930	911	880	892	915	919	909	880		
Production	19,323	18,588	18,406	18,532	18,989	19,432	19,807	19,778	19,909	20,392	20,821		
Disappearance	20,231	19,417	19,325	19,453	19,880	20,301	20,687	20,704	20,828	21,280	21,688		
Domestic Use	18,959	18,178	17,968	17,902	18,131	18,392	18,713	18,684	18,736	19,103	19,373		
Exports	1,272	1,239	1,357	1,551	1,749	1,908	1,974	2,019	2,093	2,177	2,315		
Ending Stocks	500	517	503	512	532	543	555	543	543	564	577		
Per Capita Consumption						(Pounds)							
Carcass Weight	69.5	66.2	64.9	64.2	64.4	64.9	65.5	64.8	64.5	65.2	65.6		
Retail Weight	54.0	51.4	50.4	49.8	50.0	50.3	50.8	50.3	50.0	50.6	50.9		
Change	2.7%	-4.8%	-2.0%	-1.2%	0.5%	0.6%	0.9%	-1.0%	-0.5%	1.1%	0.6%		
Prices													
Barrows & Gilts, Natl. Base				(U	.S. Dollars	s per Hund	dredweigh	t)					
51-52% lean equiv.	34.00	38.21	42.36	43.53	42.78	40.58	38.77	42.22	45.42	43.13	40.12		
Change	-2.1%	12.4%	10.9%	2.8%	-1.7%	-5.2%	-4.4%	8.9%	7.6%	-5.1%	-7.0%		
Sows, IA-S. Minn. #1-2,													
300-400 Lb. *	19.27	25.65	28.01	29.75	28.98	27.65	26.05	27.53	29.20	27.62	25.65		
Change	-20.6%	33.1%	9.2%	6.2%	-2.6%	-4.6%	-5.8%	5.7%	6.1%	-5.4%	-7.1%		
					(U.S. Do	ollars per l	Pound)						
Pork Retail	2.41	2.49	2.57	2.60	2.58	2.56	2.52	2.59	2.67	2.61	2.57		
Change	-0.5%	3.3%	2.9%	1.4%	-0.9%	-0.7%	-1.6%	2.7%	3.0%	-1.9%	-1.9%		
Net Returns				(U	.S. Dollars	s per Hund	dredweigh	t)					
Farrow - Finish	-4.13	-1.29	1.63	1.86	0.42	-2.27	-4.53	-2.21	-0.06	-2.79	-6.17		

<sup>\* 6</sup> Market prior to 1999.

#### **U.S. Poultry**

- Broiler production recovered in 1999, expanding by 6.5 percent following the production problems that arose in 1998. For 2000, production is expected to expand by another 4.6 percent. On average, broiler production is expected to expand by 3 percent per year.
- Turkey production is projected to expand by 2.3 percent, reaching 5.3 billion pounds in 2000. Thereafter, annual increases in turkey production are in the 1.5 to 2 percent range. This growth in turkey production is much slower than was experienced during the early 1990s and results in flat per capita consumption.
- Egg production is projected to expand to more than 7 billion dozen in 2000. Egg production is expected to continue to expand year after year in the baseline, as demand for eggs for further processed products and shell egg consumption remain firm.
- The 12-city broiler prices are projected to average near \$0.57 per pound in 2000. The decline in broiler prices can be associated primarily with the additional supplies of broiler meat on the market this year. Over the baseline period, broiler prices are expected to remain in the \$0.55 to \$0.58 per pound range, less than the \$0.63 per pound average price experienced in 1998.
- Exports of U.S. broiler meat are expected to expand by another 2.7 billion pounds over the next 10 years. By 2009, exports are responsible for moving 18.2 percent of domestic production offshore.
- Returns to the poultry sector remain at high levels, as feed costs continue to keep production costs at low levels. Adverse weather would quickly tighten the return picture for all of these commodities.
- Per capita consumption of broiler meat is projected to continue the expansion path it has been on for several years. Consumption of broiler meat will increase another 15 pounds per person annually over the projection period. Consumers consume 95 pounds of broiler meat per person per year by 2009, allowing broiler consumption to make up more than 40 percent of total meat consumption.

# U.S. Broiler Supply and Utilization

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(Mill	lion Pound	ds)				
Supply	30,113	31,549	32,693	33,790	34,780	35,637	36,460	37,425	38,399	39,450	40,574
Beginning Stocks	711	800	892	902	919	928	929	928	931	939	951
Production	29,402	30,749	31,802	32,888	33,861	34,709	35,531	36,497	37,468	38,511	39,623
Disappearance	29,316	30,662	31,795	32,875	33,856	34,712	35,536	36,498	37,464	38,503	39,611
Domestic Use	24,685	25,964	26,816	27,556	28,117	28,684	29,281	30,042	30,804	31,593	32,444
Exports	4,631	4,698	4,978	5,319	5,739	6,028	6,254	6,456	6,661	6,909	7,167
Ending Stocks	800	892	902	919	928	929	928	931	939	951	968
Per Capita Consumption						(Pounds)					
Retail Weight	90.6	94.6	96.9	98.7	99.9	101.1	102.4	104.3	106.0	107.9	109.9
Retail Weight less Pet Food	78.7	82.2	84.2	85.8	86.9	87.9	89.0	90.6	92.1	93.7	95.5
Change	7.2%	4.4%	2.4%	1.9%	1.2%	1.2%	1.3%	1.8%	1.7%	1.7%	1.9%
Prices					(U.S. C	ents per F	ound)				
12-City Wholesale	58.10	57.16	57.39	56.97	56.40	55.92	55.67	55.73	55.83	55.81	55.81
Change	-7.9%	-1.6%	0.4%	-0.7%	-1.0%	-0.9%	-0.4%	0.1%	0.2%	0.0%	0.0%
Broiler Retail	154.40	153.11	153.86	153.81	153.42	152.98	151.67	151.93	151.93	151.12	150.60
Change	0.5%	-0.8%	0.5%	0.0%	-0.3%	-0.3%	-0.9%	0.2%	0.0%	-0.5%	-0.3%
Net Returns	10.90	9.68	9.73	8.85	7.88	7.08	6.58	6.37	6.17	5.86	5.58

## U.S. Turkey Supply and Utilization

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(Milli	ion Pound	s)				
Supply	5,517	5,559	5,726	5,852	5,980	6,093	6,192	6,283	6,372	6,459	6,545
Beginning Stocks	304	225	287	301	312	326	337	346	355	363	372
Production	5,213	5,334	5,439	5,551	5,668	5,767	5,855	5,937	6,017	6,096	6,173
Disappearance	5,292	5,273	5,425	5,540	5,654	5,756	5,846	5,928	6,009	6,086	6,165
Domestic Use	4,931	4,887	4,996	5,067	5,138	5,209	5,274	5,332	5,389	5,438	5,488
Exports	361	386	429	474	516	547	573	596	620	648	677
Ending Stocks	225	287	301	312	326	337	346	355	363	372	380
					(	Pounds)					
Per Capita Consumption	18.1	17.8	18.0	18.2	18.3	18.4	18.4	18.5	18.6	18.6	18.6
Change	0.2%	-1.6%	1.4%	0.6%	0.6%	0.6%	0.4%	0.3%	0.3%	0.1%	0.1%
Prices					(U.S. Ce	ents per P	ound)				
Eastern Region Wholesale	69.00	69.47	68.60	68.48	67.81	67.15	66.84	66.68	66.98	66.87	66.96
Change	10.9%	0.7%	-1.3%	-0.2%	-1.0%	-1.0%	-0.5%	-0.2%	0.5%	-0.2%	0.1%
Retail	99.30	100.07	98.89	98.81	97.91	97.01	96.61	96.42	96.92	96.81	96.99
Change	-0.3%	0.8%	-1.2%	-0.1%	-0.9%	-0.9%	-0.4%	-0.2%	0.5%	-0.1%	0.2%
Net Returns	8.83	9.01	7.69	7.03	5.95	4.91	4.30	3.81	3.77	3.34	3.11

## U.S. Egg Supply and Utilization

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(Mi	Ilion Doze	n)				
Supply	6,917	7,079	7,172	7,270	7,360	7,450	7,540	7,635	7,736	7,840	7,948
Beginning Stocks	8	8	5	5	5	5	5	5	5	5	5
Production	6,901	7,067	7,163	7,261	7,351	7,441	7,531	7,626	7,727	7,831	7,939
Imports	7	4	4	4	4	4	4	4	4	4	4
<b>Disappearance</b> Civilian Disappearance	6,909	7,074	7,167	7,265	7,355	7,445	7,535	7,630	7,731	7,835	7,943
Shell Egg	4,139	4,135	4,142	4,151	4,154	4,160	4,166	4,176	4,188	4,201	4,216
Breaking Egg	1,671	1,783	1.844	1,907	1.972	2,038	2,104	2,170	2,238	2,307	2,377
Hatching Egg	941	996	1,020	1,044	1,065	1,081	1,097	1,114	1,133	1,153	1,175
Exports	159	160	162	163	165	166	168	170	172	173	175
Ending Stock	8	5	5	5	5	5	5	5	5	5	5
Per Capita Consumption						(Eggs)					
Shell Egg	182.2	180.8	179.6	178.5	177.2	176.0	174.9	173.9	173.0	172.2	171.3
Change	2.8%	-0.8%	-0.7%	-0.6%	-0.7%	-0.7%	-0.6%	-0.6%	-0.5%	-0.5%	-0.5%
Breaking Egg	73.5	77.9	79.9	82.0	84.1	86.2	88.3	90.4	92.5	94.5	96.6
Change	8.3%	6.0%	2.5%	2.6%	2.6%	2.5%	2.4%	2.3%	2.3%	2.3%	2.2%
Total	255.7	258.7	259.5	260.5	261.3	262.2	263.2	264.3	265.5	266.7	268.0
Prices					(U.S. C	ents per D	ozen)				
N.Y. Grade A Lg. Wholesale	65.60	62.02	65.08	66.82	68.09	68.34	68.98	70.11	70.99	71.90	72.81
Change	-13.5%	-5.5%	4.9%	2.7%	1.9%	0.4%	0.9%	1.6%	1.3%	1.3%	1.3%
Shell Egg Retail	96.28	93.25	96.97	99.39	101.38	102.31	103.57	105.39	106.96	108.60	110.26
Change	-6.2%	-3.1%	4.0%	2.5%	2.0%	0.9%	1.2%	1.8%	1.5%	1.5%	1.5%
Net Returns	2.20	-1.59	0.78	1.95	2.86	2.69	3.06	3.83	4.37	4.95	5.55

#### U.S. Dairy

- Milk production is set to exceed 165 billion pounds in 2000. This is a 1.8 percent increase over the 1999 level. The annual growth rate of 3.4 percent in milk production that occurred in 1999, coupled with the 1.8 percent projected this year, will result in abundant supplies of milk. Throughout the coming decade, the baseline suggests that the annual growth rate in milk production will average near 1.2 percent.
- Expected gains in milk production per cow more than offset the decline in the U.S. dairy cow herd, which results in an increase in milk production over the projection period. The driving factor behind the large increase in current milk production levels is the leveling off of the dairy cow herd at 9.2 million head. This is the first time in many years that the decline in dairy cows has been halted.
- The outlook for milk uses suggests that the cheese sector is crucial for the dairy sector. Most of the additional supplies of milk generated are destined for the cheese vat. If demand for cheese were to falter, milk prices would likely tumble as well.
- This baseline incorporates all of the changes that resulted from the USDA's reform of the Federal Milk Marketing Order (FMMO) System. Features of this reform include changes in classifications of milk, minimum pricing for milk, and a reduction in the number of orders in the system.
- In accordance with current law, the CCC price support program expires after 2000 in the baseline. This has the largest impact on the nonfat dry milk sector. The Dairy Export Incentive program (DEIP) is used at the WTO maximum level for nonfat dry milk and in the other dairy commodities depending on the market outlook.

#### **U.S. Milk Supply and Utilization**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
				(1	Million Pou	unds Milk	Equivalent	:)			
Supply	162,875	165,800	168,166	170,471	172,912	175,497	177,771	179,967	182,099	184,154	186,161
Milk Production	162,732	165,657	168,023	170,328	172,769	175,354	177,628	179,824	181,956	184,011	186,018
Per Cow (Pounds)	17,770	18,100	18,434	18,754	19,080	19,432	19,750	20,063	20,374	20,683	20,993
No. Cows (1,000)	9,158	9,152	9,115	9,082	9,055	9,024	8,994	8,963	8,931	8,897	8,861
Net Imports	143	143	143	143	143	143	143	143	143	143	143
Net Change in Stocks	0	0	0	0	0	0	0	0	0	0	0
Utilization	162,867	165,800	168,166	170,471	172,912	175,497	177,771	179,967	182,099	184,154	186,161
On-Farm Use	1,294	1,274	1,253	1,236	1,225	1,213	1,200	1,191	1,180	1,170	1,159
Fed to Calves	1,108	1,107	1,099	1,092	1,086	1,079	1,073	1,067	1,060	1,053	1,045
Farm-churned Butter	186	167	154	144	139	133	127	124	120	117	114
Fluid Product Use	56,773	56,889	57,355	57,598	57,887	58,133	58,317	58,492	58,674	58,851	59,053
Whole Milk Per Capita (lb.)	71	69	69	68	67	66	65	64	63	62	61
Lowfat Milk Per Capita (lb.)	136	136	136	136	137	137	137	137	137	137	137
Manufactured Use	98,550	101,387	103,308	105,387	107,551	109,902	112,003	114,034	115,995	117,883	119,699
Creamery Butter	26,404	26,420	26,478	26,555	26,605	26,679	26,709	26,680	26,689	26,682	26,694
Whey Cream	5,500	5,746	5,939	6,142	6,355	6,584	6,795	7,006	7,204	7,396	7,579
Net Creamery Butter	20,904	20,674	20,539	20,413	20,250	20,094	19,914	19,675	19,485	19,286	19,115
Cheese	60,073	62,650	64,667	66,792	69,016	71,414	73,618	75,820	77,893	79,902	81,822
Evaporated and Condensed	1,689	1,901	1,800	1,731	1,670	1,617	1,548	1,490	1,425	1,363	1,293
Frozen Dairy Products	14,268	14,530	14,653	14,787	14,933	15,079	15,208	15,317	15,442	15,566	15,684
Other Manufactured Products	1,616	1,632	1,648	1,665	1,681	1,698	1,715	1,732	1,750	1,767	1,785
Residual	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250
Removals (TMSB)	3,609	2,212	1,408	1,408	1,464	1,464	1,464	1,464	1,464	1,464	1,464
Butter	88	88	176	176	220	237	237	264	281	281	308
Cheese	48	39	39	39	39	39	39	39	39	39	39
Nonfat Dry Milk	3,403	2,016	1,124	1,124	1,124	1,124	1,124	1,124	1,124	1,124	1,124
Farm Prices and Returns				(L	J.S. Dollar	s per Hun	dredweigh	t)			
Minnesota-Wisconsin	12.45	11.02	11.27	11.37	11.45	11.48	11.57	11.59	11.66	11.71	11.81
Manufacturing Grade	12.54	11.09	11.34	11.45	11.52	11.55	11.65	11.66	11.73	11.78	11.89
III-A Milk Price	12.68	11.83	10.23	10.58	11.08	11.12	11.15	11.50	11.57	11.68	11.57
Fluid Grade	14.39	12.90	12.60	12.70	12.83	12.86	12.95	12.97	13.04	13.09	13.25
All Milk	14.29	12.85	12.53	12.65	12.78	12.80	12.87	12.93	12.99	13.04	13.11
Support Price	9.90	9.90	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### **State-level Dairy Supply**

- The movement of milk production to the western portion of the United States continues to be the dominant feature of regional milk production. California, New Mexico, and Idaho all continue to increase their percentage of U.S. milk production. California surpassed Wisconsin for the largest inventory of dairy cows in 1998 and continues to distance itself from the second-place finisher.
- The differences that arise in milk production per cow can be quite marked. The states with low levels of milk production per cow will continue to find it difficult to compete. Some states have seen recent jumps in their productivity, as new dairies have come into the state and increased milk per cow considerably.
- The movement of milk production to the western portion of the United States is not associated with the FMMO system.
- Although all 50 states have dairy cows, more than 50 percent of production is associated with only five states: California, Wisconsin, New York, Minnesota, and Pennsylvania.

**U.S. Dairy Cows by State** 

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(Thou	usand Hea	ad)				
Alabama	27	26	24	23	21	20	19	18	17	16	15
Alaska	1	1	1	1	1	1	1	1	1	1	1
Arizona	134	136	138	140	142	144	146	148	150	152	155
Arkansas	44	40	35	32	29	26	24	23	22	21	20
California	1,466	1,503	1,538	1,570	1,598	1,623	1,645	1,665	1,682	1,696	1,709
Colorado	82	81	80	78	77	76	75	74	73	72	71
Connecticut	29	28	27	27	26	26	26	25	25	25	25
Delaware	11	11	11	11	11	11	11	11	11	11	11
Florida	158	156	154	152	150	149	148	147	147	146	146
Georgia	89	85	80	76	72	69	65	62	59	57	54
Hawaii	9	8	8	8	7	7	6	6	6	5	5
Idaho	318	342	361	378	392	405	415	424	432	438	443
Illinois	123	117	112	108	104	101	98	96	93	91	89
Indiana	136	136	136	135	135	134	133	132	131	129	128
lowa	216	209	203	198	195	191	188	186	183	180	178
Kansas	86	89	90	91	92	93	93	94	95	96	97
Kentucky	133	128	124	119	115	111	107	104	101	98	95
Louisiana	61	59	57	56	54	53	52	51	50	49	48
Maine	42	42	42	42	41	41	41	42	42	42	42
Maryland	86	85	84	83	82	82	81	81	80	80	79
Massachusetts	25	24	23	22	21	20	19	19	19	18	18
Michigan	295	291	286	282	278	274	270	267	264	260	258
Minnesota	545	539	533	527	522	517	513	508	505	501	498
Mississippi	39	37	35	33	32	30	29	28	27	25	24
Missouri	161	155	148	143	137	133	129	125	122	119	116
Montana	18	18	17	17	17	17	16	16	16	16	16
Nebraska	74	78	82	85	88	90	92	94	95	95	96
Nevada	25	25	25	25	25	25	25	25	25	25	25
New Hampshire	19	18	17	16	15	14	13	13	12	12	11
New Jersey	18	17	17	16	16	15	14	14	13	13	12
New Mexico	232	250	265	278	290	300	309	316	323	328	332
New York	701	701	699	696	693	689	686	682	679	675	671
North Carolina	73	71	70	68	66	65	64	62	61	60	59
North Dakota	49	45	42	39	36	33	31	29	27	25	24
Ohio	260	257	253	250	246	243	240	237	234	231	228
Oklahoma	92	91	90	90	89	89	88	88	88	87	87
Oregon	89	87	85	84	83	82	81	80	79	79	78
Pennsylvania	616	611	605	600	597	594	591	589	587	585	584
Rhode Island	2	2	2	2	2	2	2	2	2	2	2
South Carolina	24	22	21	20	20	19	19	18	18	18	17
South Dakota	102	101	100	98	97	96	94	93	91	90	88
Tennessee	97	92	86	81	76	72	68	65	62	60	58
Texas	345	338	331	324	317	311	305	300	294	289	284
Utah	92	92	92	91	91	91	91	92	92	92	92
Vermont	162	162	160	158	157	157	156	156	156	156	155
Virginia	121	119	117	115	113	112	110	109	107	106	105
Washington	247	246	244	242	241	240	239	239	238	238	237
West Virginia	18	18	17	17	17	16	16	16	15	15	15
Wisconsin	1,366	1.357	1,344	1,333	1,323	1,312	1,301	1,290	1.280	1,269	1.258
Wyoming	6	6	5	5	5	5	5	5	5	5	4
United States	9,158	9,152	9,115	9,082	9.055	9,024	8,994	8,963	8,931	8,897	8,861

# U.S. Milk Production by State

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					`	llion Poun	,				
Alabama	370	361	346	331	317	303	290	277	264	252	239
Alaska	14	15	16	16	17	18	18	19	19	19	20
Arizona	2,928	3,002	3,084	3,174	3,268	3,366	3,462	3,560	3,659	3,760	3,862
Arkansas	528	483	438	401	370	346	326	310	298	289	285
California	30,437	31,537	32,914	34,122	35,295	36,459	37,541	38,542	39,514	40,437	41,342
Colorado	1,684	1,680	1,672	1,670	1,670	1,671	1,670	1,671	1,672	1,673	1,675
Connecticut	522	525	521	517	515	516	516	517	519	522	526
Delaware	178	182	182	183	185	188	190	192	195	197	200
Florida	2,395	2,420	2,411	2,413	2,427	2,447	2,469	2,491	2,516	2,541	2,568
Georgia	1,449	1,391	1,328	1,271	1,220	1,173	1,127	1,083	1,042	1,003	966
Hawaii	121	119	116	112	108	103	97	91	85	78	71
Idaho	6,438	7,059	7,599	8,094	8,557	8,991	9,379	9,738	10,068	10,373	10,655
Illinois	2,029	1,975	1,923	1,882	1,852	1,829	1,807	1,788	1,770	1,754	1,738
Indiana	2,187	2,229	2,251	2,280	2,310	2,338	2,359	2,378	2,394	2,406	2,414
Iowa	3,778	3,714	3,659	3,630	3,618	3,614	3,610	3,607	3,604	3,599	3,595
Kansas	1,390	1,466	1,511	1,557	1,604	1,652	1,696	1,742	1,787	1,832	1,877
Kentucky	1,642	1,625	1,589	1,557	1,528	1,504	1,479	1,456	1,435	1,416	1,400
Louisiana	713	702	689	680	674	671	667	664	661	659	658
Maine	693	713	720	727	735	746	756	766	776	786	796
Maryland	1.392	1,403	1,400	1,401	1,406	1,413	1,419	1,426	1,433	1,440	1,447
Massachusetts	421	414	402	390	381	375	369	366	363	362	363
Michigan	5,429	5,476	5,459	5,450	5,451	5,460	5,461	5,467	5,475	5,484	5,493
Minnesota	9,481	9,564	9,625	9,676	9,742	9,822	9,891	9,960	10,033	10,107	10,186
Mississippi	556	540	519	502	487	474	461	449	437	425	413
Missouri	2,274	2,199	2,116	2,051	1,995	1,948	1,902	1,863	1,829	1,801	1,777
Montana	303	302	299	298	298	298	299	300	300	301	302
Nebraska	1,208	1,301	1,384	1,465	1,538	1,606	1,663	1,714	1,757	1,793	1,823
Nevada	497	502	505	511	517	523	529	535	541	547	553
New Hampshire	321	309	293	278	266	255	246	238	231	226	220
New Jersey	280	275	267	261	254	248	241	235	228	221	214
New Mexico	4,721	5,171	5,570	5,937	6,278	6,600	6,887	7,149	7,387	7,603	7,797
New York	12,061	12,329	12,472	12,591	12,709	12,844	12,950	13,056	13,156	13,254	13,347
North Carolina	1,216	1,213	1,195	1,178	1,162	1,148	1,134	1,120	1,107	1,095	1,084
North Dakota	697	655	615	577	543	511	482	455	431	410	392
Ohio	4,431	4,478	4,458	4,446	4,440	4,441	4,435	4,431	4,425	4,419	4,409
Oklahoma	1.249	1,257	1,256	1,257	1,262	1,270	1,275	1,281	1,288	1,294	1,301
Oregon	1,645	1,638	1,619	1,606	1,600	1,597	1,593	1,592	1,591	1,592	1,592
Pennsylvania	10,931	11,014	11,085	11,168	11,267	11,395	11,511	11,634	11,761	11,891	12,024
•	31	30	29	28	28	28	28	28	28	28	28
Rhode Island	366		341				322	319	316		309
South Carolina		353		332	326	324				313	
South Dakota	1,507	1,520	1,528	1,532	1,536	1,542	1,543	1,543	1,542	1,539	1,536
Tennessee	1,417	1,364	1,287	1,223	1,169	1,121	1,078	1,041	1,011	987	969
Texas	5,618	5,573	5,492	5,434	5,386	5,345	5,297	5,255	5,212	5,172	5,133
Utah	1,609	1,619	1,621	1,631	1,645	1,662	1,677	1,693	1,709	1,725	1,741
Vermont	2,754	2,834	2,842	2,851	2,878	2,915	2,952	2,993	3,034	3,075	3,116
Virginia	1,873	1,868	1,853	1,846	1,841	1,840	1,837	1,836	1,834	1,834	1,834
Washington	5,537	5,579	5,589	5,613	5,648	5,690	5,728	5,771	5,815	5,862	5,910
West Virginia	277	279	277	276	275	274	272	271	269	268	265
Wisconsin	23,055	23,326	23,585	23,833	24,101	24,382	24,619	24,847	25,069	25,280	25,486
Wyoming	80	76	72	70	69	68	67	67	67	67	67
United States	162,732	165,657	168,023	170,328	172,769	175,354	177,628	179,824	181,956	184,011	186,018

#### **State-Level All Milk Prices**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(Dollars pe	er Hundred	dweight)				
Alabama	16.37	14.36	13.76	13.90	14.03	14.06	14.14	14.20	14.27	14.33	14.40
Alaska	20.35	20.40	20.45	20.50	20.55	20.60	20.65	20.70	20.75	20.80	20.85
Arizona	13.87	12.46	12.04	12.18	12.33	12.36	12.43	12.51	12.57	12.63	12.69
Arkansas	15.42	14.26	13.67	13.80	13.93	13.96	14.04	14.10	14.17	14.23	14.31
California	13.70	11.87	12.12	12.22	12.30	12.33	12.42	12.44	12.51	12.56	12.66
Colorado	14.66	13.13	12.64	12.79	12.95	12.98	13.06	13.15	13.21	13.28	13.34
Connecticut	15.35	14.93	13.81	13.57	13.75	13.78	13.86	13.96	14.03	14.09	14.14
Delaware	15.05	14.71	13.62	13.48	13.66	13.70	13.77	13.88	13.95	14.01	14.06
Florida	17.78	16.29	15.67	15.80	15.92	15.95	16.03	16.08	16.15	16.21	16.29
Georgia	16.24	14.67	14.11	14.24	14.36	14.39	14.47	14.53	14.60	14.65	14.73
Hawaii	26.46	26.56	26.66	26.77	26.87	26.98	27.08	27.19	27.30	27.41	27.52
Idaho	12.94	11.46	11.16	11.33	11.51	11.55	11.62	11.73	11.79	11.86	11.91
Illinois	14.07	12.75	12.44	12.56	12.67	12.71	12.79	12.84	12.90	12.96	13.05
Indiana	14.54	13.22	12.50	12.66	12.85	12.88	12.96	13.06	13.13	13.19	13.24
lowa	13.43	11.87	11.60	11.73	11.86	11.89	11.97	12.04	12.10	12.16	12.24
Kansas	13.91	12.55	12.06	12.21	12.36	12.40	12.48	12.56	12.63	12.69	12.75
Kentucky	15.43	14.14	13.51	13.65	13.78	13.81	13.90	13.96	14.03	14.09	14.16
Louisiana	16.34	14.72	14.13	14.26	14.39	14.42	14.50	14.56	14.63	14.69	14.77
Maine	15.30	14.67	13.56	13.34	13.51	13.55	13.62	13.72	13.79	13.85	13.91
Maryland	15.15	13.97	13.38	13.54	13.72	13.76	13.83	13.94	14.00	14.07	14.12
Massachusetts	16.00	14.58	13.46	13.22	13.40	13.43	13.51	13.60	13.67	13.74	13.79
Michigan	14.87	13.46	12.87	13.03	13.21	13.25	13.32	13.43	13.50	13.56	13.61
Minnesota	14.07	12.20	12.12	12.25	12.37	12.40	12.48	12.54	12.60	12.66	12.74
Mississippi	16.29	14.91	14.32	14.45	14.58	14.61	14.69	14.75	14.82	14.88	14.96
Missouri	14.81	13.40	12.76	12.92	13.10	13.14	13.21	13.31	13.36	13.43	13.48
Montana	14.40	12.80	12.70	12.66	12.86	12.90	12.98	13.09	13.16	13.43	13.40
Nebraska	13.44	12.04	11.62	11.77	11.93	11.97	12.04	12.13	12.20	12.26	12.32
Nevada	13.25	11.94	11.46	11.62	11.79	11.83	11.90	12.13	12.20	12.20	12.19
New Hampshire	15.23	15.27	14.16	13.94	14.11	14.15	14.22	14.32	14.39	14.45	14.51
New Jersey	15.20	13.94	13.43	13.59	13.76	13.80	13.87	13.97	14.04	14.10	14.15
New Mexico	13.85	12.50	12.09	12.24	12.39	12.43	12.51	12.59	12.65	12.71	12.78
	14.49	13.14			12.39				13.24		
New York North Carolina	17.19		12.63 15.34	12.79 15.48		13.00 15.65	13.07	13.17 15.79		13.30	13.36 15.99
		16.00	11.54		15.61		15.73	11.95	15.86	15.92	12.16
North Dakota	13.15	11.62		11.66	11.78	11.81	11.90		12.02	12.07	
Ohio	15.00	13.89	13.21	13.38	13.56	13.60	13.67	13.78	13.84	13.91	13.96
Oklahoma	15.81	14.14	13.57	13.73	13.90	13.93	14.01	14.10	14.17	14.23	14.29
Oregon	14.24	12.92	12.34	12.51	12.72	12.75	12.82	12.94	13.01	13.08	13.12
Pennsylvania	15.13	13.32	12.87	13.00	13.14	13.17	13.25	13.31	13.38	13.43	13.50
Rhode Island	15.90	15.48	14.36	14.12	14.30	14.33	14.41	14.51	14.58	14.64	14.69
South Carolina	15.95	14.67	14.01	14.15	14.29	14.32	14.40	14.47	14.54	14.59	14.67
South Dakota	15.00	13.40	13.32	13.45	13.56	13.60	13.68	13.73	13.80	13.85	13.94
Tennessee	15.95	14.82	14.18	14.32	14.45	14.49	14.57	14.63	14.70	14.76	14.83
Texas	15.07	13.77	13.14	13.30	13.49	13.52	13.59	13.70	13.77	13.83	13.88
Utah	13.84	12.40	11.97	12.12	12.28	12.32	12.40	12.48	12.55	12.61	12.67
Vermont	15.46	14.83	13.72	13.50	13.67	13.71	13.78	13.88	13.95	14.01	14.07
Virginia	15.86	14.67	14.01	14.15	14.28	14.32	14.40	14.46	14.53	14.59	14.66
Washington	14.23	12.81	12.23	12.41	12.61	12.64	12.72	12.84	12.90	12.97	13.01
West Virginia	15.00	13.89	13.21	13.38	13.56	13.60	13.67	13.78	13.84	13.91	13.96
Wisconsin	13.95	12.41	12.26	12.40	12.52	12.56	12.64	12.70	12.77	12.82	12.90
Wyoming	13.30	11.50	11.08	11.23	11.39	11.43	11.50	11.59	11.66	11.72	11.78
United States	14.29	12.85	12.53	12.65	12.78	12.80	12.87	12.93	12.99	13.04	13.11

#### **U.S. Dairy Products**

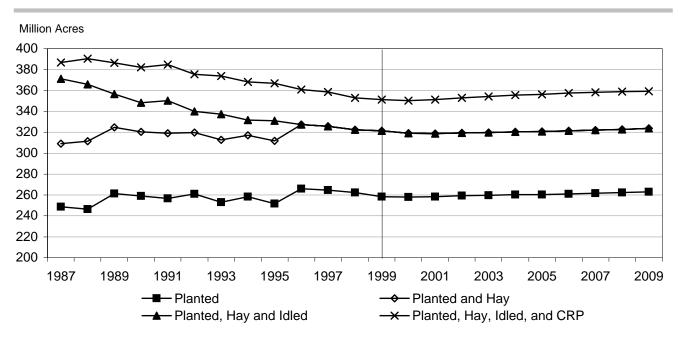
- Demand for cheese remains the major driver for the entire dairy industry. Cheese consumption per person is expected to increase another 6 pounds over the entire baseline period. If American consumers falter in their consumption of cheese, the entire dairy industry would be in for a major adjustment.
- Butter prices are expected to remain near \$1.15 per pound over the baseline period, as supplies of butter do not grow substantially; however, demand for butter remains firm.
- Wholesale cheese prices are expected to decline by more than \$0.20 per pound to \$1.25 per pound in 2000 relative to 1999, as the large supply of milk results in abundant supplies of cheese. Longer term, wholesale cheese prices are expected to average in the \$1.30 per pound range.
- The outlook for nonfat dry milk prices suggests they will fall to near \$0.80 per pound with the conclusion of the long-standing CCC purchase program. As the nonfat dry milk market adjusts to the end of the CCC purchase program, prices rise but never return to levels seen before the end of the CCC purchase program.
- The United States is not expected to be a consistent commercial exporter of bulk dairy products. Domestic prices for cheese, butter, and nonfat dry milk remain above the respective world prices for these products.

#### **U.S. Dairy Supply and Utilization**

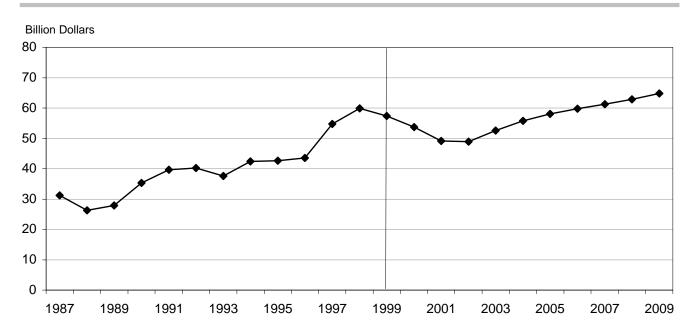
O.S. Daily Supply		ıııızaı									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Butter					(Mil	lion Pound	ds)				
Supply	1,217	1,220	1,223	1,228	1,228	1,230	1,229	1,226	1,225	1,222	1,223
Production	1,161	1,162	1,164	1,168	1,170	1,173	1,174	1,173	1,174	1,173	1,174
Imports	30	31	32	33	31	30	28	26	24	22	22
Utilization	1,216	1,220	1,224	1,228	1,228	1,230	1,229	1,226	1,224	1,222	1,223
Domestic Use	1,175	1,179	1,174	1,177	1,173	1,172	1,171	1,166	1,163	1,160	1,158
Exports	12	12	21	22	26	29	29	31	32	33	36
Shipments	2	2	2	2	2	2	2	2	2	2	2
Ending Stocks	27	27	27	27	27	27	27	27	27	27	27
CCC Removals	0	0	0	0	0	0	0	0	0	0	0
DEIP	10	10	20	20	25	27	27	30	32	32	35
Cheese											
Supply	8,839	9,291	9,565	9,854	10,156	10,481	10,780	11,079	11,362	11,635	11,897
Production	7,971	8,313	8,580	8,862	9,157	9,476	9,768	10,060	10,335	10,602	10,857
Imports	350	357	360	364	368	371	375	379	383	386	390
Utilization	8,840	9,292	9,566	9,854	10,156	10,481	10,780	11,080	11,361	11,635	11,897
Domestic Use	8,082	8,526	8,794	9,076	9,372	9,690	9,983	10,276	10,551	10,818	11,074
Exports	84	87	90	93	96	99	102	105	108	111	114
Shipments	53	54	54	54	54	55	55	55	55	56	56
Ending Stocks	621	625	628	631	634	637	640	644	647	650	653
CCC Removals	1	0	0	0	0	0	0	0	0	0	0
DEIP	4	4	4	4	4	4	4	4	4	4	4
Nonfat Dry Milk											
Supply	1,548	1,676	1,687	1,575	1,465	1,456	1,447	1,432	1,421	1,410	1,401
Production	1,385	1,393	1,385	1,379	1,369	1,361	1,352	1,338	1,328	1,317	1,309
Imports	12	12	12	13	13	13	14	14	14	15	15
Utilization	1,545	1,676	1,687	1,575	1,465	1,457	1,447	1,432	1,421	1,409	1,401
Domestic Use	1,028	1,133	1,264	1,257	1,214	1,207	1,198	1,184	1,174	1,163	1,156
Exports	240	247	234	229	163	163	163	163	163	163	163
Shipments	2	2	2	2	2	2	2	2	2	2	2
Feed, Waste	4	4	4	4	4	4	4	4	4	4	4
Ending Stocks	271	290	183	83	82	81	80	79	78	77	76
CCC Removals	236	126	0	0	0	0	0	0	0	0	0
DEIP	245	159	159	159	159	159	159	159	159	159	159
Prices					(Cen	ts per Pou	ınd)				
Butter Wholesale	125.65	108.84	113.50	111.44	114.44	115.35	114.96	118.46	118.27	118.51	117.53
Butter CCC	65.00	65.89	0	0	0	0	0	0	0	0	0
Cheese Wholesale 40 lb. Block	141.89	125.85	128.45	129.42	130.30	130.64	131.55	131.93	132.63	133.17	134.15
Cheese CCC	110.05	110.02	0	0	0	0	0	0	0	0	0
NFD Wholesale	103.58	103.84	82.70	87.77	92.12	92.22	92.72	95.15	96.02	97.16	96.33
NFD CCC	100.93	100.45	0	0	0	0	0	0	0	0	0
Puttor Potoil	0.65	2.40	0.47	2.44		rs per Po		2.54	254	254	2.52
Butter Retail Cheese Retail	2.65 3.81	2.40 3.44	2.47 3.52	2.44 3.57	2.48 3.61	2.50 3.64	2.49 3.69	2.54 3.72	2.54 3.76	2.54 3.80	2.53 3.84
Choese Netali	3.01	3.44	3.32	3.31	3.01	3.04	3.03	3.12	3.70	3.00	3.04
Per Capita Consumption						(Pounds)					
Butter	4.3	4.3	4.2	4.2	4.2	4.1	4.1	4.1	4.0	4.0	3.9
Cheese	29.7	31.1	31.8	32.5	33.3	34.2	34.9	35.7	36.3	36.9	37.5
NFD	3.6	4.0	4.4	4.4	4.3	4.3	4.2	4.1	4.0	4.0	3.9

# U.S. AGGREGATE MEASURES

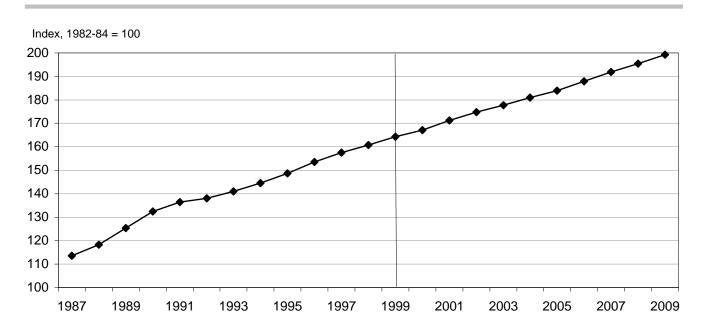
#### **U.S. Land Use**



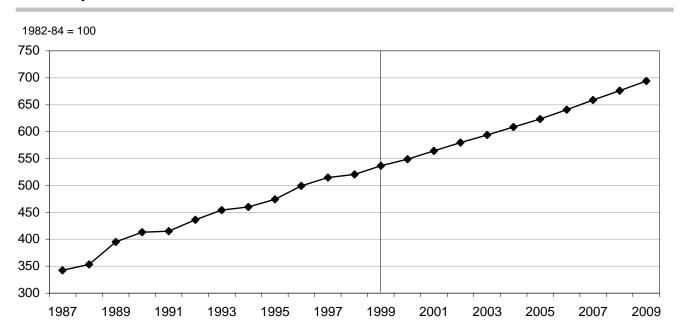
## Value of U.S. Agricultural Exports, Fiscal Year



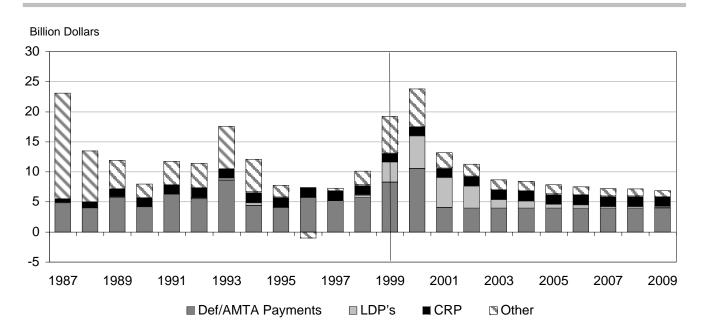
#### **Consumer Price Index for Food**



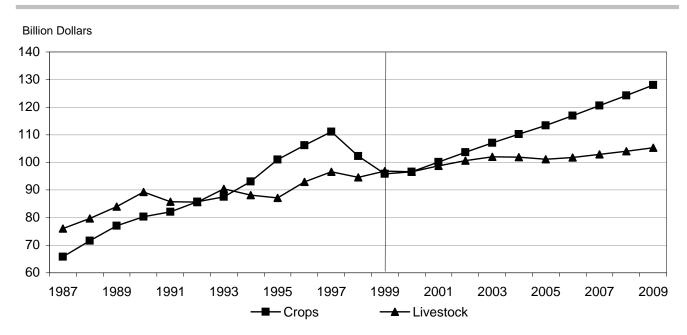
## **Real Expenditures for Food**



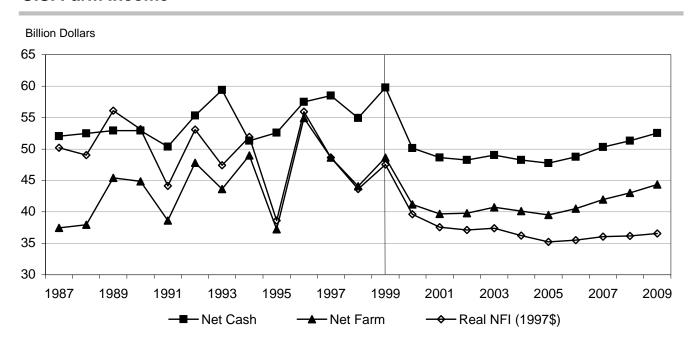
# **Government Outlays, Fiscal Year**



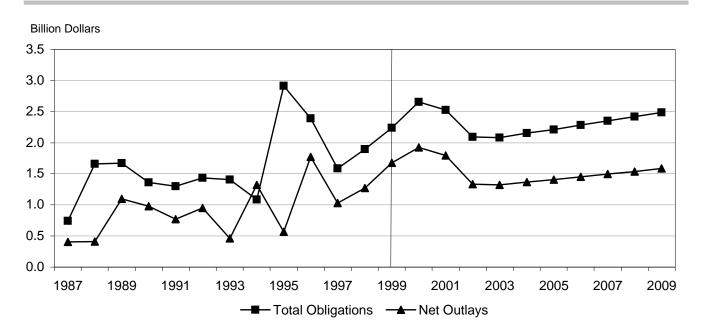
### **U.S. Cash Receipts**



#### **U.S. Farm Income**



## **Crop Insurance Outlays, Fiscal Year**



#### U.S. Land Use

- Under the provisions of the FAIR Act, CRP enrollment is capped at 36.4 million acres. Through 1999, CRP enrollment stood at 29.8 million acres.
- Original CRP contracts began to expire in 1997/98, and total CRP area fell to 30.5 million acres by 1998/99, as some contracts were not immediately extended. It is assumed that contract holders may re-bid their land and that new land may also be bid into the CRP. While not all bids will be accepted and some current contracts will not be extended, the net effect is an increase in CRP area starting in 2000/01. Area in the program reaches 36 million acres by 2006/07. FAPRI assumes that the Secretary of Agriculture will seek to maintain the CRP area at or very near the maximum acreage through the use of continuous sign-ups of riparian area and filter strips, state incentive programs, and traditional announced sign-ups.
- Given the price paths of program crops, the planting flexibility provisions of the FAIR Act allow feed grain and oilseed area to expand at the cost of cotton and rice area. This shifting is a continuation of the changes occurring while normal flex acres existed.
- Total area planted to 15 principal crops decreased in 1999/00 due to lower prices for most key commodities. For the 2000 crop year, planted area of the 15 crops is projected to total 258.2 million acres. The higher commodity prices in the last years of the baseline pull land back into production. By 2009/10, planted area reaches 263 million acres

**U.S. Planted and Idled Area** 

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mi	llion Acres	5)				
15-Crop Total Area	288.1	289.5	290.9	292.9	294.2	295.4	296.0	297.0	297.6	298.2	298.5
Planted	258.3	258.2	258.4	259.4	259.7	260.4	260.5	261.0	261.6	262.2	263.0
Annual Idled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CRP	29.8	31.3	32.5	33.5	34.5	35.0	35.5	36.0	36.0	36.0	35.5
Wheat Total Area	72.1	71.8	73.4	75.6	76.4	77.0	76.9	77.2	77.4	77.6	77.6
Planted	62.8	62.1	63.3	65.2	65.7	66.1	65.8	66.0	66.2	66.4	66.6
Annual Idled	NA										
CRP	9.3	9.7	10.1	10.4	10.7	10.9	11.0	11.2	11.2	11.2	11.0
Corn Total Area	80.3	80.3	81.3	83.2	82.9	83.6	83.4	84.1	84.0	84.4	84.3
Planted	77.4	77.2	78.1	79.9	79.4	80.1	79.9	80.5	80.4	80.8	80.8
Annual Idled	NA										
CRP	2.9	3.1	3.2	3.3	3.4	3.5	3.5	3.6	3.6	3.6	3.5
Sorghum Total Area	11.4	11.6	11.5	11.5	11.5	11.6	11.6	11.6	11.5	11.5	11.4
Planted	9.3	9.4	9.3	9.2	9.1	9.1	9.1	9.1	9.0	9.0	8.9
Annual Idled	NA										
CRP	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.4
Barley Total Area	7.7	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.0	8.0
Planted	5.2	5.3	5.2	5.1	5.1	5.1	5.0	5.0	5.0	5.0	5.0
Annual Idled	NA										
CRP	2.5	2.6	2.8	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.0
Oats Total Area	5.8	5.7	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.5	5.5
Planted	4.7	4.6	4.6	4.5	4.4	4.4	4.4	4.3	4.3	4.2	4.2
Annual Idled CRP	NA 1.1	NA 1.1	NA 1.2	NA 1.2	NA 1.3						
Soybean Total Area	76.5 73.8	77.5 74.5	76.3 73.2	74.3 71.0	74.9 71.6	74.7 71.3	75.6 72.2	75.4 71.9	76.1 72.6	76.3 72.8	76.9 73.5
Planted CRP	73.6 2.8	3.0	3.1	3.2	3.3	3.4	3.5	3.5	3.5	3.5	3.4
Cotton Total Area	15.8	16.1	15.7	15.4	15.3	15.2	15.2	15.2	15.2	15.1	15.1
Planted	14.6	14.8	14.4	14.0	13.9	13.8	13.7	13.8	13.8	13.7	13.6
Annual Idled CRP	NA 1.2	NA 1.3	NA 1.3	NA 1.4	NA 1.4	NA 1.4	NA 1.4	NA 1.5	NA 1.5	NA 1.5	NA 1.4
Rice Total Area	3.6	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.3	3.3	3.3
Planted Annual Idled	3.6 NA	3.4 NA	3.5 NA	3.5 NA	3.4 NA	3.4 NA	3.4 NA	3.3 NA	3.3 NA	3.3 NA	3.3 NA
CRP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sugar Harvested	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7
Peanuts Planted	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
5 Other Crops*	7.0	7.0	7.0	7.0	7.0	7.1	7.1	7.1	7.1	7.2	7.2
Other CRP Area	7.8	8.2	8.5	8.7	9.0	9.1	9.2	9.4	9.4	9.4	9.2
Hay Harvested	63.2	60.8	60.1	60.1	60.1	60.2	60.2	60.3	60.5	60.5	60.6
15 Crops + Hay	351.3	350.3	351.1	353.0	354.3	355.5	356.3	357.4	358.1	358.8	359.1
Planted	321.5	319.1	318.6	319.5	319.8	320.5	320.8	321.4	322.1	322.8	323.6
Annual Idled	NA										
CRP	29.8	31.3	32.5	33.5	34.5	35.0	35.5	36.0	36.0	36.0	35.5

 $<sup>^{\</sup>star}$  Planted area of sunflowers, edible beans, and flaxseed. Harvested area for tobacco and rye.

**U.S. Wheat Production** 

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	lion Acres	)				
CRP Idled	9.30	9.72	10.12	10.42	10.73	10.89	11.04	11.19	11.19	11.19	11.04
Corn Belt	0.59	0.60	0.63	0.64	0.66	0.67	0.67	0.68	0.68	0.68	0.68
Central Plains	2.14	2.22	2.34	2.41	2.48	2.52	2.56	2.59	2.59	2.59	2.56
Delta States	0.20	0.22	0.22	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24
Far West	0.91	0.98	0.98	1.01	1.04	1.05	1.07	1.08	1.08	1.08	1.07
Lake States	0.30	0.34	0.33	0.34	0.35	0.36	0.36	0.37	0.37	0.37	0.36
Northeast	0.01 2.79	0.01	0.01	0.01 3.17	0.01	0.01 3.31	0.01	0.01 3.40	0.01 3.40	0.01 3.40	0.01 3.36
Northern Plains Southeast	0.32	2.85 0.35	3.07 0.35	0.37	3.26 0.38	0.38	3.36 0.39	0.39	0.39	0.39	0.39
Southern Plains	2.04	2.16	2.18	2.25	2.32	2.35	2.38	2.42	2.42	2.42	2.38
Planted Area	62.81	62.06	63.29	65.19	65.69	66.12	65.85	66.02	66.20	66.37	66.60
Corn Belt	3.67	3.54	3.64	3.95	3.99	4.03	3.94	3.95	3.92	3.90	3.87
Central Plains	14.65	14.25	14.31	14.68	14.75	14.79	14.68	14.68	14.68	14.67	14.67
Delta States	1.26	1.46	1.51	1.50	1.59	1.61	1.63	1.63	1.66	1.68	1.72
Far West	5.68	5.66	5.74	5.91	5.95	6.01	6.00	6.04	6.07	6.11	6.15
Lake States	2.79	2.68	2.66	2.81	2.85	2.88	2.85	2.86	2.86	2.86	2.87
Northeast	0.67	0.70	0.69	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Northern Plains	18.29	18.61	19.00	19.48	19.62	19.76	19.75	19.86	19.96	20.04	20.14
Southeast	2.76	2.79	2.77	2.81	2.86	2.85	2.86	2.84	2.85	2.86	2.89
Southern Plains	13.05	12.37	12.97	13.34	13.38	13.47	13.41	13.44	13.48	13.52	13.58
Harvested Area	53.91	54.88	56.07	57.75	58.20	58.58	58.35	58.50	58.66	58.81	59.01
Corn Belt	3.50	3.31	3.40	3.69	3.73	3.77	3.68	3.69	3.67	3.65	3.62
Central Plains	13.45	13.23	13.48	13.80	13.86	13.90	13.80	13.80	13.80	13.79	13.80
Delta States	1.19	1.34	1.39	1.39	1.46	1.48	1.51	1.50	1.53	1.55	1.58
Far West	5.15	5.37	5.44	5.59	5.63	5.68	5.68	5.71	5.74	5.78	5.82
Lake States	2.72	2.60	2.58	2.72	2.76	2.79	2.76	2.77	2.77	2.77	2.78
Northeast	0.63	0.67	0.66	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Northern Plains	17.19	17.75	18.12	18.58	18.71	18.85	18.84	18.94	19.03	19.11	19.20
Southeast	2.11	2.22	2.21	2.24	2.29	2.29	2.29	2.27	2.29	2.29	2.32
Southern Plains	7.97	8.40	8.80	9.05	9.08	9.14	9.10	9.12	9.15	9.18	9.22
						els per Ac					
Yield	42.7	40.0	40.2	40.4	40.7	41.0	41.2	41.5	41.7	42.0	42.2
Corn Belt	60.5	52.8	53.2	53.5	53.8	54.2	54.6	54.9	55.3	55.6	55.9
Central Plains	46.5	37.4	37.6	37.8	38.0	38.2	38.4	38.6	38.8	39.0	39.2
Delta States	54.4	47.6	48.2	48.8	49.4	49.9	50.5	51.1	51.6	52.2	52.7
Far West	62.1 47.1	69.0 40.8	69.6	70.1 41.0	70.6 41.1	71.2 41.2	71.7 41.3	72.3 41.4	72.8 41.5	73.3 41.6	73.8 41.7
Lake States Northeast	58.6	58.3	40.9 59.2	60.0	60.9	61.7	62.5	63.3	64.1	64.9	65.6
Northern Plains	30.4	32.4	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7
Southeast	51.5	49.4	50.2	51.1	51.9	52.6	53.4	54.2	54.9	55.7	56.4
Southern Plains	35.5	31.0	31.1	31.3	31.4	31.6	31.7	31.9	32.1	32.2	32.4
	33.3	00	0	00		on Bushel		00	02	02.2	02
Production	2,302	2,195	2,253	2,336	2,370	2,401	2,407	2,427	2,449	2,470	2,493
Corn Belt	212	175	181	197	201	204	201	203	203	203	203
Central Plains	626	495	507	522	527	531	530	533	536	538	541
Delta States	65	64	67	68	72	74	76	77	79	81	84
Far West	320	370	378	392	397	404	407	412	418	423	429
Lake States	128	106	106	112	114	115	114	115	115	116	116
Northeast	37	39	39	41	41	42	42	43	44	44	45
Northern Plains	523	575	590	607	614	621	624	630	636	641	647
Southeast	109	110	111	114	119	120	123	123	126	128	131
Southern Plains	283	261	274	283	285	289	289	291	293	296	298

**U.S. Corn Production** 

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mi	llion Acres	5)				
CRP Idled	2.92	3.10	3.23	3.33	3.44	3.49	3.54	3.60	3.60	3.60	3.54
Corn Belt	1.36	1.42	1.52	1.57	1.62	1.65	1.67	1.70	1.70	1.70	1.67
Central Plains	0.32	0.33	0.35	0.36	0.37	0.38	0.38	0.39	0.39	0.39	0.38
Delta States	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Far West	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Lake States	0.57	0.64	0.63	0.65	0.67	0.68	0.69	0.70	0.70	0.70	0.69
Northeast	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Northern Plains	0.27	0.28	0.30	0.31	0.31	0.32	0.32	0.33	0.33	0.33	0.32
Southeast	0.24	0.26	0.27	0.27	0.28	0.29	0.29	0.29	0.29	0.29	0.29
Southern Plains	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Planted Area	77.43	77.22	78.11	79.86	79.44	80.09	79.85	80.46	80.37	80.77	80.76
Corn Belt	34.80	34.50	34.88	36.04	35.87	36.19	35.92	36.22	36.07	36.21	36.10
Central Plains	12.98	12.88	12.99	13.03	12.99	13.07	13.12	13.20	13.24	13.31	13.35
Delta States	0.79	0.85	0.89	0.94	0.92	0.93	0.93	0.94	0.94	0.95	0.96
Far West	1.03	1.04	1.07	1.07	1.07	1.09	1.10	1.12	1.13	1.15	1.16
Lake States	12.90	12.96	13.07	13.32	13.29	13.38	13.34	13.43	13.42	13.47	13.47
Northeast	3.68	3.67	3.71	3.75	3.70	3.72	3.71	3.73	3.72	3.73	3.73
Northern Plains	4.57	4.67	4.69	4.69	4.68	4.72	4.77	4.82	4.85	4.90	4.93
Southeast	4.16	4.17	4.26	4.47	4.38	4.43	4.41	4.45	4.44	4.48	4.48
Southern Plains	2.53	2.49	2.56	2.56	2.54	2.55	2.56	2.56	2.56	2.57	2.58
Harvested Area	70.54	70.67	71.54	73.25	72.92	73.59	73.42	74.05	74.02	74.45	74.50
Corn Belt	33.87	33.59	33.97	35.11	34.98	35.30	35.06	35.37	35.25	35.40	35.32
Central Plains	12.40	12.30	12.40	12.44	12.40	12.48	12.52	12.60	12.64	12.71	12.75
Delta States	0.74	0.79	0.83	0.88	0.86	0.87	0.87	0.88	0.88	0.89	0.89
Far West	0.44	0.47	0.49	0.50	0.50	0.51	0.52	0.53	0.54	0.55	0.56
Lake States	11.40	11.42	11.54	11.79	11.78	11.89	11.88	11.98	12.00	12.07	12.09
Northeast	2.06	2.31	2.34	2.36	2.33	2.34	2.34	2.35	2.35	2.35	2.35
Northern Plains	3.98	4.07	4.09	4.10	4.10	4.15	4.19	4.25	4.29	4.34	4.38
Southeast Plains	3.49	3.56	3.65	3.84	3.77	3.83	3.82	3.87	3.86	3.90	3.91
Southern Plains	2.16	2.16	2.23	2.23	2.21	2.22	2.22	2.23	2.23	2.24	2.24
Yield	133.8	133.1	134.9	136.5	•	els per Ac	re) 142.2	143.9	145.8	147.5	149.3
Corn Belt	137.2	139.7	141.8	143.5	138.5 145.9	140.3 148.0	150.4	152.4	154.7	156.9	159.1
Central Plains	139.8	140.9	142.2	143.5	144.9	146.1	147.4	148.6	149.8	151.0	152.2
Delta States	120.5	115.0	116.7	118.4	120.2	121.8	123.5	125.1	126.7	128.2	129.8
Far West	168.9	177.9	180.0	182.2	184.3	186.3	188.4	190.3	192.3	194.2	196.1
Lake States	144.8	129.4	131.2	132.9	134.7	136.5	138.3	140.0	141.7	143.4	145.2
Northeast	83.3	110.9	112.2	113.4	114.6	115.8	117.0	118.2	119.4	120.5	121.7
Northern Plains	113.7	103.9	105.4	107.0	108.6	110.1	111.5	113.0	114.4	115.8	117.2
Southeast	94.6	107.6	109.2	110.8	112.5	114.1	115.8	117.4	119.0	120.5	122.1
Southern Plains	133.3	124.3	125.7	127.1	128.5	129.9	131.3	132.7	134.0	135.4	136.7
					(Milli	on Bushel	ls)				
Production	9,437	9,407	9,653	10,002	10,102	10,325	10,441	10,660	10,792	10,983	11,123
Corn Belt	4,648	4,691	4,817	5,040	5,102	5,224	5,272	5,391	5,454	5,552	5,618
Central Plains	1,733	1,734	1,764	1,786	1,797	1,824	1,846	1,873	1,893	1,919	1,940
Delta States	89	91	97	104	103	106	107	110	112	114	116
Far West	74	83	88	90	92	95	98	101	104	107	110
Lake States	1,651	1,478	1,514	1,567	1,588	1,623	1,642	1,677	1,700	1,731	1,755
Northeast	172	256	262	268	267	271	274	278	280	284	286
Northern Plains	452	422	432	439	445	457	468	480	490	502	513
Southeast	330	383	399	425	424	437	442	454	459	471	478
Southern Plains	288	269	280	283	284	288	292	295	299	303	306

#### **U.S. Sorghum Production**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	lion Acres	)				
CRP Idled	2.12	2.19	2.25	2.32	2.38	2.42	2.45	2.48	2.48	2.48	2.45
Corn Belt	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
Central Plains	0.85	0.87	0.91	0.94	0.97	0.98	0.99	1.01	1.01	1.01	0.99
Delta States	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.12
Far West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake States	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northeast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Plains	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09
Southeast	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Southern Plains	0.87	0.91	0.91	0.94	0.96	0.98	0.99	1.00	1.00	1.00	0.99
Planted Area	9.29	9.43	9.26	9.22	9.13	9.15	9.11	9.08	9.00	8.98	8.95
Corn Belt	0.42	0.44	0.43	0.44	0.44	0.44	0.43	0.43	0.42	0.41	0.40
Central Plains	4.38	4.25	4.26	4.21	4.16	4.16	4.13	4.10	4.05	4.02	3.99
Delta States	0.43	0.43	0.42	0.44	0.43	0.43	0.43	0.43	0.43	0.43	0.42
Northern Plains	0.20	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Southeast	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Southern Plains	3.74	3.99	3.85	3.83	3.81	3.83	3.83	3.83	3.82	3.84	3.84
Harvested Area	8.54	8.53	8.38	8.34	8.26	8.28	8.24	8.22	8.15	8.13	8.10
Corn Belt	0.41	0.43	0.42	0.43	0.43	0.43	0.42	0.41	0.40	0.40	0.39
Central Plains	4.03	3.86	3.87	3.82	3.78	3.78	3.75	3.73	3.68	3.66	3.63
Delta States	0.42	0.40	0.39	0.41	0.40	0.40	0.40	0.40	0.39	0.40	0.39
Northern Plains	0.08	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Southeast	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07
Southern Plains	3.49	3.64	3.50	3.49	3.47	3.49	3.49	3.49	3.48	3.49	3.50
					(Bush	els per Ac	re)				
Yield	69.7	69.0	69.9	70.6	71.2	71.9	72.4	73.1	73.6	74.2	74.8
Corn Belt	76.7	87.1	87.7	88.2	88.8	89.4	89.9	90.4	91.0	91.5	92.0
Central Plains	76.0	77.5	78.4	79.3	80.2	81.1	82.0	82.8	83.7	84.5	85.3
Delta States	81.5	73.8	74.6	75.4	76.2	76.9	77.7	78.4	79.1	79.9	80.6
Northern Plains	58.0	58.9	60.0	61.2	62.3	63.4	64.5	65.5	66.6	67.7	68.7
Southeast	53.8	65.3	66.2	67.2	68.2	69.1	70.0	71.0	71.9	72.8	73.7
Southern Plains	60.6	57.8	58.2	58.6	59.0	59.4	59.9	60.3	60.7	61.1	61.5
					(Milli	on Bushel	s)				
Production	595	589	585	589	588	595	597	600	600	603	606
Corn Belt	31	37	37	38	38	38	37	37	37	36	36
Central Plains	306	300	304	303	303	306	307	309	308	309	310
Delta States	34	29	29	31	30	31	31	31	31	32	32
Northern Plains	5	7	7	7	7	7	7	7	7	8	8
Southeast	4	5	5	5	5	5	5	5	5	5	5
Southern Plains	211	210	204	205	205	207	209	210	211	213	215

# **U.S. Barley Production**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	llion Acres	)				
CRP Idled	2.53	2.65	2.77	2.86	2.94	2.98	3.03	3.07	3.07	3.07	3.03
Corn Belt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Plains	0.18	0.18	0.19	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Delta States	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Far West	0.62	0.67	0.66	0.68	0.70	0.71	0.72	0.73	0.73	0.73	0.72
Lake States	0.15	0.18	0.17	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19
Northeast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Plains	1.53	1.56	1.69	1.74	1.79	1.81	1.84	1.87	1.87	1.87	1.84
Southeast	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Southern Plains	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.03
Planted Area	5.22	5.27	5.20	5.13	5.07	5.07	5.05	5.01	4.98	4.97	4.98
Central Plains	0.12	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Far West	1.68	1.77	1.75	1.73	1.71	1.71	1.71	1.70	1.70	1.70	1.70
Lake States	0.30	0.33	0.35	0.36	0.35	0.35	0.34	0.34	0.33	0.32	0.31
Northeast	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.17
Northern Plains	2.82	2.74	2.68	2.63	2.58	2.58	2.58	2.56	2.55	2.54	2.55
Southeast	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13
Southern Plains	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Harvested Area	4.76	5.00	4.93	4.88	4.82	4.82	4.80	4.76	4.74	4.73	4.74
Central Plains	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Far West	1.59	1.66	1.65	1.63	1.62	1.62	1.61	1.60	1.60	1.60	1.60
Lake States	0.27	0.31	0.32	0.33	0.33	0.33	0.32	0.31	0.30	0.30	0.29
Northeast	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Northern Plains	2.55	2.65	2.59	2.55	2.51	2.51	2.50	2.49	2.48	2.48	2.48
Southeast	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Southern Plains	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
					(Bush	els per Ac	re)				
Yield	59.2	63.7	64.3	65.0	65.6	66.2	66.7	67.3	67.9	68.4	69.0
Central Plains	95.7	102.2	104.0	105.7	107.4	109.0	110.6	112.2	113.7	115.2	116.7
Far West	70.4	77.4	78.1	78.7	79.4	80.0	80.6	81.2	81.8	82.4	83.0
Lake States	49.7	58.5	58.8	59.1	59.4	59.7	60.0	60.3	60.6	60.9	61.2
Northeast	76.5	76.6	77.7	78.8	79.8	80.8	81.9	82.9	83.9	84.8	85.8
Northern Plains	50.2	53.0	53.5	54.0	54.5	55.0	55.5	55.9	56.4	56.8	57.3
Southeast	80.9	78.6	80.0	81.3	82.6	83.8	85.1	86.3	87.5	88.7	89.8
Southern Plains	35.9	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	41.0
					•	on Bushel	,				
Production	282	319	317	317	316	319	320	321	322	324	327
Central Plains	10	10	10	10	10	10	10	10	10	11	11
Far West	112	129	129	128	128	129	130	130	131	132	133
Lake States	13	18	19	20	20	20	19	19	18	18	18
Northeast	11	13	12	13	13	13	13	13	13	13	13
Northern Plains	128	140	139	138	137	138	139	139	140	141	142
Southeast	7	8	8	8	8	8	9	9	9	9	9
Southern Plains	0	1	0	0	0	0	0	0	0	0	0

**U.S. Oat Production** 

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					•	lion Acres	•				
CRP Idled	1.09	1.14	1.19	1.22	1.26	1.28	1.29	1.31	1.31	1.31	1.30
Corn Belt	0.14	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15
Central Plains	0.13	0.13	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.15
Delta States	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Far West	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Lake States	0.20	0.22	0.22	0.22	0.23	0.23	0.24	0.24	0.24	0.24	0.24
Northeast	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Northern Plains	0.51	0.52	0.56	0.58	0.60	0.60	0.61	0.62	0.62	0.62	0.61
Southeast Southern Plains	0.03 0.06	0.03 0.06	0.03 0.06	0.03 0.06	0.03	0.03 0.06	0.03	0.03 0.07	0.03 0.07	0.03 0.07	0.03 0.06
					0.06		0.06				
Planted Area	4.67	4.56	4.56	4.48	4.43	4.40	4.36	4.31	4.26	4.22	4.17
Corn Belt	0.52	0.56	0.54	0.54	0.53	0.53	0.51	0.50	0.48	0.47	0.45
Central Plains	0.31	0.32	0.31	0.30	0.30	0.30	0.30	0.30	0.29	0.29	0.29
Delta States	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Far West	0.47	0.52	0.53	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Lake States	0.89	0.89	0.88	0.86	0.85	0.83	0.81	0.79	0.77	0.75	0.73
Northeast	0.31	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.27	0.27	0.27
Northern Plains Southeast	1.20	1.15	1.16	1.13	1.12	1.12	1.12	1.11	1.11	1.11	1.11
Southern Plains	0.22 0.75	0.21 0.61	0.20 0.63	0.20 0.62	0.19 0.61	0.19 0.61	0.19 0.61	0.19 0.61	0.19 0.61	0.19 0.61	0.19 0.60
Harvested Area	2.45	2.46	2.46	2.39	2.35	2.33	2.30	2.26	2.23	2.19	2.16
Corn Belt	0.38	0.39	0.38	0.38	0.38	0.37	0.36	0.36	0.35	0.34	0.33
Central Plains	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Delta States	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Far West Lake States	0.10 0.68	0.09 0.67	0.10	0.09 0.64	0.09	0.09 0.61	0.09	0.09 0.58	0.09	0.09 0.54	0.09 0.52
Northeast	0.24	0.07	0.66 0.25	0.04	0.63 0.24	0.01	0.60 0.24	0.36	0.56 0.23	0.54	0.32
Northern Plains	0.63	0.25	0.23	0.23	0.62	0.62	0.62	0.24	0.23	0.23	0.23
Southeast	0.03	0.03	0.10	0.03	0.02	0.02	0.02	0.10	0.10	0.10	0.10
Southern Plains	0.14	0.10	0.10	0.14	0.14	0.14	0.10	0.13	0.10	0.10	0.10
Councillians	0.14	0.10	0.14	0.14				0.10	0.10	0.10	0.10
Yield	59.6	59.8	60.0	60.4	(Bush 60.6	els per Ac 60.9	re) 61.2	61.4	61.7	61.9	62.2
Corn Belt	66.2	64.7	64.8	64.9	65.0	65.2	65.3	65.4	65.5	65.5	65.6
Central Plains	56.0	58.4	59.1	59.7	60.4	61.0	61.6	62.3	62.9	63.5	64.1
Delta States	91.0	79.2	79.8	80.5	81.1	81.8	82.4	83.1	83.7	84.3	85.0
Far West	81.3	85.6	86.3	86.9	87.6	88.3	88.9	89.5	90.1	90.8	91.4
Lake States	61.0	59.5	59.6	59.8	59.9	60.0	60.1	60.2	60.3	60.4	60.5
Northeast	60.8	60.5	60.6	60.6	60.7	60.7	60.8	60.8	60.9	61.0	61.0
Northern Plains	55.3	56.4	56.9	57.4	57.9	58.3	58.8	59.2	59.7	60.1	60.6
Southeast	55.6	60.4	60.6	60.9	61.1	61.4	61.6	61.8	62.1	62.3	62.5
Southern Plains	43.8	44.1	44.3	44.5	44.7	44.9	45.1	45.2	45.4	45.6	45.8
Production	146	147	148	144	143	on Bushel 142	s) 141	139	137	136	134
Corn Belt	25	25	25	25	24	24	24	23	23	22	22
Central Plains	9	10	10	9	9	9	9	9	9	9	9
Delta States	1	1	1	1	1	1	1	1	1	1	1
Far West	8	8	8	8	8	8	8	8	8	8	8
Lake States	41	40	40	38	38	37	36	35	34	33	31
Northeast	15	15	15	15	15	15	14	14	14	14	14
Northern Plains	35	36	37	36	36	36	36	36	36	37	37
Southeast	6	6	6	6	6	6	6	6	6	6	6
Southern Plains	6	6	6	6	6	6	6	6	6	6	6

#### **U.S. Hay Production**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	lion Acres	)				
Harvested Area	63.16	60.82	60.12	60.10	60.11	60.17	60.25	60.34	60.45	60.54	60.58
Corn Belt	8.20	7.99	7.87	7.89	7.90	7.92	7.94	7.96	7.99	8.01	8.02
Central Plains	7.42	7.46	7.46	7.46	7.45	7.44	7.43	7.43	7.42	7.42	7.42
Delta States	2.47	2.26	2.28	2.30	2.31	2.31	2.32	2.33	2.34	2.35	2.35
Far West	6.26	6.18	6.16	6.15	6.15	6.14	6.14	6.14	6.13	6.13	6.13
Lake States	6.35	6.04	5.87	5.82	5.79	5.76	5.74	5.72	5.70	5.68	5.65
Northeast	4.98	4.79	4.63	4.60	4.59	4.59	4.60	4.61	4.62	4.62	4.63
Northern Plains	10.79	10.51	10.43	10.41	10.38	10.36	10.34	10.32	10.31	10.30	10.29
Southeast	8.22	8.02	7.99	8.05	8.10	8.16	8.23	8.29	8.35	8.41	8.44
Southern Plains	8.47	7.58	7.42	7.42	7.44	7.47	7.51	7.55	7.59	7.63	7.65
					(Ton	s per Acre	e)				
Yield	2.52	2.57	2.59	2.60	2.62	2.63	2.64	2.65	2.67	2.68	2.69
Corn Belt	2.59	2.69	2.70	2.71	2.72	2.73	2.74	2.74	2.75	2.76	2.77
Central Plains	2.62	2.56	2.58	2.61	2.63	2.65	2.67	2.69	2.71	2.74	2.76
Delta States	1.99	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40	2.41	2.42
Far West	4.12	4.28	4.32	4.35	4.39	4.42	4.46	4.49	4.53	4.56	4.59
Lake States	3.00	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
Northeast	1.80	2.26	2.27	2.27	2.28	2.28	2.29	2.29	2.30	2.30	2.31
Northern Plains	2.11	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99
Southeast	2.07	2.32	2.35	2.38	2.40	2.43	2.45	2.47	2.50	2.52	2.54
Southern Plains	2.34	2.28	2.29	2.29	2.29	2.29	2.29	2.30	2.30	2.30	2.30
					(Mi	llion Tons	)				
Production	159.1	156.4	155.6	156.4	157.2	158.1	159.1	160.1	161.1	162.1	162.9
Corn Belt	21.2	21.5	21.3	21.4	21.5	21.6	21.7	21.9	22.0	22.1	22.2
Central Plains	19.5	19.1	19.3	19.4	19.6	19.7	19.9	20.0	20.2	20.3	20.4
Delta States	4.9	5.3	5.3	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.7
Far West	25.8	26.4	26.6	26.8	27.0	27.2	27.4	27.6	27.8	27.9	28.1
Lake States	19.1	17.4	16.9	16.8	16.7	16.6	16.5	16.5	16.4	16.4	16.3
Northeast	9.0	10.8	10.5	10.5	10.5	10.5	10.5	10.6	10.6	10.6	10.7
Northern Plains	22.8	19.9	19.9	20.0	20.0	20.1	20.2	20.2	20.3	20.4	20.4
Southeast	17.0	18.6	18.8	19.1	19.5	19.8	20.2	20.5	20.8	21.2	21.5
Southern Plains	19.8	17.3	17.0	17.0	17.0	17.1	17.2	17.3	17.4	17.5	17.6

## **U.S. Soybean Production**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	lion Acres	)				
CRP Idled	2.77	2.97	3.12	3.23	3.34	3.40	3.45	3.51	3.51	3.51	3.44
Corn Belt	1.63	1.69	1.79	1.85	1.91	1.93	1.96	1.99	1.99	1.99	1.96
Central Plains	0.10	0.12	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.16
Delta States	0.34	0.38	0.38	0.40	0.41	0.42	0.42	0.43	0.43	0.43	0.42
Far West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake States	0.37	0.43	0.42	0.44	0.45	0.46	0.47	0.48	0.48	0.48	0.47
Northeast	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Northern Plains	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.22	0.22	0.22	0.21
Southeast	0.07	0.10	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.14
Southern Plains	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Planted Area	73.78	74.53	73.23	71.03	71.58	71.32	72.15	71.93	72.59	72.80	73.47
Corn Belt	37.00	37.60	36.90	35.62	35.66	35.40	35.73	35.49	35.70	35.66	35.86
Central Plains	7.15	7.25	7.16	6.93	7.01	7.04	7.22	7.29	7.45	7.56	7.72
Delta States	6.42	6.35	6.36	6.22	6.44	6.48	6.57	6.57	6.66	6.71	6.80
Lake States	10.30	10.50	10.22	10.00	10.04	10.03	10.15	10.16	10.25	10.29	10.38
Northeast	1.30	1.26	1.22	1.16	1.22	1.21	1.23	1.21	1.23	1.22	1.24
Northern Plains	5.45	5.57	5.41	5.23	5.23	5.20	5.23	5.23	5.27	5.29	5.34
Southeast	5.28	5.16	5.11	5.03	5.14	5.14	5.19	5.17	5.22	5.23	5.29
Southern Plains	0.88	0.85	0.84	0.83	0.83	0.82	0.82	0.82	0.82	0.82	0.83
Harvested Area	72.48	73.47	72.19	70.02	70.55	70.30	71.12	70.90	71.55	71.75	72.41
Corn Belt	36.83	37.30	36.61	35.33	35.38	35.12	35.45	35.21	35.42	35.38	35.58
Central Plains	7.05	7.12	7.04	6.81	6.89	6.91	7.09	7.16	7.32	7.43	7.58
Delta States	6.24	6.22	6.23	6.10	6.31	6.34	6.44	6.44	6.52	6.57	6.66
Lake States	10.14	10.34	10.07	9.85	9.89	9.88	10.00	10.00	10.09	10.14	10.23
Northeast	1.13	1.24	1.20	1.14	1.20	1.19	1.20	1.19	1.21	1.20	1.21
Northern Plains	5.41	5.49	5.33	5.15	5.15	5.13	5.16	5.15	5.19	5.22	5.27
Southeast	4.94	4.98	4.93	4.85	4.96	4.96	5.01	4.98	5.03	5.05	5.10
Southern Plains	0.74	0.79	0.79	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
					•	els per Ac	,				
Yield	36.5	39.9	40.6	41.4	41.9	42.5	42.9	43.5	43.9	44.4	44.8
Corn Belt	39.3	44.0	44.9	46.0	46.6	47.3	47.8	48.5	49.0	49.6	50.1
Central Plains	36.7	40.0	40.7	41.4	41.9	42.5	43.0	43.6	44.1	44.6	45.1
Delta States	26.5	30.4	30.8	31.3	31.6	32.0	32.4	32.8	33.1	33.5	33.8
Lake States	41.4	39.0	39.5	40.1	40.5	41.0	41.3	41.8	42.1	42.5	42.9
Northeast	28.6	35.7	36.1	36.5	36.9	37.3	37.6	38.0	38.4	38.8	39.1
Northern Plains	35.8	32.5	32.9	33.4	33.7	34.1	34.4	34.8	35.1	35.4	35.7
Southeast Southern Plains	21.0 23.1	33.8 28.3	34.4 28.6	34.9 28.9	35.5 29.1	36.0 29.4	36.6 29.7	37.1 30.0	37.6 30.2	38.2 30.5	38.7 30.8
Oddilem i lains	20.1	20.5	20.0	20.3				30.0	30.2	30.3	30.0
Production	2,643	2,929	2,930	2,899	(Milli 2,955	on Bushel 2,985	s) 3,051	3,081	3,141	3,185	3,245
Corn Belt	1,447	1,639	1,643	1,626	1,650	1,663	1,695	1,708	1,736	1,755	1,782
Central Plains	259	285	286	282	289	294	305	312	323	331	342
Delta States	165	189	192	191	200	203	208	211	216	220	225
Lake States	420	403	398	395	401	405	413	418	425	431	439
Northeast	32	44	43	42	44	44	45	45	46	47	48
Northern Plains	193	178	175	172	174	175	177	179	182	185	188
Southeast	104	168	169	172	174	179	183	185	189	193	198
Southern Plains	17	22	23	22	22	23	23	23	23	23	24

#### **U.S. Rice Production**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	llion Acres	)				
CRP Idled	0.012	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Arkansas	0.006	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008
California	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Louisiana	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Mississippi	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002
Missouri	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Texas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Planted Area	3.581	3.449	3.464	3.480	3.411	3.388	3.364	3.342	3.305	3.287	3.260
Arkansas	1.650	1.540	1.567	1.575	1.537	1.531	1.518	1.512	1.494	1.488	1.476
California	0.540	0.557	0.540	0.535	0.533	0.528	0.532	0.530	0.529	0.529	0.529
Louisiana	0.620	0.635	0.635	0.644	0.625	0.619	0.610	0.603	0.592	0.586	0.577
Mississippi	0.325	0.288	0.289	0.293	0.287	0.285	0.282	0.280	0.276	0.274	0.271
Missouri	0.186	0.159	0.159	0.159	0.157	0.156	0.155	0.154	0.152	0.151	0.150
Texas	0.260	0.270	0.274	0.273	0.271	0.269	0.267	0.264	0.261	0.259	0.257
Harvested Area	3.562	3.422	3.436	3.451	3.384	3.361	3.337	3.316	3.279	3.262	3.235
Arkansas	1.645	1.527	1.553	1.561	1.524	1.518	1.506	1.499	1.482	1.476	1.465
California	0.535	0.554	0.537	0.532	0.531	0.526	0.530	0.527	0.526	0.526	0.527
Louisiana	0.616	0.631	0.632	0.640	0.622	0.615	0.606	0.599	0.588	0.582	0.573
Mississippi	0.323	0.286	0.287	0.291	0.284	0.282	0.280	0.278	0.274	0.272	0.269
Missouri	0.184	0.155	0.155	0.155	0.153	0.152	0.151	0.150	0.148	0.147	0.146
Texas	0.259	0.268	0.273	0.272	0.270	0.267	0.266	0.263	0.260	0.258	0.256
					(Pour	nds per Ad	re)				
Yield	5,908	6,028	6,056	6,088	6,147	6,189	6,236	6,278	6,325	6,365	6,409
Arkansas	5,900	5,880	5,918	5,965	6,033	6,084	6,138	6,188	6,242	6,290	6,340
California	7,262	8,195	8,288	8,351	8,406	8,467	8,507	8,561	8,609	8,655	8,698
Louisiana	5,004	4,749	4,772	4,791	4,822	4,848	4,874	4,899	4,925	4,949	4,973
Mississippi	5,650	5,910	5,948	5,984	6,023	6,060	6,097	6,132	6,167	6,201	6,235
Missouri	5,400	5,360	5,385	5,409	5,434	5,457	5,480	5,503	5,525	5,547	5,568
Texas	6,004	5,919	5,916	5,922	5,929	5,936	5,943	5,951	5,958	5,965	5,973
					(Million I	Hundredw	eight)				
Production	210.5	206.3	208.1	210.1	208.0	208.0	208.1	208.2	207.4	207.7	207.4
Arkansas	97.0	89.8	91.9	93.1	92.0	92.4	92.4	92.8	92.5	92.9	92.9
California	38.9	45.4	44.5	44.5	44.6	44.5	45.1	45.1	45.3	45.5	45.8
Louisiana	30.8	30.0	30.2	30.7	30.0	29.8	29.5	29.4	29.0	28.8	28.5
Mississippi	18.3	16.9	17.1	17.4	17.1	17.1	17.0	17.0	16.9	16.9	16.8
Missouri	9.9	8.3	8.3	8.4	8.3	8.3	8.3	8.2	8.2	8.2	8.1
Texas	15.6	15.9	16.2	16.1	16.0	15.9	15.8	15.6	15.5	15.4	15.3

# **U.S. Upland Cotton Production**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Mil	lion Acres	i)				
CRP Idled	1.24	1.31	1.33	1.37	1.41	1.43	1.45	1.47	1.47	1.47	1.45
Corn Belt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Plains	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delta States	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Far West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake States	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northeast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Plains	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southeast	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Southern Plains	1.14	1.20	1.21	1.25	1.29	1.30	1.32	1.34	1.34	1.34	1.32
Planted Area	14.57	14.76	14.37	14.02	13.90	13.76	13.74	13.77	13.75	13.68	13.61
Corn Belt	0.38	0.40	0.40	0.38	0.39	0.38	0.38	0.39	0.40	0.39	0.39
Central Plains	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Delta States	2.79	2.94	2.83	2.80	2.71	2.68	2.64	2.65	2.63	2.60	2.56
Far West	0.88	0.93	0.88	0.80	0.81	0.79	0.81	0.81	0.82	0.82	0.82
Southeast	4.03	4.12	4.00	3.95	3.92	3.88	3.87	3.87	3.85	3.83	3.81
Southern Plains	6.46	6.33	6.22	6.05	6.04	5.99	6.00	6.00	6.01	5.99	5.99
Harvested Area	13.09	13.99	13.62	13.29	13.18	13.05	13.03	13.05	13.04	12.96	12.90
Corn Belt	0.38	0.39	0.39	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.38
Central Plains	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Delta States	2.75	2.89	2.79	2.75	2.67	2.64	2.61	2.62	2.59	2.56	2.53
Far West	0.87	0.92	0.88	0.80	0.80	0.79	0.80	0.81	0.82	0.82	0.82
Southeast	3.75	4.05	3.92	3.88	3.85	3.81	3.80	3.80	3.78	3.76	3.74
Southern Plains	5.32	5.69	5.60	5.45	5.44	5.40	5.41	5.41	5.42	5.40	5.40
					(Pour	nds per Ac	re)				
Yield	596	648	652	656	661	666	671	677	681	686	690
Corn Belt	595	728	737	745	754	762	770	777	785	793	800
Central Plains	384	439	447	455	463	470	478	485	492	498	505
Delta States	710	769	776	783	789	795	801	806	811	817	822
Far West	1,246	1,227	1,234	1,243	1,248	1,253	1,258	1,262	1,267	1,272	1,277
Southeast	533	654	662	669	676	683	690	696	703	709	715
Southern Plains	477	483	488	492	496	500	503	507	510	513	516
					(Mil	llion Bales	)				
Production	16.26	18.88	18.51	18.17	18.15	18.11	18.22	18.40	18.51	18.53	18.55
Corn Belt	0.47	0.60	0.60	0.59	0.60	0.60	0.61	0.63	0.64	0.64	0.64
Central Plains	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Delta States	4.07	4.64	4.52	4.49	4.39	4.37	4.35	4.39	4.38	4.36	4.33
Far West	2.26	2.36	2.26	2.07	2.09	2.06	2.11	2.13	2.16	2.16	2.17
Southeast	4.17	5.51	5.41	5.40	5.42	5.42	5.46	5.51	5.53	5.55	5.57
Southern Plains	5.28	5.73	5.69	5.58	5.62	5.62	5.67	5.71	5.76	5.78	5.81

## **U.S. Agricultural Exports**

- The value of U.S. agricultural exports reached a record level of \$60 billion in fiscal year (FY) 1996 and since then, both the quantity and value of agricultural exports have been declining, mainly in response to large global supplies and weak import demand.
- The quantity of U.S. exports rebounded in FY 1999. More than 90 percent of the rise resulted from increased exports of feed grains and products.
- The value of agricultural exports fell below \$50 billion in FY 1999 and is likely to bottom out in FY 2000 at just under \$49 billion. Over the next 10 years, the value of agricultural exports is projected to increase by 40 percent, reaching \$69 billion by FY 2009.
- High-value products account for about 60 percent of the total increase in the value of agricultural exports, and the remaining 40 percent is accounted for by bulk commodities such as grains and oilseeds. Within high value products, the export value of animal and animal products is projected to rise by more than 50 percent during the projection period.
- The quantity of U.S. agricultural exports is projected to increase by about 35 mmt during the projection period, with feed grain and oilseeds accounting for most of the increase. In addition, the quantity of animal and animal products is also projected to increase by nearly 30 percent in the next decade.
- Among grain, feed grain exports are expected to increase by 15 mmt, with corn accounting for a major share. Similarly, exports of oilseeds and products are projected to rise by more than 21 percent during the projection period.

## **Quantity of U.S. Agricultural Exports, Fiscal Year**

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Thous	and Metric	Tons)				
Animals and Animal Products	5,966	5,907	6,180	6,451	6,680	6,892	7,070	7,238	7,369	7,508	7,662
Grains and Feeds	104,576	106,755	109,834	111,692	114,360	117,585	119,365	121,531	123,706	126,633	129,144
Wheat (Unmilled and Flour)	29,867	30,954	32,181	32,796	33,328	33,894	33,964	34,284	34,553	34,822	35,096
Rice (Paddy Milled)	3,076	3,075	3,363	3,439	3,435	3,331	3,252	3,184	3,109	3,021	2,948
Feed Grains and Products	58,398	59,196	60,542	61,447	63,394	65,904	67,489	69,171	70,844	72,595	74,619
Other Grains and Feeds	13,235	13,530	13,748	14,011	14,203	14,457	14,661	14,893	15,200	16,195	16,482
Oilseeds and Products	33,569	35,155	39,526	41,594	40,914	40,393	40,757	41,244	41,705	42,116	42,692
Cotton (excl. Linters)	884	1,287	1,679	1,723	1,710	1,691	1,669	1,651	1,643	1,636	1,626
Other Products	8,784	9,240	9,852	10,218	10,447	10,706	10,928	11,179	11,431	11,706	11,991
Total	153,779	158,344	167,071	171,679	174,111	177,266	179,788	182,844	185,854	189,598	193,117

## Value of U.S. Agricultural Exports, Fiscal Year

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
					(Millio	n U.S. Do	llars)				
Bulk Commodities *	19,019	18,029	19,572	21,078	21,943	22,648	23,147	23,863	24,649	25,417	26,243
High-value Products †	30,083	30,919	32,964	34,669	36,060	37,106	38,057	39,034	40,097	41,171	42,384
Animals and Animal Products	9,951	10,150	10,866	11,697	12,461	13,002	13,370	13,799	14,310	14,803	15,401
Meat and Meat Products	4,460	4,718	5,122	5,595	5,983	6,214	6,313	6,439	6,631	6,715	6,871
Poultry and Poultry Products	2,050	1,925	1,991	2,124	2,265	2,387	2,489	2,591	2,702	2,827	2,958
Dairy Products	897	868	870	838	828	822	826	829	835	839	844
Hides and Skins	1,108	1,306	1,446	1,602	1,759	1,909	2,046	2,204	2,374	2,610	2,860
Other Animal Products	875	907	963	1,025	1,081	1,123	1,154	1,187	1,228	1,260	1,298
Grains and Feeds	14,272	12,996	14,368	15,340	15,902	16,681	16,970	17,606	18,121	18,741	19,296
Wheat (Unmilled and Flour)	3,913	2,871	3,358	3,881	4,148	4,391	4,404	4,567	4,702	4,839	4,969
Rice (Paddy Milled)	1,010	900	1,024	1,083	1,114	1,107	1,104	1,107	1,105	1,096	1,089
Coarse Grains	5,821	5,625	6,324	6,673	6,881	7,362	7,575	7,936	8,233	8,584	8,926
Corn	5,039	4,833	5,454	5,759	5,951	6,403	6,599	6,930	7,211	7,541	7,859
Other Feed Grains	782	792	870	915	930	960	976	1,005	1,022	1,044	1,067
Feeds and Fodders	3,527	3,600	3,663	3,703	3,759	3,820	3,887	3,996	4,082	4,221	4,312
Oilseeds and Products	8,606	8,787	9,187	10,038	10,523	10,511	10,843	11,023	11,394	11,649	12,036
Soybeans	4,748	5,032	5,204	5,738	6,041	5,967	6,177	6,257	6,528	6,677	6,947
Soybean Meal	1,028	1,108	1,091	1,163	1,232	1,260	1,308	1,348	1,374	1,406	1,438
Soybean Oil	608	402	597	738	791	825	860	897	924	969	1,005
Other Oilseeds and Products	1,028	1,108	1,091	1,163	1,232	1,260	1,308	1,348	1,374	1,406	1,438
Tobacco, unmanufactured	1,376	1,409	1,419	1,425	1,434	1,445	1,452	1,460	1,468	1,477	1,487
Cotton and Linters	1,309	1,566	2,074	2,158	2,209	2,252	2,289	2,323	2,359	2,399	2,443
Horticulture and Other Products	12,988	13,539	14,500	15,090	15,473	15,864	16,279	16,686	17,094	17,519	17,963
Total	49,102	48,948	52,536	55,747	58,003	59,754	61,204	62,897	64,746	66,589	68,627

<sup>\*</sup> Bulk Commodities include wheat, rice, coarse grains, soybeans, cotton, and tobacco.

<sup>†</sup> High-value is total exports minus bulk commodities.

#### **U.S. Food Prices and Expenditures**

- The CPI for food is expected to increase 1.7 percent in 2000. With the exception of dairy products, all food prices are expected to rise this year. The rise in the CPI for food is still less than the general rate of price inflation of 2.5 percent for the year.
- The baseline shows the CPI for food increasing at an average rate of 1.2 percent annually. Consumers are expected to continue to get a bargain when they head to the grocery store. If weather were to result in short crops, however, consumers can expect food prices to rise at a faster rate than projected in the baseline.
- Meat prices are projected to rise for the next few years, as supplies of beef and pork fall from the levels seen the previous two years. Over the baseline period, the price index for meat rises annually with the growth rate dependent upon the cattle and hog cycles being experienced.
- Lower prices for milk and dairy products push the dairy CPI lower by 3.4 percent for 2000. As the growth in milk production slows, dairy product prices rebound, with the CPI for dairy products again reaching its 1999 level by 2003.
- Low grain prices curtailed the growth in the CPI for cereal and bakery products to 1.4 percent for 2000. Over the baseline, with higher grain prices, the CPI for cereal and bakery products grows at an annual rate of 2.4 percent.
- The growth in real food expenditures should remain modest over the baseline. The total growth in real food expenditures is projected to be 1.5 percent over the 1999 to 2009 period, compared to a 2.1 percent over the 1989 to 1999 period. Consumers can expect food expenditures to remain quite reasonable in the absence of any adverse weather events.
- Of the \$107 billion increase in food-at-home expenditures, \$60 billion can be associated equally between meats, cereal and bakery products, and fruits and vegetables, while the remaining increase in food-at-home expenditures comes from other food.

#### **Consumer Price Indexes for Food**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(198	32-84=100	))				
FOOD	164.3	167.1	171.2	174.8	177.8	180.9	183.9	187.9	191.9	195.4	199.3
Food at Home	164.1	166.7	170.6	174.1	176.9	179.8	182.7	186.5	190.3	193.7	197.4
Cereal and Bakery	184.9	187.5	193.4	197.0	199.6	203.7	208.0	212.7	217.8	223.1	228.8
Meat	147.7	152.1	157.0	161.0	162.9	164.1	164.8	168.0	171.3	173.0	175.1
Dairy	159.6	154.2	155.9	158.3	160.8	162.8	165.2	167.6	169.8	172.0	174.6
Fruit and Vegetables	203.8	208.2	212.8	217.1	221.9	226.8	231.8	236.9	242.1	247.4	252.9
Other Food At Home	153.6	156.6	158.5	161.1	164.0	167.0	170.0	173.8	177.0	180.3	183.6
Sugar and Sweets	152.3	158.1	157.7	160.1	162.5	164.9	167.4	173.8	176.6	179.6	182.5
Fats and Oils	148.3	148.0	148.0	149.9	153.5	157.1	159.9	163.0	166.0	169.4	172.9
Other Prepared Items	168.9	173.0	177.3	181.4	185.9	190.5	195.2	200.0	204.9	209.9	215.0
Non-alc. Beverages	134.3	135.7	135.8	136.6	137.4	138.1	139.0	140.7	141.6	142.5	143.4
Food Away From Home	165.1	168.4	172.8	176.7	180.0	183.4	186.7	190.9	195.1	199.0	203.1

# **Total Consumer Expenditures for Food**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(Bil	lion Dollar	s)				
FOOD	536.8	548.5	563.9	579.6	593.9	608.5	623.1	641.0	658.9	676.0	694.1
Food at Home	312.7	319.9	330.1	340.8	350.6	360.5	370.4	383.0	395.4	407.1	419.6
Cereal and Bakery	47.2	48.3	50.2	52.0	53.3	55.1	56.9	58.9	61.1	63.4	65.8
Meat	81.3	83.1	85.9	88.2	90.0	91.5	92.9	95.6	98.4	100.5	102.7
Dairy	35.0	34.4	35.5	36.6	37.8	39.0	40.2	41.3	42.5	43.6	44.9
Fruit and Vegetables	53.0	54.2	56.0	57.9	59.8	61.9	64.0	66.1	68.4	70.7	73.2
Other Food At Home	96.1	99.8	102.4	106.0	109.5	112.9	116.4	120.9	124.8	128.7	132.8
Sugar and Sweets	12.3	13.1	13.3	13.9	14.3	14.8	15.2	16.1	16.6	17.1	17.7
Fats and Oils	8.5	8.5	8.6	8.8	9.1	9.4	9.6	9.9	10.1	10.4	10.7
Other Prepared Items	43.0	43.9	45.2	46.4	47.5	48.6	49.7	51.0	52.4	53.7	55.1
Non-alc. Beverages	26.4	28.0	28.8	30.2	31.5	32.9	34.3	36.0	37.4	38.9	40.4
Food Away From Home	224.1	228.6	233.8	238.8	243.3	248.0	252.6	258.1	263.6	268.9	274.5

#### **U.S. Government Costs**

- The emergency spending packages of 1998 and 1999, together with increased LDPs, have pushed government outlays significantly higher. For FY 1999, net expenditures reached \$19.2 billion. Outlays are projected to increase to \$23.8 billion in FY 2000, falling just short of the record-level of \$25.8 billion set in FY 1986. Longer term, outlays decline to approximately \$7 billion, with the bulk of those costs associated with FAIR Act contract payments and CRP rental payments.
- Feed grain program costs are projected to rise to \$7.9 billion in FY 2000, with the bulk of the increase due to the additional payments of the 1999 spending package. With no assumption of additional aid packages and lower LDPs, program outlays fall to \$2.6 billion in FY 2001. Costs average \$2.1 billion in the latter half of the baseline.
- Outlays for wheat are projected to be \$3.4 billion in FY 2000, about the same level as 1999. Direct payments under the FAIR Act and the emergency spending package account for \$2.8 billion of the total. Longer term, outlays average \$1.1 billion.
- Increased LDPs and marketing loan gains due to sagging soybean prices will to lead to additional outlays for FY 2000. Costs for FY 2000 are projected to be \$2.8 billion and are expected to rise to \$3.9 billion in 2001. As prices recover, soybean program costs are nonexistent.
- Cotton program costs are projected to grow to \$2.8 billion in FY 2000 as low world prices contribute to higher LDPs. In addition, the re-instatement of the Step 2 program is expected to contribute \$600 million to the costs of the program in 2000. Continued low prices will keep cotton outlays at a high level through FY 2002. Longer term, outlays for cotton range between \$700 million and \$1 billion.
- As rice prices have weakened over the past year, the costs of the rice program have increased. For FY 2000, costs are projected at \$1.2 billion, which if realized would be a new record high. As prices recover and contract payments decline, rice outlays decline to \$400 million by the end of the projection period.
- Direct payments under the emergency packages, coupled with increased product purchases, have pushed dairy outlays to their highest levels since FY 1991. For FY 2000, outlays are projected at just under \$400 million. Longer term, dairy costs average \$130 million, with most of those costs associated with the Export Incentive Program.
- Outlays associated with the CRP are projected to average \$1.5 billion in FY 1999 and 2000. As acreage enrolled in the CRP is assumed to expand to 36 million acres, outlays grow to \$1.74 billion by FY 2007.

# **CCC Net Expenditures, by Program**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
				(M	illion U.S.	Dollars, F	iscal Year	·)			
Feed Grains	6,169	7,929	2,626	2,161	2,097	2,156	2,194	2,175	2,171	2,159	2,160
Corn	5,402	6,962	2,265	1,854	1,806	1,862	1,897	1,878	1,875	1,863	1,865
Sorghum	501	663	226	198	198	200	201	201	200	200	200
Barley	224	264	112	94	85	87	87	87	86	86	86
Oats	41	40	23	16	8	7	9	10	10	10	9
Wheat	3,435	3,438	1,269	1,054	1,068	1,120	1,101	1,085	1,084	1,085	1,085
Soybeans	1,289	2,842	3,951	3,235	1,000	795	363	276	8	-15	-20
Cotton	1,882	2,845	2,132	1,859	1,446	1,264	1,090	962	939	872	710
Rice	911	1,193	696	633	582	545	515	480	450	496	409
Sugar	-51	0	0	-43	-43	-44	-44	-44	-44	-45	-45
Dairy	480	395	126	115	120	123	124	129	132	132	130
Export Programs	106	82	81	81	81	81	81	81	81	81	81
Net Interest	210	314	282	281	259	220	192	184	170	169	148
Disaster Payments	2,294	1,487	90	90	90	90	90	90	90	90	90
Conservation Reserve	1,462	1,497	1,553	1,583	1,621	1,669	1,693	1,717	1,741	1,741	1,741
Other Conservation Prog.	293	350	294	220	225	241	254	256	258	260	261
Other Net Costs	753	1,411	102	42	136	156	190	146	162	146	144
Net CCC Outlays	19,223	23,783	13,202	11,311	8,681	8,418	7,845	7,537	7,241	7,171	6,894
<b>Total Government Costs</b>	19,223	23,783	13,202	11,311	8,681	8,418	7,845	7,537	7,241	7,171	6,894

#### U.S. Cash Receipts from Farm Marketings

- Total receipts from farm marketings for 2000 are projected to remain relatively stable at \$193 billion. Weak commodity prices will keep receipts well below the record levels observed in the mid 1990s. As prices recover and production expands, total receipts are projected to grow to \$233 billion by the end of the baseline.
- Weaker prices are projected to lower feed grain cash receipts to \$20.5 billion in 2000, the lowest level since 1994. This also represents a \$7-billion decline from the levels observed in 1996 and 1997. As production and prices increase, receipts steadily increase after 2000, growing to \$26.9 billion by 2009.
- For 2000, total food grain receipts will remain near \$7.5 billion as wheat and rice prices continue to remain weak. Recovery begins in 2001 as prices began to strengthen. By 2009, food grain receipts are projected to grow to \$10.6 billion. However, this is still below the record level of \$10.7 billion in 1995.
- Oilseed cash receipts are projected to fall below \$14 billion for 2000, representing a decline of almost \$6 billion from the 1997 level. Recovery in soybeans prices, coupled with increased production, push receipts up to \$19.8 billion by 2009.
- Larger production and a modest recovery in prices will push cotton receipts up to \$5.9 billion in 2000. Receipts remain stable through 2005 as higher prices are offset by smaller production levels.
- With stronger prices expected, cash receipts for cattle and calves are projected to continue to expand through 2003, peaking at \$39.3 billion. As the cattle cycle turns, receipts generally decline thereafter.
- Cash receipts for hogs are projected to reach \$10 billion in 2000, based on stronger prices. Although higher than the two previous years, it still falls \$3 billion below the 1997 peak. Receipts average \$11 billion after 2000, with movements following the production cycle.
- Lower milk prices more than offset higher production, causing 2000 dairy receipts to fall by \$2 billion from the 1999 level of \$23.3 billion. As prices continue to struggle, little recovery is seen until 2003. Longer term, dairy receipts increase to \$24.5 billion.
- The combination of lower prices and higher production will keep total poultry receipts stable at \$23 billion for 2000. As broiler prices recover, receipts increase beginning in 2001. For the 2001 to 2009 period, poultry receipts grow at an annual average rate of 2.4 percent.

**U.S. Cash Receipts from Farming** 

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Farm Marketings					(Billio	n U.S. Dol	lars)				
and CCC Loans	192.72	193.20	198.86	204.23	209.06	212.06	214.55	218.71	223.53	228.24	233.37
Crops	95.89	96.65	100.12	103.64	107.07	110.19	113.43	116.90	120.57	124.23	128.04
Feed Grains	20.80	20.45	21.69	22.55	23.16	23.80	24.35	25.01	25.66	26.28	26.91
Corn	15.53	15.18	16.29	17.08	17.62	18.19	18.66	19.24	19.82	20.37	20.93
Sorghum	0.87	0.94	0.99	1.01	1.03	1.06	1.08	1.09	1.11	1.13	1.15
Barley	0.52	0.53	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.66
Oats	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Hay	3.80	3.72	3.75	3.79	3.83	3.87	3.91	3.96	4.02	4.06	4.09
Food Grains	7.52	7.56	8.24	8.74	9.16	9.32	9.55	9.80	10.05	10.30	10.56
Wheat	5.97	6.06	6.71	7.18	7.57	7.72	7.92	8.15	8.38	8.61	8.85
Rice	1.53	1.48	1.50	1.55	1.58	1.59	1.61	1.63	1.65	1.67	1.69
Rye	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Oilseeds	14.57	13.91	14.11	15.00	15.88	16.44	17.03	17.60	18.30	19.01	19.81
Cotton	5.15	5.87	6.00	5.88	5.86	5.96	6.08	6.25	6.43	6.57	6.72
Sugar	2.24	2.28	2.30	2.32	2.34	2.36	2.37	2.39	2.41	2.43	2.45
Other Crops *	45.62	46.58	47.77	49.15	50.67	52.31	54.05	55.86	57.73	59.64	61.59
Livestock and Products	96.83	96.56	98.75	100.59	101.98	101.87	101.12	101.81	102.96	104.01	105.33
Red Meats	47.06	48.30	49.80	50.44	50.74	49.84	48.17	47.80	47.84	47.82	47.99
Cattle, Calves	37.32	37.86	38.62	38.99	39.28	38.67	37.27	36.23	35.57	35.86	36.54
Hogs	9.27	10.02	10.73	10.99	11.01	10.72	10.45	11.12	11.82	11.51	11.00
Sheep, Lambs	0.47	0.43	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Dairy Products	23.32	21.36	21.13	21.62	22.14	22.51	22.93	23.32	23.71	24.07	24.45
Poultry, Eggs	22.57	22.97	23.82	24.48	24.97	25.34	25.80	26.42	27.11	27.78	28.50
Broilers	14.96	15.38	15.95	16.37	16.68	16.94	17.26	17.70	18.19	18.67	19.20
Turkeys	2.97	3.06	3.08	3.14	3.18	3.20	3.23	3.27	3.33	3.37	3.42
Chicken Eggs	3.99	3.87	4.10	4.26	4.39	4.46	4.55	4.68	4.79	4.91	5.04
Other Poultry	0.65	0.66	0.69	0.71	0.73	0.74	0.75	0.78	0.80	0.82	0.84
Other Livestock †	3.88	3.93	3.99	4.06	4.12	4.18	4.22	4.26	4.30	4.34	4.39
Government Payments	21.68	15.12	10.22	7.71	7.26	6.83	6.68	6.44	6.40	6.31	6.20
Total Cash Receipts	214.39	208.32	209.08	211.94	216.32	218.89	221.23	225.14	229.93	234.55	239.57

 $<sup>^{\</sup>star}$  Includes to bacco, vegetables and melons, fruits and tree nuts, and other crops. † Includes horses, mules, and a quaculture.

#### **U.S. Farm Production Expenses**

- Increased costs for purchased livestock and feed will push expenses for farm-origin inputs higher in 2000. Driven by higher feed costs, expenses continue to increase over the baseline, growing from \$46.7 billion in 2001 to \$54.4 billion in 2009.
- The increase in oil prices will push expenses for manufactured inputs higher in 2000. Higher fuel and fertilizer expenses contribute to the \$1 billion increase in expenses for manufactured inputs. After 2000, input price inflation causes manufactured input expenses to grow at an annual rate of 1.8 percent.
- Recent increases in interest rates will push total interest expenses higher in 2000, reaching \$14.2 billion. Modest growth is projected over the baseline period, with total interest expenses reaching \$14.8 billion in 2009. The increased expenses are driven by the increased production of crop and livestock commodities, rather than by increases in interest rates. Interest rates are projected to be relatively stable over the projection period.
- Growth in labor and miscellaneous expenses contribute the majority of the \$1.8 billion increase in other operating expenses for 2000. Over the baseline period, other operating expenses grow from \$65.1 billion in 2000 to \$79.9 billion by 2009. Miscellaneous expenses and labor costs are the primary growth drivers over the baseline period, with annual growth rates of 2.4 percent and 3.1 percent, respectively.
- Other overhead expenses are projected to fall to \$38.9 billion in 2000, a drop of \$300 million from the previous year. The decline is due to lower expenses for capital consumption and rent. Rent to non-operator landlords is projected to decline due to the drop in market receipts for the major crops. Longer term, overhead expenses are projected to reach \$43.3 billion, with rent expenses contributing most of the growth.
- Total production expenses are projected to grow to \$193.6 billion in 2000. This represents a \$4 billion increase from the 1999 level and \$3.5 billion more than the peak observed in 1997. Increased production levels and modest growth in input prices lead to continued growth in total production expenses. After 2000, production expenses grow at an annual rate of 1.8 percent.

#### **U.S. Farm Production Expenses**

0.0. 1 411111 1040	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
-	(Billion U.S. Dollars)										
Farm-Origin Inputs	44.62	45.59	46.74	47.94	49.30	50.24	50.69	51.23	52.08	53.18	54.36
Feed	23.59	24.08	24.84	25.78	26.77	27.74	28.58	29.44	30.25	31.00	31.70
Purchased Livestock	13.85	14.26	14.50	14.59	14.82	14.61	14.08	13.59	13.47	13.66	13.98
Seed	7.19	7.25	7.39	7.57	7.71	7.89	8.03	8.20	8.35	8.52	8.68
Manufactured Inputs	28.83	29.79	30.01	30.64	31.13	31.76	32.33	33.04	33.65	34.31	34.95
Fertilizer, Lime	10.45	10.85	10.96	11.25	11.40	11.62	11.79	12.03	12.23	12.47	12.69
Petroleum Fuel, Oils	6.05	6.43	6.42	6.59	6.71	6.88	7.02	7.21	7.37	7.53	7.69
Electricity	3.10	3.16	3.16	3.20	3.28	3.36	3.44	3.55	3.61	3.68	3.74
Pesticides	9.23	9.35	9.47	9.60	9.74	9.90	10.07	10.25	10.44	10.62	10.82
Interest Charges	13.82	14.18	14.14	14.21	14.30	14.41	14.56	14.54	14.61	14.68	14.80
Short-Term Interest	7.04	7.22	7.20	7.23	7.28	7.33	7.41	7.39	7.43	7.46	7.52
Real Estate Interest	6.78	6.96	6.94	6.98	7.02	7.08	7.16	7.14	7.18	7.21	7.27
Other Operating Exp. Repair, Operation	63.35	65.13	66.45	68.00	69.64	71.40	73.04	74.69	76.35	78.09	79.85
of Capital Items	10.38	10.51	10.67	10.85	11.03	11.23	11.43	11.61	11.78	11.96	12.14
Contract, Hired Labor	19.76	20.37	21.01	21.66	22.34	23.08	23.80	24.53	25.26	26.01	26.77
Machine Hire	10.70	20.01	21.01	21.00	22.01	20.00	20.00	2 1.00	20.20	20.01	20.77
Custom Work	5.37	5.47	5.50	5.56	5.60	5.66	5.71	5.78	5.84	5.91	5.98
Marketing, Storage,	0.01	0.11	0.00	0.00	0.00	0.00	0.7 1	0.70	0.01	0.01	0.00
and Transportation	7.01	7.33	7.45	7.59	7.73	7.86	7.94	8.04	8.15	8.27	8.40
Miscellaneous	20.82	21.43	21.83	22.33	22.93	23.57	24.15	24.73	25.32	25.94	26.56
Other Overhead Exp.	39.22	38.94	38.94	39.24	39.73	40.24	40.79	41.39	41.99	42.64	43.33
Capital Consumption	19.31	19.16	19.15	19.24	19.36	19.52	19.67	19.84	20.01	20.20	20.39
Property Taxes	7.16	7.30	7.40	7.50	7.61	7.74	7.87	8.02	8.17	8.34	8.53
Rent to Nonoperators	12.74	12.48	12.40	12.50	12.76	12.98	13.24	13.53	13.81	14.10	14.41
Production Expenses	189.83	193.63	196.28	200.02	204.10	208.04	211.42	214.88	218.69	222.90	227.28
Noncash Expenses	18.46	18.31	18.30	18.39	18.51	18.67	18.82	18.99	19.16	19.35	19.54
Labor Perquisites	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Net Cap Consumption	17.86	17.71	17.70	17.79	17.91	18.07	18.22	18.39	18.56	18.75	18.94
Op Dwelling Expenses	2.68	2.66	2.69	2.72	2.75	2.78	2.81	2.84	2.87	2.90	2.93
Cash Expenses	168.68	172.67	175.29	178.92	182.85	186.59	189.79	193.05	196.66	200.66	204.82

#### **U.S. Net Farm Income**

- Total farm receipts are projected to increase to \$207.7 billion in 2000, driven primarily by increased crop receipts. For 2001, a \$6 billion increase is projected, based on both higher crop and livestock receipts. With the majority of the growth occurring in crops, total farm receipts are projected to reach \$251 billion by 2009.
- After reaching a record level of \$21.7 billion in 1999, direct government payments are projected to fall to \$15.1 billion in 2000 with lower LDPs and the assumption of no additional assistance packages. As crop prices recover and LDPs decline, direct payments decline to \$6.2 billion by 2009, reflecting continued AMTA and CRP payments.
- Non-money income comprises the value of home consumption of farm products and the imputed rental value of farm dwellings. With the average value of land and buildings projected to show a modest increase, non-money income is projected to grow from \$11.8 billion in 2000 to \$14.4 billion in 2009.
- The value of inventory change is projected at \$200 million in 2000. The increase from the 1999 level is due to an increased value of crop stocks. With trend yields and stable crops prices, the value of inventory change remains at relatively low levels throughout the baseline.
- Net cash income is projected to decline to \$50.1 billion in 2000 due to lower government payments and higher production expenses. Cash income falls further in 2001 and 2002, as higher income is more than offset by higher expenses. Not until 2007 does net cash income recover to the 2000 level; however, it remains well below the 1999 level of \$59.8 billion.
- Accounting for the value of inventory change, non-money income, and total expenses, net farm income is
  projected to decline to \$41.2 billion in 2000, a \$7.5 billion decline from the 1999 level. As with net cash
  income, net farm income remains stable through 2007 before showing modest recovery at the end of the period.
- After accounting for inflation, real net farm income (in 1997 dollars) falls to \$39.6 billion in 2000, a decline of \$8 billion from the previous year. In general, real farm income declines over the projection period, reaching a low of \$35.2 billion in 2005.

#### **U.S. Farm Income Statistics**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	(Billion U.S. Dollars)										
1. Farm Receipts	206.79	207.69	213.70	219.45	224.63	228.01	230.85	235.38	240.57	245.65	251.15
Crops	95.89	96.65	100.12	103.64	107.07	110.19	113.43	116.90	120.57	124.23	128.04
Livestock	96.83	96.56	98.75	100.59	101.98	101.87	101.12	101.81	102.96	104.01	105.33
Farm-Related *	14.07	14.49	14.84	15.22	15.58	15.94	16.31	16.67	17.04	17.41	17.78
2. Government Payments	21.68	15.12	10.22	7.71	7.26	6.83	6.68	6.44	6.40	6.31	6.20
3. Gross Cash Income (1 + 2)	228.47	222.81	223.92	227.16	231.89	234.84	237.53	241.82	246.97	251.96	257.35
4. Nonmoney Income	11.59	11.83	12.09	12.35	12.60	12.82	13.03	13.32	13.66	14.01	14.37
5. Value of Inventory Change	-1.56	0.17	-0.07	0.32	0.34	0.51	0.38	0.29	0.03	-0.06	-0.07
6. Gross Farm Income (3 + 4 + 5)	238.50	234.81	235.94	239.83	244.83	248.17	250.94	255.43	260.66	265.91	271.65
7. Cash Expenses †	168.68	172.67	175.29	178.92	182.85	186.59	189.79	193.05	196.66	200.66	204.82
8. Total Expenses	189.83	193.63	196.28	200.02	204.10	208.04	211.42	214.88	218.69	222.90	227.28
9. Net Cash Income (3 - 7)	59.78	50.14	48.63	48.24	49.04	48.24	47.74	48.76	50.31	51.30	52.53
10. Realized Net Farm Inc (3 + 4 - 8)	50.23	41.01	39.73	39.49	40.39	39.62	39.14	40.26	41.94	43.07	44.44
11. Net Farm Income (6 - 8)	48.66	41.18	39.66	39.80	40.74	40.12	39.52	40.54	41.97	43.00	44.36
Deflated (1997 \$) ‡	47.51	39.64	37.56	37.11	37.39	36.25	35.21	35.49	36.04	36.19	36.56

 $<sup>^{\</sup>star}$  Income from machine hire, custom work, sales of forest products, and other miscellaneouis cash sources.

 $<sup>\</sup>dagger$  Excludes capital consumption, perquisites to hired labor, and farm household expenses.

<sup>‡</sup> Deflated by the GNP price deflator, 1997=1

#### **Crop Insurance**

- Net acres insured rose to 196 million acres in 1999, due in part to the provisions of the disaster assistance packages in the last two years. The increase in participation due to these packages will continue through 2001. After 2001, net acres insured fall back to near 1998 levels, but then steadily climb to more than 188 million acres by 2009.
- The disaster assistance packages require producers who did not have crop insurance and receive assistance to purchase crop insurance for two years. Most of the acreage increases in 1999 and 2000 are in buy-up coverage due to the temporary increases in premium subsidies. In 2001, the temporary premium subsidy increases are removed.
- Total premiums rose to roughly \$2.3 billion in 1999 and do similarly in 2000. This increase arises from growth in overall participation and, particularly, in buy-up participation. In 2001, total premium levels fall to \$1.8 billion due to decreases in buy-up participation and low crop prices. Total premiums then trend upward, reaching \$2.1 billion in 2009.
- The impact of the \$400 million for temporary premium subsidies from the disaster assistance packages is evident from the producer-paid premiums and premium subsidies for 1999 and 2000. Premium subsidies exceed \$1.3 billion in both years. Following 2000, the division of premium payments returns to the normal pattern. After 2001, producer-paid premiums exceed premium subsidies for the first time since 1994.
- Total indemnities (insurance payments) follow a pattern similar to total premiums. Loss ratios of one indicate that "actuarially fair" premiums are being charged for the insurance products. These projections show that, overall, federal crop insurance will meet the loss ratio targets set by Congress.
- Total obligations represent the federal government's financial responsibility from crop insurance. They are the costs for crop insurance before taking any crop insurance revenues into account. Total obligations are equal to the sum of indemnities, delivery expenses, administrative and operating expenses, agent commissions, and other expenses. Over the projection period, total obligations exceed \$2 billion each year. By 2009, the federal government's total financial obligation from crop insurance reaches \$2.5 billion.
- Net outlays take underwriting costs and crop insurance revenues into account. They are equal to the sum of total obligations and underwriting costs minus producer-paid premiums. Net outlays exceeded \$1.6 billion in 1999. In 2000, net outlays increase to \$1.9 billion. Most of this increase can be attributed to the temporary premium subsidies. After 2000, net outlays for crop insurance decline through 2003, only to increase back up to nearly \$1.6 billion in 2009.
- Budget authority is the amount the law allows the federal government to spend for the program. For crop insurance, it represents net outlays on a crop year basis. Budget authority for 1999 and 2000 is nearly \$2 billion a year. In 2001, this falls to \$1.3 billion. By 2009, budget authority for crop insurance rises to \$1.6 billion.

#### **FAPRI Crop Insurance Baseline**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	(Million Acres)										
Eligible Acres	263.77	263.69	263.89	264.83	265.05	265.71	265.88	266.34	266.88	267.49	268.21
Net Acres Insured	196.22	197.24	187.18	182.81	183.39	184.25	184.85	185.64	186.49	187.35	188.32
Crop Insurance											
Participation Rate	74.39%	74.80%	70.93%	69.03%	69.19%	69.34%	69.52%	69.70%	69.88%	70.04%	70.22%
	(Billion Dollars)										
Total Premiums	2.31	2.27	1.76	1.72	1.78	1.82	1.88	1.94	1.99	2.05	2.12
Producer-Paid Premiums	0.92	0.91	0.87	0.86	0.90	0.92	0.95	0.98	1.01	1.04	1.07
Premium Subsidies	1.39	1.36	0.89	0.85	0.88	0.91	0.93	0.96	0.99	1.01	1.05
Total Indemnities	2.17	2.27	1.76	1.72	1.78	1.82	1.88	1.94	1.99	2.05	2.12
Loss Ratio	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	(Billion Dollars, Fiscal Year)										
Total Obligations	2.24	2.66	2.53	2.09	2.08	2.15	2.21	2.28	2.35	2.42	2.49
Net Outlays	1.68	1.92	1.79	1.33	1.32	1.37	1.40	1.45	1.50	1.54	1.58
Budget Authority	1.91	1.99	1.34	1.30	1.35	1.39	1.43	1.48	1.52	1.56	1.62